

The influence of dynamic capabilities on the performance of the small and medium enterprises in the manufacturing sector in Kenya

Sixbert Sangwa

sangwamukiza@gmail.com

Jean Bosco Muvunyi

Musco249@yahoo.fr

Open Christian University Bethal, South Africa

Abstract: Global competition, technological advancements and changing consumer needs, simultaneous paradigms push companies to be simultaneous, successively in different dimensions such as product design and development, manufacturing and distribution, communication and marketing. The objective of this study was to determine the relationship between dynamic capacity and the performance of the marine industry in Kenya. The specific objective was to determine how dynamic capabilities affect performance in the small and medium enterprises in the manufacturing sector in Kenya. The study used two theories namely resource-based and knowledge-based to strengthen its case for the relationship between dynamic capacity and performance. The target population was 60 manufacturing SMEs operating in Kenya. A modified Likert scale questionnaire was developed, divided into three parts. A pilot study was carried out to refine the instrument. Data analysis was performed on a computer using Statistical Package for Social Science SPSS for Windows. The analysis was carried out using numbers of frequencies, percentages, means and standard deviations, regression, correlation and the information generated was presented in the form of graphs and tables. The analysis found a very strong positive correlation between the dynamism of organizational capacities and performance, as demonstrated by the Karl Pearson correlation model. The study concluded that there is a positive relationship between dynamism and performance. The study recommended that manufacturing SMEs should invest more in research, capital; Innovation such as a new technology and creating the new products and services as well as having a habit of setting short and long-term goal.

Keywords: SMEs Performance in Kenya, Dynamic Capabilities and business performance, Competitive capabilities in Manufacturing Sector.

I. INTRODUCTION

1.1. Background

Different opinions exist as to whether a dynamic capability itself can be the source of competitive advantage (Wilden, Gudergan & Lings, 2013). Teece, Pisano, and Shuen (1997) share the view of the resource-based theory of the firm which requires resources to be valuable, rare, imperfectly imitable, and non-substitutable (VRIN-criteria) in order to generate competitive advantage (Barney, 1996). Slater, Olson, and Hult (2006) consider the so-called VRIN-criteria to be a necessary characteristic for dynamic capabilities. Eisenhardt and Martin (2000) express a contrasting opinion and argue that a best practice of dynamic capabilities exists and that dynamic capabilities show equifinality, homogeneity, and substitutability across firms. Though dynamic capabilities emerge from path-dependent histories of firms and are unique and idiosyncratic processes (Teece, Pisano & Shuen, 1997), they may share common features across firms; however, they differ in their effectiveness. Moreover, dynamic capabilities do not necessarily result in competitive advantage, as they create value indirectly through e.g. the reconfiguration of a firm's resource base. Consequently, a dynamic capability may seem worthless in one scenario when the resulting reconfiguration did not generate the intended outcome, but may be valuable in another case (Zahra, Sapienza & Davidsson, 2006).

The study will be based by 2 majors theories namely, Dynamic capabilities and Organizational Performance. Knowledge based theory (Teece, et al, 2007) which considers knowledge as the most strategically significant resource of a firm. Its proponents argue that because knowledge-based resources are usually difficult to imitate and socially complex, heterogeneous knowledge bases and capabilities among firms are the major determinants of sustained competitive advantage and superior corporate performance.

This knowledge is embedded and carried through multiple entities including organizational culture and identity, policies, routines, documents, systems, and employees. Resource based theory (Barney, 1991) is based on a managerial framework used to determine the strategic resources a firm can exploit to achieve sustainable competitive advantage. The SME within the manufacturing sector in Kenya has over the years been recognized for its provision of goods and services enhancing competition, fostering innovation, generating employment, contributing to Gross Domestic Product (GDP), aiding industrial development and in effect, alleviation of poverty. The crucial role of SME is underscored in Kenya's vision 2030-the development blueprint which seeks to transform Kenya into an industrialized middle income country, providing high quality of life to all its citizens by the year 2030. SME have been identified and prioritized as key growth drivers for achievement of vision 2030 goals. While SMEs constitute close to 85 per cent of employment, they only

contribute about 20 percent of the total GDP. This is a relatively low contribution to the country's GDP considering the large Kenyan workforce which SME employ (Ongolo&Awino, 2013). This therefore calls for a study to ascertain if dynamic capabilities can influence the performance of the SME's in this sector and increase the total contribution to the GDP.

1.1.1. Dynamic capabilities

The dynamic capabilities view of the firm is the evolutionary extension of the resource-based perspective as it explicitly looks at how capabilities evolve and how organizations deal with environmental turbulence (Helfat et al., 2007). The term 'dynamic' differentiates one capability (e.g. the operational ability to develop new products) from another form of ability (e.g. the ability to reform the way the organization develops new products) (Zahra, Sapienza & Davidsson, 2006). In this example, the new routine for product development which is a new operational capability is distinguished from the ability to alter such capabilities which is labelled a dynamic capability. Dynamic capabilities do not directly concern the production of a good or the provision of a marketable service and therefore do not directly affect a firm's output (Helfat & Peteraf, 2003). They affect the productive process indirectly by integrating, reconfiguring, gaining, and releasing resources to respond to environmental turbulence or to create internal and external change (Eisenhardt & Martin, 2000; López, 2005).

A dynamic capability is defined as the organizational ability to create internal change and/or to respond to environmental turbulence (Wilden, Gudergan & Lings, 2013). This is done through reconfiguring (creating, extending, and modifying) the organizational resource base (Eisenhardt & Martin, 2000; Penrose, 1959; Zahra, Sapienza & Davidsson, 2006). Accordingly, firms may differ in displaying dynamic capabilities that provide a basis for reconfiguring their e.g. marketing, sales, customer linking, and service capabilities. Dynamic capabilities, through reconfigurations of these operational capabilities, can support the creation of sustainable competitive advantage and are capable of indirect rent generation (Wilden, Gudergan & Lings, 2013). Dynamic capabilities are part of the overall organizational resource-base. According to the resource-based view of the firm, resources (i.e. inputs for the production of goods and provision of services) and organizational capabilities (i.e. intangible assets that are based on skills, learning, and knowledge in deploying resources) can be sources of competitive advantage (Wilden, Gudergan & Lings, 2013). To become so, they have to be valuable, rare, inimitable, and non-substitutable (Amit & Schoemaker, 1993; Barney, 1991; Combe and Greenley, 2004). Research on the resource-based perspective has incorporated dynamic processes into a conceptualization of a theory of the firm (Zott, 2003). This resulted in a stream of research, focusing on dynamic capabilities which together with operational capabilities

constitute organisational capabilities, do not directly aim at the creation of a product (Helfat & Peteraf, 2003; Teece, Pisano and Shuen, 1997); they build, integrate, or reconfigure operational capabilities and concern change (Helfat et al., 2007). Yung-Ching and Tsui-Hsu (2006, p. 215) state that "dynamic capabilities are necessary for business transformation and for identifying practices that develop those capabilities." Capability possession, deployment, and upgrading are important for the success of organizations (Luo, 2000).

Furthermore, organizational response to environmental turbulence requires both sound corporate-level (product market scope) and business level strategies (sources of competitive advantage) (Dess, Lumpkin & McGee, 1999).

1.1.2. Organizational Performance

Organizational performance which is a recurrent theme in management research continues to be a contentious subject in terms of definition and measurement among researchers (Barnley, 1991). Javier (2002) suggested that performance is equivalent to economy, efficiency and effectiveness of a certain activity. Daft (2000) defined organizational performance as the organization's ability to attain its goals using its resources in an efficient and effective manner. These definitions and suggestions evaluate organization's performance as organizations' ability to maximize their strength, overcome their weaknesses and to neutralize their threats in order to take advantage of their opportunities. Organization performance has also been constituted in terms of three different perspectives namely the goals approach (Etzioni, 1964). Resource Approach (Yutchman and Seashore, 1967) and systems approach (Steers, 1977).

Organizational performance comprises the actual output or results of an organization as measured against its intended outputs (or goals and objectives). According to Richard et al. (2009) organizational performance encompasses three specific areas of firm outcomes: financial performance (profits, return on assets, return on investment, etc.); product market performance (sales, market share, etc.); shareholder return (total shareholder return, economic value added, etc.). The term Organizational effectiveness is broader. Specialists in many fields are concerned with organizational performance including strategic planners, operations, finance, legal, and organizational development.

In recent years, many organizations have attempted to manage organizational performance using the balanced scorecard methodology where performance is tracked and measured in multiple dimensions such as: financial performance (e.g. shareholder return), customer service, social responsibility (e.g. corporate citizenship, community outreach), employee stewardship, Organizational performance, Performance measurement systems, Performance improvement, Organizational engineering. Obtaining an accurate measure of performance is often a problem without taking

cognizance of non-financial and less tangible measures such as environmental integrity and social equity (Kalpan & Norton, 1992).

1.1.3. SME manufacturing sector in Kenya

Manufacturing is considered as the physical or chemical transformation of materials of components into new products, whether the work is performed by power-driven machines or by hand, whether it is done in a factory or in the worker's home, and whether the products are sold at wholesale or retail. Manufacturing is a key sector in the development of many economies worldwide. Some of the major sectors in Kenya include agriculture, energy, tourism and manufacturing. According to the KAM Manufacturing Report in 2018, the manufacturing sector in Kenya has faced significant challenges in the past 15 years. The report further states that despite the static nature of the manufacturing sector with regards to its overall role in the economy, there have been significant shifts in the production levels of various manufacturing sub-sectors over the last ten years alone. Lot has been done to develop a manufacturing-led economy aimed at creating jobs for many and wealth for the country. SMEs are seen to be a critical point when it comes to achieving manufacturing prosperity in the country. A recent National Economic Survey report by the Central Bank of Kenya (CBK) indicates that SMEs constitute 98 percent of all business in Kenya, create 30 percent of the jobs annually as well as contribute 3 percent of the GDP. This means that for the manufacturing sector to grow, a lot more emphasis must be put on SMEs. There are some manufacturing companies that are make some good strides in the economy. A good example is Tarpo Industries who have been involved in this industry for over 20 years. Since the first case of COVID-19 in Kenya was announced in mid-March Tarpo Industries has been offering expertise in rapid deployment of emergency response field hospitals. A lot of procurement departments of private hospitals have reached out to Tarpo for tents to deal with the emergency.

An SME is defined as an entity employing a few as 1 and not more than 99 employees as per the MSE Act 2012. SME's in the Manufacturing sector under the Kenya Association of Manufacturers play a crucial role in advocating the government to create an environment conducive to entrepreneurship and SME development to secure the future of industry. According to the Kenya Association of Manufacturers website, it sets out to provide strategic leadership in supporting Manufacturing SMEs towards inclusive global competitiveness. In 2016, Kenya Private Sector Alliance presented a programme proposal on SME's to the President; an initiative known as "Kenya Rising Star and Scale-up Programme (KRISP) and it was endorsed. Its objectives are; increase business formation, expand the number of productivity of homegrown globally competitive SME's, expand the number of high growth and innovative SME's, enhance productivity of Kenyan SME's and intensify SME's formalization in Kenya. SME development offers value added services to growth

oriented and market ready manufacturing SMEs. It is geared towards preparing, nurturing and growing businesses to take full advantage of new emerging market frontiers both locally and in the international space. The mission is to foster the development of a flourishing entrepreneurial culture and competitive small and medium manufacturers in Kenya and in the region.

1.2. Research Problem

The debate on the consequences that dynamic capabilities have on organizational performance is still inconclusive. In the last decade a growing number of scholars considered dynamic capabilities to be at the heart of firm strategy, value creation and competitive advantage (e.g. Teece *et al.*, 1997; Eisenhardt & Martin, 2000; Winter, 2003, Teece, 2007, Helfat *et al.* 2007). Theoretical arguments have been advanced about their nature and their relationship with firm performance. Existing research however is still loaded with vague assertions and interpretations which have not yet been confirmed by empirical analysis. Many scholars are still skeptical about the role and conceptualizations advanced about dynamic capabilities (Winter 2003, Zahra *et al.*, 2006). Dynamic capabilities have often been criticized for being tautological (e.g. Mosakowski & McKelvey, 1997; Priem & Butler, 2001), vague and not operational. Furthermore, while organizational performance has been a core issue in the research on dynamic capabilities since the seminal article of Teece *et al.* (1997), the question of whether and how they affect performance is still open (Helfat *et al.* 2007).

SMEs in Kenya are engines of economic growth and development, research suggests that SMEs account for over 80% of firms in Kenya, create jobs, contribute to GDP, aid industrial development, satisfy local demand for services, innovate and support large firms with inputs and services. The current outbreak of COVID-19 pandemic has greatly impacted global, regional and local economic activity. SMEs are anticipated to bear the greatest burden as the effects of the COVID-19 pandemic roll through economies and government continue to enforce social distancing, lockdowns and other measures in response to the pandemic. Pandemics such as this tend to put more strain on SME's means of earning income due to various socio-economic factors. With all these challenges affecting SME's within the manufacturing sector, it is important that they identify their dynamic capabilities; develop, adapt and renew their capabilities to stay competitive.

Some previous studies have focused on dynamic capabilities and performance (Schilke, 2014); core capabilities, strategy implementation and corporate performance (Awino, 2007); some scholars have explored dynamic capabilities, its manifestation and effects in the manufacturing sector (Awino, 2007; Magutu, 2013; Murgor, 2014; and Mwazumbo, 2016), these have predominantly focused on the large manufacturing firms but the SME's within the manufacturing sector has not been delved into yet and forms the knowledge gap that this study seeks to bridge; What is the relationship

between dynamic capabilities and the small and medium enterprises in the Manufacturing Sector in Kenya?

1.3. Research Objectives

The objective of this study is to determine how dynamic capabilities affect performance in the small and medium enterprises in the manufacturing sector in Kenya.

1.4. Value of the Study

The findings of the study will provide SME's, investors, firm level managers and boards in the small and medium manufacturing sector with insights on resource leverage and configurations for achieving short to midterm competitive advantage and thriving in a constantly flux context.

This study will help lecturers, students, researchers as findings of this research might be used to expand literature reviews of similar studies.

The findings of the study will aid policy makers for example KEPSA, KIPPRA, Government etc in designing policies to spur increased competitiveness, productive and growth for the sector.

This study will also add to the existing knowledge of dynamic capabilities of their manifestations, impact and identify new areas for further research in this area.

II. RESEARCH METHODOLOGY

2.1 Introduction

This chapter presents the research methodology and processes that will be followed by the researcher to conduct the study. This section will focus on research design, population, data collection and data analysis.

2.2 Research Design

The researcher will use descriptive study, with both qualitative and quantitative data that will facilitate a conclusion about the performance of the SMEs in the manufacturing sector in Kenya. The descriptive approach has been chosen due to its several advantages as it can pave a way for a very multifaceted approach in data collection using interviews, observations and questionnaires. As Caleb Kim & Alicia Boyd (2017) put it, a descriptive research design can easily integrate both qualitative and quantitative as it deals with either identifying the characteristics of an observed phenomenon or exploring possible associations amounting to two or more phenomena (Boyd, 2017). It also involves collecting information through data review, survey, interviews, or observation (Gay, 1987), which was an advantage for our study that aimed to produce and interpret statistical information on the subject matter.

2.3 Population of the Study

The population of this study included all manufacturing SMEs companies operating in Kenya. According to Nairobi garage website in Kenya there are over 1,000 companies in the manufacturing sector in Kenya. The researcher used a sampling technique recommend a sample size of at least 60 manufacturing companies.

2.4 Data Analysis

The study used descriptive data analysis that combines quantitative and qualitative data analysis methods. Software packages such as the Statistical Package for the Social Sciences (SPSS) were used to generate graphs, tables and figures. After collecting the data, the researcher processed the collected data by editing, coding, and tabulating as explained below. In order for the research to be of a quantitative and qualitative type, quantities were used to facilitate the presentation and analysis of the data in order to give a clear picture of the results.

The set of data set will be described using the percentage, type used and coefficient of variation and presented using tables, charts and graphs to establish the relation between Organizational Capability, dynamic capacity as independence variables and the performance of small and medium enterprises as a dependent variable, the researcher used multiple regressions and coefficients of correlation and determination to determine the relationship between the variables to be studied. the model specification was as follows:

Regression = $\alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$ where α : is a constant term

β_n : coefficients to be determined

Y: the dependent variable (small and medium enterprises performance).

X_1 : the independent variable (Organisational Capability)

X_2 : The independent variable (Dynamic Capabilities)

X_3 : the independent variable (Innovativeness) and

ε : error term

III. DATA ANALYSIS, RESULTS AND DISCUSSION

3.1 Introduction

This chapter presents empirical findings in reference to the research questions in chapter one. These findings were obtained from both primary and secondary sources. They were presented and analysed using frequency tables, pie charts, means, standard deviation and percentages were used on research topic entitled "the influence of dynamic capabilities on the performance of the small and medium enterprises in the manufacturing sector in Kenya".

3.1.1 Response Rate

The study targeted 60 SMEs operating in the manufacturing sector in Kenya. From the study, 60 respondents were completed and returned the questionnaires, a response rate of 95% which means that this response rate was very excellent and adequate for analysis and reporting.

3.1.2 Data Validity

Instrument validity refers to the extent to which an instrument measures what it is supposed to measure (Kothari, 2004). A content validity test was used to measure the validity of the instrument. This type of validity measured the extent to which data

collected using a particular instrument represented a specific area of indicators or the content of a particular concept (Mugenda, 1999). An expert in project monitoring and data analysis was given the necessary tools to assess to what extent it was possible to measure and determine the content of a particular concept.

3.1.3 Reliability Analysis

The reliability of the instrument was analyzed by the test-retest technique by administering the questionnaires to a group of people with characteristics similar to the actual size of the disease. The test was repeated after two weeks. The scores obtained from the two tests were correlated to obtain the reliability coefficient. The Spearman correlation coefficient of 0.7 was considered acceptable.

3.2 Demographic Information

Demographic information was assured on the number of employees, how long the small manufacturing small medium enterprises operated its ownership structure, its own assets as well as its capital structure.

3.2.1 Number of workers

The study sought to know the number of employees of the shipping company. This was made to know the average number of employees involving in small manufacturing small medium enterprise. The main objective was to issue the average number of employees for the SMEs studied. The results are summarized in Table 4.1.

Table 4.1.

Number of workers in manufacturing SMEs

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	9	14.1	15.0	15.0
	2	19	29.7	31.7	46.7
	3	15	23.4	25.0	71.7
	4	13	20.3	21.7	93.3
	5	3	4.7	5.0	98.3
	7	1	1.6	1.7	100.0
	Total	60	93.8	100.0	
Missing	System	4	6.2		
Total		64	100.0		

Source: Research data, 2021

According to Table 4.1 above, the majority of Manufacturing SMEs have 2 employees with 31.7%.

3.2.2 SME Duration in years of operation in manufacturing area

The study sought to find out how long the SME has been in manufacturing business. This was a closed question limiting the respondent to a given range of years. They were asked to tick the box under 5 between 5 and 10, between 10 and 15, between 15 to 20 and over 20 years old. The main objective was to understand the company

experience in manufacturing sector. It was necessary to enable data analysis. Table 4.2 below indicates details results:

Table 4.2.

Experience duration a SMSEs has been in manufacturing operation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than five years	16	25.0	26.7	26.7
	5 to 10 years	14	21.9	23.3	50.0
	10 to 15 years	18	28.1	30.0	80.0
	15 to 20 years	8	12.5	13.3	93.3
	More than 20 years	4	6.2	6.7	100.0
	Total	60	93.8	100.0	
Missing	System	4	6.2		
Total		64	100.0		

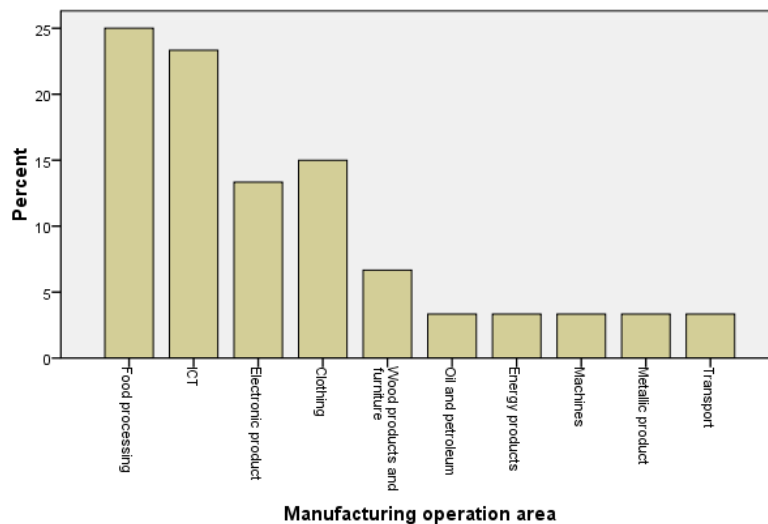
Source: Research data, 2021

The study reveals that manufacturing SMEs that have been operating for more than 10 to 15 years were the majority with 30% and those who operated Less than five years were 26.7% and those who operated between 5 to 10 years were 23.3% ; 15 to 20 years were 13.3% while More than 20 years 6.2 %.

3.2.3 Manufacturing operation area

In this section of analysis, a researcher wanted to know for what is manufacturing area at which small medium enterprises focused on.

Figure 4.1: Ownership structure of Manufacturing SME



Source: Research Data, 2021

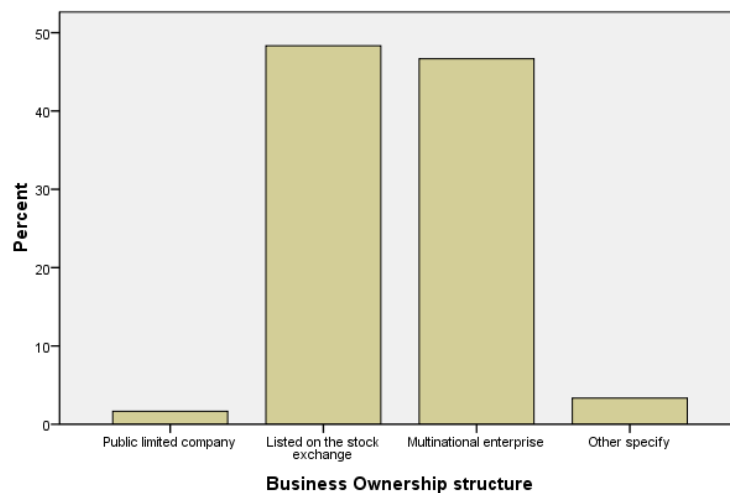
From Figure 4.1. below, study showed the manufacturing operating area as follows: Food processing enterprises 25%, ICT enterprises 24%, Electronic product enterprises 14%, Clothing enterprises 15%, Wood product and furniture 7%, Oil and

petroleum 5%, Energy product enterprises 5%, machines enterprises 5%, metallic product enterprises 5%, and Transport enterprises 5%.

3.2.4 Ownership structure of Manufacturing SME

It was a closed question that sought to find out how these companies are producing. Respondents should check whether the business is completely private owned, partially private and partially public, listed or multinational in fact the Main objective was to understand the ownership structure of companies under the study because the Ownership structure plays a significant role in how the business can engage in dynamism. The results are shown in Figure 4.2.

Figure 4. 2: Ownership structure of Manufacturing SME



Source: Research Data, 2021

From Figure 4.2. below, study showed the ownership structure as follows: Limited on stock exchange was 49%, Multinational enterprises 48% and Public limited Company was 1% and Others were 2%.

3.3 Organisational Capability

The researcher has prepared a series of questions to answer the research objectives. Identify the different capabilities that small and medium-sized manufacturing companies can apply to improve performance. In the research analysis, the researcher used a 5 to 1 tool rating scale; where 5 was the highest and 1 the lowest. The opinions expressed by the responses were scored as follows: 5 strongly agree, 4 = agree, 3 = neutral, 2 = disagree and 1 = strongly disagree.

The analysis of the mean, standard deviation and coefficient of variation was based on this rating scale.

Table 4.3.

Organization Capabilities

	N	Mean	Std. Deviation	Variance
Develop periodic business and strategic plan	60	2.93	1.191	1.419

Availability of budget to manage business	60	4.02	1.568	2.457
Training technique offered to staff	60	2.30	1.124	1.264
Qualified staff	60	2.00	1.484	2.203
Make an external audit and Accounting exercise	60	1.90	.986	.973
Use of the communication channel	60	4.07	1.425	2.029
Valid N (listwise)	60			

Source: Research data, 2021

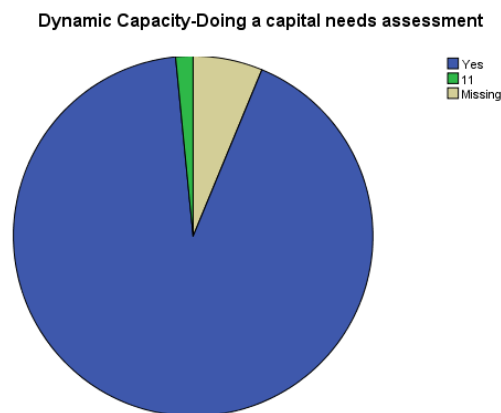
3.4 Dynamic Capability

The project prepared a series of questions to address the research objectives by establishing the capacity of SMEs to create and deliberately expand or modify the resource based.

3.4.1 Capital

The researcher sought to know from the respondent respondents actually performing the capital needs assessment. The researcher answered yes or no to the respondents. The main objective whether SMEs changed their capital according to their needs to improve their performance.

Figure 4.3: Capital need assessment to be conducted



Source: Research Data, 2021

The study found that most respondents conducted capital needs assessments. It can therefore be concluded that almost all SMEs in Kenya made their capital need assessment for improving their performance. The study further found that after performing the capital needs assessment, the response of responses either increased capital or decreased capital. The more about results are shown in Table 4.4 below.

Table 4.4.

Capital assessment needs frequency

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	59	92.2	98.3	98.3

	11	1	1.6	1.7	100.0
	Total	60	93.8	100.0	
Missing	System	4	6.2		
Total		64	100.0		

Source: Research Data, 2021

The study found that 98.3% of respondents performed a capital assessment.

Table 4.5

Capital needs assessment duration

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Annually	27	42.2	45.0	45.0
	Every 3 years	21	32.8	35.0	80.0
	After more than 3 years	12	18.8	20.0	100.0
	Total	60	93.8	100.0	
Missing	System	4	6.2		
Total		64	100.0		

Source: Research data, 2021

The study found that 45 of respondents perform a capital assessment annually, while 35% of respondents performing it for every 3 years while the remaining ones 20% who performed for After more than 3 years.

3.4.2 Setting a short and long term goal

The researcher sought to know from the respondent respondents actually performing directives; in planning, motivate and inspire employees as well as helping organizations to assess and monitor their SME performance. The opinions were expressed by the responses by scored as follows: 5 strongly agree, 4 = agree, 3 = neutral, 2 = disagree and 1 = strongly disagree.

Table 4.6

Short and long term goal for Business

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	14	21.9	23.3	23.3
	Neutral	25	39.1	41.7	65.0
	Agree	8	12.5	13.3	78.3
	Strongly Agree	12	18.8	20.0	98.3
	Disagree	1	1.6	1.7	100.0
	Total	60	93.8	100.0	
Missing	System	4	6.2		

Total	64	100.0		
-------	----	-------	--	--

Source: Research data, 2021

The study revealed that 23.3% % of the respondents are strongly agreed that they do not do Short and long term goal for Business, 41.7% are neutral,13.3 % are agreed, whereas 1.7% are disagreed.

3.5 Innovativeness

The researcher sought to know from the respondents the performing the skill and imagination to create new things for testifying to the duality of SMEs innovation for the growth and sustainability. The researcher answered yes or no to the respondents.

3.5.1 Change and acquiring new technology

Table 4.7.

Changing a new technology

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Non	44	68.8	73.3	73.3
	Yes	16	25.0	26.7	100.0
	Total	60	93.8	100.0	
Missing	System	4	6.2		
Total		64	100.0		

Source: Research data, 2021

The study revealed that 68.8% % of the respondents do not change any technology whereas 26.7 % of the respondents changed the technology in order to improve their manufacturing SMEs

Table 4.8.

Times of technology change

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	44	68.8	73.3	73.3
	Once	12	18.8	20.0	93.3
	Twice	3	4.7	5.0	98.3
	Three times	1	1.6	1.7	100.0
	Total	60	93.8	100.0	
Missing	System	4	6.2		
Total		64	100.0		

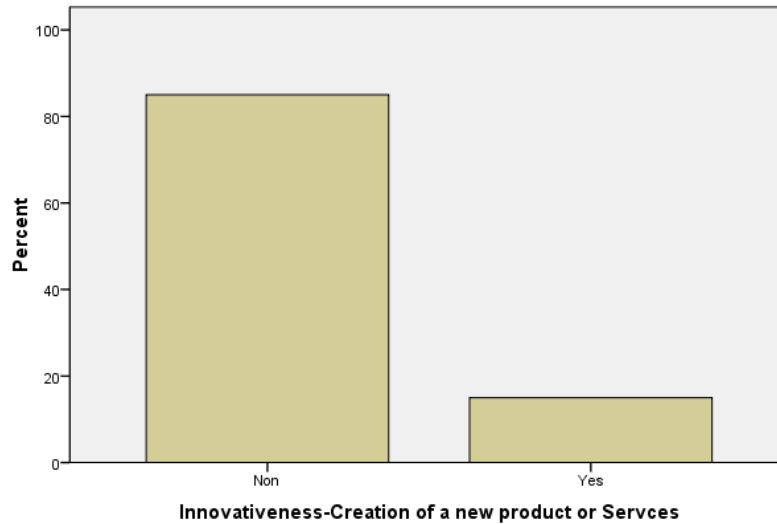
Source: Research data, 2021

The study found that 68.8% of respondents do not change,20% changed once,5% changed Twice, whereas 1.7% changed technology in three times.

3.5.2 New product or service creation

The researcher sought to know from the respondents whether there is New Product Development covering the entire process of bringing a new product to market, renewing an existing product or introducing a new product in order to know this a research used the closed questions by answering yes or no to the respondents for more detail results are shown in fig 4.4

Figure 4.4: Creation of a new product or service



Source: Research data, 2021

The study revealed that 85% of the respondents did not create any new product or services whereas 15% of respondents have created new products

Figure 4.5: Performance for first quarter

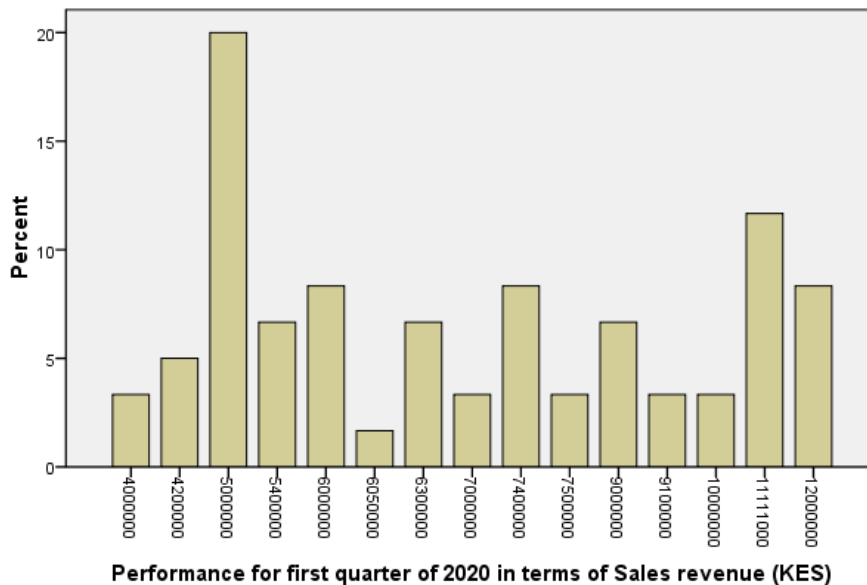


Figure 4.6: Performance for second quarter

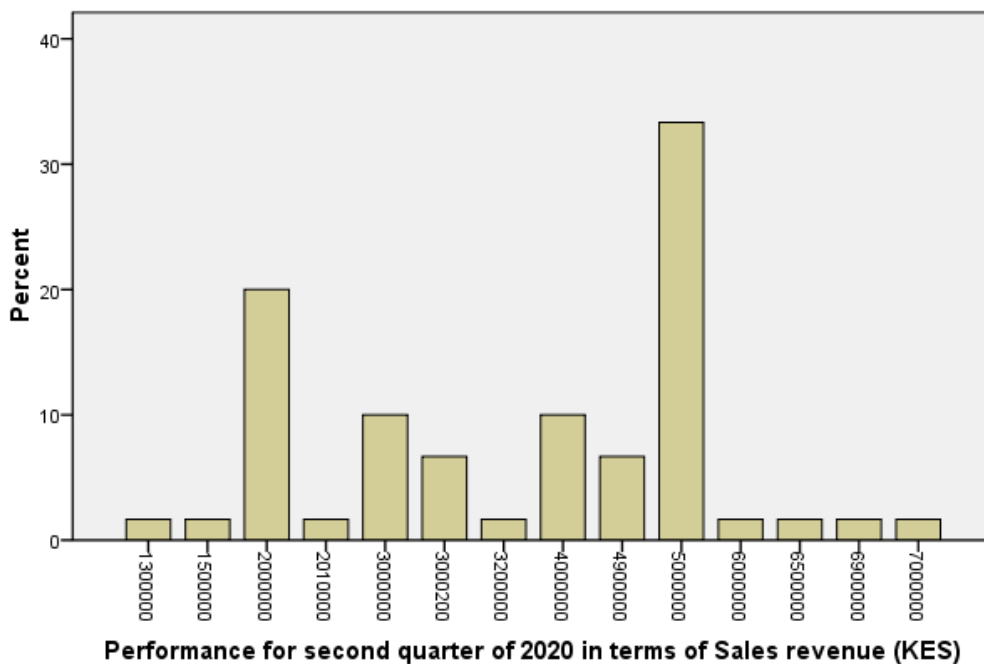


Table 4.9.

Performance in terms of sales (KES Millions) in 2018

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Year 2018 (0-200M)	40	62.5	66.7	66.7
	Year 2018 (201M-500M)	17	26.6	28.3	95.0
	Year 2018(501M-1B)	3	4.7	5.0	100.0
	Total	60	93.8	100.0	
Missing	System	4	6.2		
Total		64	100.0		

Source: Research data, 2021

Table 4.9 reveals that the majority performance in year 2018 (0-200M) was 66.7%, Year 2018 (201M-500M) was 28.3% whereas Year 2018(501M-1B) was 5%.

Table 4.10.

Performance in terms of sales (KES Millions) in 2019

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Year 2019 (0-200M)	37	57.8	61.7	61.7
	Year 2019 (201M-500M)	23	35.9	38.3	100.0
	Total	60	93.8	100.0	
Missing	System	4	6.2		
Total		64	100.0		

Source: Research data, 2021

Table 4.10 reveals that the majority performance in year 2019 (0-200M) was 61.7%, Year 2019 (201M-500M) was 38.3%.

Table 4.11.

Performance in terms of sales (KES Millions) in 2020

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Year 2020 (0-200M)	60	93.8	100.0	100.0
Missing	System	4	6.2		
Total		64	100.0		

Table 4.10 reveals that the majority performance in year 2020 (0-200M) was 100%.

3.6 Correlation Analysis

For the relationship between the independent variables and the dependent variable, the study conducted a correlation analysis that involved a correlation coefficient and a coefficient of determination.

3.6.1 Coefficient of Correlation

To try to show the relationship between study variables and their results, the study used the Karl Pearson correlation coefficient (r). This is illustrated in Table 4.12.

Table 4.12.

Pearson Correlation

		Organizational Capability	Dynamic Capacity	Innovativeness	Performance
Organizational Capability	Pearson Correlation	1	-.120	-.362**	-.060
	Sig. (2-tailed)		.362	.004	.647
	N	60	60	60	60
Dynamic Capacity	Pearson Correlation	-.120	1	.216	.084
	Sig. (2-tailed)	.362		.098	.523
	N	60	60	60	60
Innovativeness	Pearson Correlation	-.362**	.216	1	.104
	Sig. (2-tailed)	.004	.098		.429
	N	60	60	60	60
Performance	Pearson Correlation	-.060	.084	.104	1
	Sig. (2-tailed)	.647	.523	.429	
	N	60	60	60	60

Source: Research Data, 2021

3.6.2 Coefficient of Determination (R2)

Table 4.13 showed that the coefficient of determination was 0.076 Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (Performance) that is explained by all independent variables.

From the findings this meant that 7.6% of performance is attributed to combination of the three independent factors investigated in this study. Result captured in table 4.13

Table 4.13.

Coefficient of Determination (R²)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.276 ^a	.076	.027	.484

Source: Research Data, 2021

3.6.3 Regression Analysis

The study used ANOVA to establish the significance of the regression model

Table 4.14.

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.081	3	.360	1.540	.214 ^a
	Residual	13.102	56	.234		
	Total	14.183	59			

Source: Research Data, 2021

a. Predictors: (Constant), Innovativeness, Dynamic Capacity, Organizational Capability

3.6.4 Multiple Regression

The researcher conducted a multiple regression analysis as shown in Table 4.15 so as to determine the relationship between performance and the two variables investigated in this study.

Table 4.15.

Multiple regression

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	1.235	.188		6.565	.000
	Organizational Capability	.034	.044	.101	.768	.446
	Dynamic Capacity	.039	.044	.114	.882	.382
	Innovativeness	.274	.181	.201	1.517	.135

Source: Research Data, 2021

The used regression model was:

$$\text{Regression} = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

a. Dependent Variable: Performance

Where Y = Performance

X1 = Organizational Capability

X2 = Dynamic Capacity

X3 = Innovativeness

$$Y = 1.235 + .034X1 + .039X2 + .274X3$$

The regression equation above established that the consideration of all factors (performance resulting from organizational capacity, innovation and dynamic capacity) constant at zero at performance among small and medium-sized manufacturing firms was 1.235. presented also show that taking all other independent variables to zero, a unit increase in organizational capacity will result in an increase of 0.34 in the performance scores of manufacturing SMEs; a unit increase in capacity dynamics will lead to an increase of 0.39 in performance among manufacturing SMEs while innovativeness will increase by 0.274 among manufacturing SMEs, which implies that the three variables have a positive relationship with performance.

3.7 Discussion of Findings

Out of the target population of 60 respondents, 95 % questionnaires were received and analyzed. This study analyzed the relationship between dynamic capacity and performance in the Manufacturing small medium enterprises in Kenya. The study shows that the relationship between dynamic capacity and performance in manufacturing SMEs is influenced by capital, personnel expertise, technology and innovation. These results are supported by studies on dynamic capacity and performance. The dynamic capacity approaches adopted by the shipping industry have a relationship on the performance of the shipping industry (Winter, 2003, Zott, 2003). Knowledge management, research and development process for new areas to venture in and strategic decision-making (Grant, 1996, Conner & Prahalad, 1996) in the knowledge base theory where companies are seen as sets of knowledge that serve as a source differentiation and competitive advantage. The results further show that an approach based on dynamic capacities confers the An RBV perspective with a more dynamic nature that emphasizes the strategic value of higher-order resources (dynamic capabilities) enabling the generation and renewal of basic skills and competitive advantage (organizational learning process).

Organizations control resources and capacities that may have become valuable sources competitive advantage; however, once organizations face environmental turmoil, there is a need to reconfigure the resource base. According to Langlois (1997), even the most integrated company may not have all the resources and capabilities necessary to All Activities. Therefore, organizations must establish links with other businesses; especially when Innovation is involved including a new technology and creating the new products and services as well as having a habit of setting short and long term goal.

IV. SUMMARY, CONCLUSION AND RECOMMENDATIONS

4.1.Introduction

The chapter summarizes the conclusions of chapter four and also gives the conclusions and recommendations of the study according to the objectives of the study. The chapter finally presents the limits of the study and suggestions for studies and research.

4.2.Summary

This study analyzed factors related to the relationship between dynamic capacity and performance in the Kenyan manufacturing SMEs. The study shows that the relationship between dynamic capacity and performance in manufacturing SMEs is influenced by capital; Innovation such as a new technology and creating the new products and services as well as having a habit of setting short and long term goal. These capabilities include designing business models to respond to customers and capture value, as well as securing access to necessary capital and human resources (Teece,2007).The transformation of dynamic capacities is important for continuous renewal and is necessary when radical new opportunities need to be addressed. In addition, they are periodically needed to ease rigidities that develop over time from asset accumulation, standard operating procedures, and insider hijacking of annuity streams (Teece, 2007).

4.3.Conclusion

The study concluded that there is a relationship between dynamic capacity and performance in manufacturing SMEs. Organizational capacity and dynamic capacities had a positive correlation with the dependent variable. Capital assessment needs, training needs assessment, activities and technology, innovation and setting short term and long term goal are needed in dynamic capacities as essential to improve the performance of manufacturing SMEs in Kenya. The study shows that dynamic capabilities positively influence business performance and therefore any business that does not adopt them may not survive for their business sustainability.

4.4.Recommendation

The study recommended the following:

[1] Kenyan manufacturing SMEs should adopt a habit of setting short and long term goals

[2] Kenyan manufacturing SMEs should increase their personnel training activities in order to improve their performance

[3] Kenyan manufacturing SMEs should have spirit innovation and creativity in order to increase their productivity.

4.5.Suggestion for further studies

This research presents a relationship between dynamic capacities and performance. Dynamic capabilities have been shown to have both directed and indirect

effects on performance: directly through dynamic capacity costs and indirectly through the organizational resource based. In addition, the strategic marketing orientation has several impacts on the performance relationship of dynamic capabilities. The researcher proposes that a study be carried out to determine the SME in increasing economic growth in Kenya.

4.6. Study limitation

The responses took a long time to complete the questionnaires, which is why the researcher had to collect the already completed questionnaires to do the analysis due to time constraints. This caused the response rate to not be 100% as expected. Furthermore, a major limitation was the respondents' reluctance to objectively articulate the situation of the shipping company for fear that the information could not be used for a competitive advantage by their rival.

References

- [1] BABBIE (2007) the practice of social research. Belmont, CA: Thomson Wadsworth.
- [2] BARNETT (2005) Gunning for Arsene. [On-line], Available: <http://web.ebscohost.com>
- [3] Basuki, Y. T., Arief, M., & Propheto, A. 2015 The role of leadership, dynamic capabilities, and organization culture, in company performance of manufacturing industries in Indonesia (Study in food and beverages industries). *Advanced Science Letters*, 21 (5), 1141–1145
- [4] Beck, T. and Demircuc-Kunt, A. (2006), Small and Medium Size Enterprises: Access to Finance as a Growth Constraint. In: *Journal of Banking and Finance*.
- [5] Beck, T., Demircuc-Kunt, A., and Ross, L. (2003). "The Impact of SMEs on Growth, Development, and Poverty: Cross-Country Evidence". Washington DC: World Bank.
- [6] BECK, T., LEVINE, R. & DEMIRGUC-KUNT. 2003. SMEs, Growth, and Poverty. *Journal of Economic Growth*. 2, September 9, 2005.
- [7] BERMAN, B. AND EVANS, J.R. 2004. 2ed. Retail Management. A strategic approach. Upper Saddle: Prentice Hall.
- [8] Black, B. and Gilson, R. (1998), Venture Capital and the Structure of Capital Markets: Banks versus Stock Markets. In: *Journal of Financial Economics*.
- [9] Caves, R. (1998). "Industrial Organization and New Findings on Turnover and Mobility of Firms, *Journal of Economic Literature* Vol. 36, No. 4, pp. 1947-1982.
- [10] Central Agency for Public Mobilization and Statistics (1996), *Census Data 1996*. The Central Agency for Public Mobilization and Statistics, Cairo
- [11] Central Agency for Public Mobilization and Statistics, Cairo (2001), *Industrial Census 2001*.

[12] Christofidis,C.and Debande,O.(2001),Financing Innovative Firms through Venture Capital. In: European Investment Bank Publications.

[13] Dollar, D. and Aart K., (2002). "Growth is Good for the Poor," Journal of Economic Growth, Vol. 7, No. 3,pp. 195-225.

[14] Kamasa, R., Yavuz, M. and Altuntas, G. (2016), Is the relationship between innovation performance and knowledge management contingent on environmental dynamism and learning capability? Evidence from a turbulent market", Business Research, Vol. 9 No. 2, pp. 229-253.

[15] Little, I. M. D. (2004). "Small Manufacturing Enterprises in Developing Countries." The World Bank Economic Review Vol. 1, No. 2, pp. 203-35.

[16] Mwamadzingo, M. (1996). "Science and Technology for Sustainable Industrial Development in Africa: The Prospects for Institutional Cooperation". In Proceedings of the 2nd Conference of Eastern and Southern African Economics Associations (ESAEA). Dar Es Salaam, Tanzania. December 14-16, 1992.

[17] Ramón, J., Lorenzo, F., Teresa, M., Rubio, M., & Garcés, S. A. 2018 The competitive advantage in business, capabilities and strategy. What general performance factors are found in the Spanish wine industry? Wine Economics and Policy, 7 (2), 94–108.

[18] Valdez-Juárez, L. E., De Lema, D. G. P., & Maldonado-Guzmán, G. 2016 Management of knowledge, innovation and performance in SMEs. Interdisciplinary Journal of Information, Knowledge, and Management, 11, 141–176.