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**INFLUENCE OF DYNAMIC CAPABILITY ON GROWTH SUSTAINABILITY OF  
LISTED CONSTRUCTION AND ALLIED FIRMS IN KENYA**

**BY**

**CAROLINE ARIGA**

**REG NO: 082016**



**A RESEARCH THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE  
REQUIREMENTS FOR THE DEGREE OF MASTER OF COMMERCE(MCOM) AT  
STRATHMORE UNIVERSITY**

**SEPTEMBER, 2022**

## DECLARATION

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other University. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

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## ABSTRACT

The business market's climate is becoming increasingly dynamic. This implies that only firms that can deploy new capabilities will survive, while those that fail to adapt may cease to exist. Today's highlighted concern for any organization is the challenge of surviving in such a climate. The fundamental requirement for all organizations is dynamic capability, which allows them to adapt to changing circumstances. The study investigated the influence of dynamic capabilities on growth sustainability of listed construction and allied firms in Kenya. The dynamic capability theory guided the study and the cross-sectional design was also employed in the study. Five listed construction and allied firms formed the target population and a census survey was used due to the small population; hence all the five firms formed the study sample. Senior level staff and middle level staff were the study respondents. They were picked using judgemental sampling from the departments of business development, marketing, finance, research, human resources and corporate affairs. The judgemental sampling resulted in 30 respondents being selected from each company. Questionnaires were used to collect data with the five-point likert scale type of questionnaire being used in data. Descriptive statistics, correlation analysis and regression were employed in data analysis via the SPSS software. Data was presented using tables. Only 105 questionnaires out of the 150 were returned, hence the study had an adequate response rate. The study descriptive findings indicated that most respondents agreed with the assertion that innovation, learning, marketing and networking capabilities influenced growth sustainability of the listed construction and allied firms. Regression results revealed a statistically significant relationship between innovation capability, learning capability, marketing capability, networking capability and growth sustainability. The study therefore recommends that the management of the listed construction and allied firms increase their innovativeness and proactively think regarding strategic management and ensure that their strategies are effective and differentiated. The management of the construction and allied firms can ensure innovation in different areas such as new products and services and new form of organizations. The study also faced a number of limitations where the focus was on companies that are in the construction industry making it difficult to generalize the findings. The analysis was also on high growth publicly listed construction and allied firms; however, the analysis cannot reveal the gap between average growth or low-growth firms.

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## LIST OF ABBREVIATIONS

|                |   |
|----------------|---|
| <b>CAGR</b>    | Compounded Annual Growth Rate                             |
| <b>DCs</b>     | Dynamic Capabilities                                      |
| <b>DCT</b>     | Dynamic Capability Theory                                 |
| <b>RBV</b>     | Resource Based View Theory                                |
| <b>GC</b>      | Growth Sustainability                                     |
| <b>IC</b>      | Innovation Capability                                     |
| <b>IT</b>      | Information Technology                                    |
| <b>KNBS</b>    | Kenya National Bureau of Statistics                       |
| <b>LC</b>      | Learning Capability                                       |
| <b>MC</b>      | Marketing Capability                                      |
| <b>MT</b>      | Mega Tonnes   |
| <b>NACOSTI</b> | National Commission for Science Technology and Innovation |
| <b>NC</b>      | Networking Capability                                     |
| <b>NSE</b>     | Nairobi Securities Exchange                               |
| <b>R&amp;D</b> | Research and Development                                  |
| <b>RBV</b>     | Resource Based View                                       |
| <b>SGR</b>     | Standard Gauge Railway                                    |
| <b>SMEs</b>    | Small and Medium Enterprises                              |
| <b>SPSS</b>    | Statistical Programme for Social Sciences                 |

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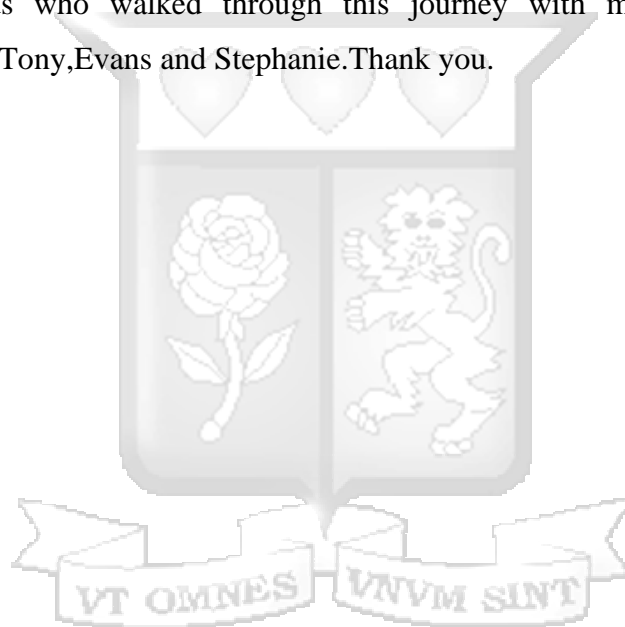
## DEDICATION

I dedicate my work to my family and support system. A special feeling of gratitude to my parents for their constant encouragement and following up on the progress to the very last detail.

A special mention to Tanya, Paul and Lydia words cannot explain how grateful I am. Thanks for being my biggest cheerleaders.

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# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Study

The business environment is becoming very dynamic due to incorporation of emerging technologies, the propagation of new standards that a business must follow and the rising global competition. Many companies are finding it difficult to thrive in the environment (Zott, 2003). These challenges erode the value of existing firm competencies and encourage firms to build new functional competencies. By sensing, reallocating, reconfiguring and renewing internal capabilities, dynamic capabilities allow firms to adjust to new market dynamics (Frishammar & Hörte, 2007). The development and deployment of these new capabilities, as well as ability to create necessary resources in order to adapt to new business conditions are key to sustaining growth. For businesses facing a growth slowdown, the long-term feasibility of growth as a business strategy is important (Baghai, Smit & Viguerie, 2007). Many companies, approach growth with no strategy at all, and only 27.5 percent of such companies survive after six years (Krogh & Cusumano, 2001). A company can adopt dynamic capabilities (DCs) to increase market share, increase revenue, or improve efficiencies through economies of scale. However, not every capability particularly in emerging markets, can guarantee long-term growth (Prats, Sosna & Ramakrishna, 2012). Thus, choosing the right dynamic capabilities is critical for maintaining the company's growth potential and surviving in the market.

According to Zahra et al. (2006), the concept of DC is vital for business growth sustainability because it allows companies to generate, find, and successfully exploit new opportunities by serving as a source of competitive advantage. The long-term sustainability is contingent on whether competitors can imitate products or introduce innovation. Since a company is more likely to control imitation as a direct form of competition rather than the ability of competitors to innovate, the significant barriers to imitation should exist. The more efficient these barriers are, the longer growth sustainability will be sustained (Laurie, Doz & Sheer, 2006). Many firms in the construction and allied sector have been experiencing a slowdown in demand, which undoubtedly impacts on profits. For instance, the sector has been underperforming since 2018. This is evidenced by the suspension of Athi River Mining Cement from trading at the Nairobi bourse after the firm was placed under administration in 2019.

Data by the Kenya National Bureau of Statistics also shows cement exports in the period January-June 2019 was 362.28, a sharp decrease from 1.04 billion in 2018 (KNBS, 2019). With additional production capacity being digitized (online) both locally and regionally, the cement industry in Kenya encounters the challenge of balancing medium to long-term demographics. Low per capita cement consumption signals expanding markets, but if demand does not materialize in the near future, the incentive for cement producers to expand dwindles, especially in the face of aggressive imports, rising energy costs and increasing local competition. Thus, cement manufacturers will have to identify all the variables that can influence and sustain growth in the long-term in form of dynamic capabilities.

### 1.1.1 Dynamic Capability

Dynamic capability refers to the creation of difficult-to-replicate resource combinations and the successful coordination of inter-organizational relationships that can offer a corporation a competitive advantage over competitors (Eisenhardt & Martin, 2000). DC is defined by Teece et al. (1997) as a company's ability to assimilate, grow, and reconfigure internal and external skills to meet changing market conditions. DC refers to a firm's ability to adapt, expand, or extend its resource base tenaciously in reaction to dynamic markets (Helfat & Peteraf, 2015).

Although dynamic capability involves utilization of a firm resources, in particular the process of integrating, reconfiguring, gaining, and releasing resources for matching and even creating market change, it is also viewed in terms of a firm's activity, processes, and practices that make it more competitive, thereby enabling a firm to maintain or gain market share in the industry (Teece et al., 1997). The word capabilities emphasize the critical role that the leadership of a firm plays in planning, reorganizing, and modifying internal and external authoritative capacities, resources, and practical capabilities to streamline the demands of a changing environment (Prabowo, Sriwidadi & Ikhsan, 2021).

The way people view organizational resources has evolved over time. Businesses now spend more on dynamic resources than on resources that only meet their operational needs. Businesses need a precise set of factors since the first industrial revolution to conduct their operations successfully and these factors have changed with each succeeding revolution. Numerous studies have offered categorizations (based on organizational, human and technological criteria) for these resources (Gupta et al., 2020).

Firms can alter and pursue strategic goals thanks to dynamic capabilities and strategy. In order to pursue effective digital business model innovation or digital transformation, for instance, incumbent enterprises across industries are constructing their dynamic capabilities. In order to take advantage of new technology, adapt to shifting customer behaviors, and ultimately outperform rivals, they are restructuring their internal and external resources. Regardless of the sector or types of change, a company will benefit in the long-term from investing in dynamic skills (Prabowo, Sriwidadi & Ikhsan, 2021).

Helfat and Winter (2011) opine there is need for a business unit to differentiate dynamic from non-dynamic capabilities because non-dynamic capabilities are concerned with ordinary or operational activities tailored towards maintaining the status quo. Contrary to this, dynamic capabilities are structured in a manner that alters the methods through which a firm generates revenue by adjusting old routines (Makadok, 2001). Calling a capability into use enables a firm to execute a task effectively. The outcome is superior results. Just like other capabilities, execution is the only means of maintaining dynamic capabilities (Winter, 2003).

Learning capability encompasses both accumulation of experience from repeated practices and mistakes, as well as the method for searching, articulating, and codifying new information (Zollo & Winter, 2002). Marketing capability is a specialized process that is architectural, inter-functional, and dynamic. This capability is used to acquire, combine and turn marketing resources

into value propositions for target markets (Morgan, 2012). It enables businesses to better understand their present and potential consumers' demands. Thus, the businesses will be able to service their customers' needs better, reach out to potential customers and assess the competition accurately (Fowler, 2000). Networking capability is the ability of a company to build and exploit inter-organizational links to gain diverse resources. Businesses can join forces with suppliers and certain competitors to develop a formidable network to obtain and maintain a competitive advantage. This collaboration makes it possible for companies to be highly competitive, because of introducing companies to new innovations and business strategies (Sawers et al., 2008).

As a significant component affecting organizational behavior and performance, organizational networks have been examined in the past. Recently, the phrase business social capital has become popular. The impact of social networks on the performance of a firm is captured by social capital. Most past studies examined the characteristics, and purpose of social capital, but they did not define it in terms of networking capabilities (Li & Liu, 2014). In order to conceptualize the social capital of construction and allied firms, the study examined the networking capabilities of these enterprises. The impact of learning on business performance and general assessment methods, has received minimal attention. The learning capability's role in achieving growth sustainability is unclear from most of the studies that have been conducted. It is considered that the presence of dynamic capabilities favors the development of marketing capabilities, which take place at different levels within the company ranging from the individual to the corporate level (Protogerou et al., 2011). Deviatykh and Sobakina (2014) operationalize dynamic capabilities using learning, innovation, marketing and networking capabilities. Similarly, the current study operationalized DCs using similar variables.

### **1.1.2 Growth Sustainability**

Growth sustainability refers to the attainable growth that firms can maintain without running into capital limitations, budget constraints or unwarranted losses (Yudanov, 2008). Growth is accomplished by growing revenue through increasing sales of both goods and services or by reducing costs (Mass, 2005). Growth sustainability is a business adoption strategy that simultaneously meets the needs of an enterprise and its stakeholders while maintaining, protecting and optimizing natural and human resources (Mass, 2005). As such, managers focused on growth sustainability must recognize and maintain resources that are vital to the organization efficiency (Phelps, Adams & Bessant, 2007).

The challenge of sustaining fast growth is most difficult for high-growth private firms in emerging markets (Prats et al., 2012). To maintain growth, a business must focus on maintaining competitive advantage as well as managing growth resulting from the exploitation of competitive advantage (Furlan & Grandinetti, 2011). Grant (2013), opines that the transferability and replicability of competitive advantage, as well as its longevity, can be used to determine growth sustainability. Geographical immobility, incomplete knowledge on resources and capabilities, complementarity of resources and proven organizational capabilities that are the most difficult to imitate, are sources of immobility of resources and capabilities that form competitive advantage. The ability of rivals

to mimic a company's competitive advantage is characterized by the transferability and replicability of these resources (Furlan & Grandinetti, 2011).

Organizations that successfully implement dynamic capabilities, are most likely to experience high growth (Pettus, 2001). Companies, however, need to understand the multidimensional nature of growth to have long-term growth. Furlan and Grandinetti (2011) examined the multi-dimensional nature of growth in terms of growth in size, relational growth and innovation growth. These three dimensions of growth are interrelated. How well these interdependencies are managed influences the firm's growth plan's effectiveness and durability.

Size growth refers to a company's borders expanding over time. i.e., expansion of current organizational units or the creation of new production, logistical, commercial units or subsidiaries (McKelvie & Wiklund, 2010). Relational growth is the increase in the degree to which external resources are utilized by an organization over-time. External resources are known as assets that are not personally held by the corporation, but which are available through partnerships with other institutions. This form of growth is also predetermined by the number and value of the company's strategic partners (Zhou, Park & Ungson, 2013). Innovation growth, on the other hand, refers to the creation of significant new value for clients and the organization by creatively modifying one or more business system dimensions.

The justification for using size, relational and innovation growth to measure growth sustainability is that a company's growth is multidimensional. According to Furlan and Grandinetti (2011), financial growth results from other growth aspects that should be evaluated first. Davidsson et al. (2005) opine that sales and profit growth are only partial indicators of a successful organization; therefore, size, relational, and innovation growth must precede financial growth. According to Pettus (2001), a company that successfully executes its dynamic capabilities, i.e. a sustainable competitive edge, is most likely to sustain growth. Firms must however, consider the multidimensional character of growth which includes size growth, relational growth, and innovation growth to deliver long-term growth. This study measured growth sustainability using size growth, relational growth and innovation growth.

### **1.1.3 Listed Construction and Allied Firms in Kenya**

The construction industry in Kenya comprises 8 firms, including Bamburi Cement Limited, Athi River Mining Limited (ARM), East Africa Portland Cement Company Limited (EAPCC), Crown paints, EA Cables Mombasa Cement Limited, National Cement Company Ltd, and Savannah Cement Company (Kenya Construction Industry Databook, 2020). Five of the eight firms are listed at the NSE: Bamburi Cement, EA cables, Athi river mining, Crown paints and EA Portland. Bamburi Cement Company is the largest cement manufacturer in the country. Apart from producing the largest volume of cement consumed in the country, it also has the largest market share. Besides producing cement, the construction and allied firms also make precast concrete, paving blocks, cables and paints (Dyer and Blair, 2019). The Capital Markets Authority regulates the NSE-listed firms. The COVID-19 pandemic is predicted to impact key industries significantly by restricting growth in the medium term. Key construction sectors like residential and commercial

sectors would be the hardest hit, while the infrastructure sector is expected to continue growing due to government spending (Kenya Construction Industry Databook, 2020).

Kenya's construction sector is predicted to grow at 10.4% compounded annual growth rate to 1023.4 billion by 2024 (Kenya Construction Industry Databook, 2020). In 2019, infrastructure development was estimated to be KES 339.3 billion, representing a CAGR of 10.2 % over a five-year period. Exports of cement to other nations fell by 58.3% to 42,000 tonnes in 2019. Cement imports, however, rose by 14.6% in 2019 from 23,000 tonnes in 2018. (Economic Survey Report, 2020). Lower building costs and more affordable home ownership ways, may be the key to growing low-end housing demand and, as a result, cement consumption. Low per capita cement consumption signals expanding markets, but if demand does not materialize in the near future, the incentive for cement producers to expand dwindles, especially in the face of aggressive imports, rising energy costs and increasing local competition (Dyer and Blair, 2019). Thus, cement manufacturers will have to identify all the variables that can influence and sustain growth to enable them navigate the expected challenges. This study therefore aimed to investigate the influence of dynamic capabilities on growth sustainability of listed construction and allied firms in Kenya.

## **1.2 Statement of the Problem**

Kenya being a highly turbulent emerging market, necessitates that companies adopt new strategies to counter rapidly evolving markets. The recession in the third quarter of 2020 is proof that the Kenyan economy is highly unstable, as measures introduced to reduce the spread of Covid-19 pandemic continued to hurt the economy unabated (World Bank, 2020). The recessionary effects spilled over to new government policies and industry regulations, consequently posing serious challenges to key sectors in the economy.

The most critical challenge in the construction sector is that firms do not reach sustained growth and last in the market for a long time (World Bank, 2020). Most of the listed construction firms operate in the market with a constant growth rate for 6-8 years, before they either go bankrupt or remain in the market growing slowly and insignificantly thus, lacking the normal level of profitability (Simiyu & Ruagmi, 2018). Kenya had only three cement producers in 2008, with the dominant player accounting for 65 percent of the market. With fresh competition, the dominant player's market share had fallen to 32.6 percent by 2017. High operating costs, poor governance, political uncertainty, poor marketing, poor market penetration, price stagnation and high demand, all led to change in the market share (Simiyu & Ruagmi, 2018). To ensure long-term growth and avoid any losses resulting from misalignment as circumstances change, construction and allied firms should aim to fit their operational variables to contingencies through dynamic capabilities (Molonket, 2014).

Putri, Irwansyah and Aprilia (2018) explored the relationship between dynamic capability and long-term success of Indonesian print media enterprises. The study was limited to one print media company. The dependent variable of the study was sustainability development, while this study variable is growth sustainability. Deviatykh and Sobakina (2014) examined dynamic capability and long-term viability of growth strategies in Russian high-growth private enterprises. The study

limitation is that only firms in the IT sector were considered. The current study extends the discussion to construction and allied firms. D'Annunzio, Carattoli, and Duplex (2015) studied how SMEs in Argentina acquire capabilities to grow. The study lacked delineation in terms of the scope of the capabilities addressed. The current study however was explicit in terms of the DCs that were investigated.

Eikelenboom and De Jong (2019) investigated dynamic capability and SMEs' long-term viability in the Netherlands. The study was limited to integrative capability while this study examined innovation, learning, marketing and networking capabilities. The study context was limited to SMEs whereas the current study examined firms in the construction and allied sector. Acquier, Carbone and Acosta (2013) examined dynamic capability and sustainable innovation. DC was investigated in terms of relational and organizational capabilities. The study limitation is that it focussed on two aspects of DCs: relational and organizational capability and it is important to add to the pool of knowledge and develop it further by analysing other categories of DCs that are necessary for organizations to achieve sustainable growth. Zayed and Alawad (2017) investigated the association between dynamic capabilities (market and learning) and Egyptian SMEs' performance. The study presents methodological gaps as innovation and culture were used as mediating variables, while in the current research, innovation is employed as an independent variable. A conceptual gap also arises since the focus was on business performance, not growth sustainability. Bayarcelik, Tasel and Apak (2014) determined the vital innovation elements that influence SME growth. The study presents conceptual gaps as it focused on SMEs, not construction and allied firms and only explored the innovation capability variable.

Prior research on dynamic capability has primarily focused on companies that operate in the western developed markets; little is known about dynamic capability and its connection to sustainable growth in developing countries. This focus restricts theoretical completeness and creates a large vacuum in literature because established markets and developing economies differ greatly from one another. The review of extant literature presents conceptual, contextual and methodological gaps. Conceptual gaps arise in studies, such as Acquier, Carbone, and Acosta (2013), who viewed dynamic capabilities as either relational or organizational capabilities and Eikelenboom and De Jong (2019), who considered DCs from the integrative capability perspective. However, the current study examined DC from the concept of networking, learning, marketing and innovation. Contextual gaps are evident in studies that focus on SMEs and IT firms whose operations are distinct from large construction firms, such as Zayed and Alawad (2017), Eikelenboom and De Jong (2019) and Bayarcelik, Tasel and Apak (2014) focused on SMEs. Deviatykh and Sobakina (2014) examined IT firms. However, the current study examined construction and allied firms that have more resources at their disposal and operate in a competitive business environment, thus DCs would impact them differently. Methodological gaps arise in cases where scholars used variables such as innovation and marketing as mediating factors and adopted interview guides. Given the above knowledge gaps, the current study sought to establish the relationship between dynamic capabilities and growth sustainability among Kenya's listed construction and allied firms.

### **1.3. Research Objective**

To establish the influence of dynamic capabilities on growth sustainability of listed construction and allied firms in Kenya.

#### **1.3.1 Specific Objectives of the Study**

The specific objectives of the study were:

- i. To establish the influence of learning capability on growth sustainability of listed construction and allied firms in Kenya.
- ii. To establish the influence of innovation capability on growth sustainability of listed construction and allied firms in Kenya.
- iii. To establish the influence of marketing capability on growth sustainability of listed construction and allied firms in Kenya.
- iv. To establish the influence of networking capability on growth sustainability of listed construction and allied firms in Kenya.

#### **1.4 Research Questions**

Based on the specific research objectives above, the study sought to answer the following research questions:

- i. What is the influence of learning capability on growth sustainability among listed construction and allied firms in Kenya?
- ii. What is the influence of innovation capability on growth sustainability among listed construction and allied firms in Kenya?
- iii. What is the influence of marketing capability on growth sustainability among listed construction and allied firms in Kenya?
- iv. What is the influence of networking capability on growth sustainability among listed construction and allied firms in Kenya?

#### **1.5 Scope of the Study**

The scope of the study included five construction and allied companies licensed and approved by the Capital Markets Authority. The study examined four independent variables: learning, innovation, networking, and marketing forms of DCs. Size, relational and innovation growth were used as measures of growth sustainability, denoting dependent variables. The relationship between the variables were analyzed using a correlation matrix and the relationship between the independent and dependent variables were analyzed using regression analysis. The study limited its geographical scope to Nairobi County. The respondents were senior and middle-level employees since they are well-versed in their firms operations and strategies.

## **1.6 Significance of the Study**

To the management and employees of construction and allied firms, the findings of this study will be beneficial in establishing the dynamic capability strategies that impact on growth sustainability, and advantages DCs offer to an organization. A careful analysis of the DCs and means of dealing with challenges associated with them will help drive these firms to greater success.

Government policymakers can benefit from the findings of the study in terms of being guided in the formulation of appropriate policies. The government can encourage the use of high-strength, low-carbon-dioxide materials through policy formulation. By moving to high-quality cement with a high value, businesses can increase profits while reducing production volumes but still meeting demand for construction materials as effectively as they currently do.

To the scholarly field, the study findings will be beneficial to scholars and academicians in understanding dynamic capabilities and growth sustainability in construction and allied firms. This research will help add to the pool of literature available on the subject from which future research may be based and from which areas for further research may also be identified.

## **1.7 Chapter Summary**

The chapter discusses the concept of dynamic capability and growth sustainability. DC is defined as the creation of difficult-to-replicate resource combinations and the successful coordination of inter-organizational relationships that can offer a corporation a competitive advantage over competitors, while growth sustainability refers to the attainable growth that firms can maintain without running into capital limitations, budget constraints or unwarranted losses. The chapter also discusses the statement of the problem and highlights the various empirical studies conducted locally and international on dynamic capability and growth sustainability in an attempt to identify the conceptual and contextual gaps. The chapter highlights the general and specific objectives of the study and concludes by looking at the scope and significance of the study.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter discusses the theories on which the study is based, covers the empirical literature on the topic, presents the conceptual framework and concludes with a synopsis of the research gaps and operationalization of the variables.

#### **2.2 Theoretical Framework**

Theoretical literature is mainly studied under two main schools of thought, namely; Resource-Based view and Dynamic Capability Theory. However, for this study, the theory underpinning the study was the Dynamic Capability Theory.

##### **2.2.1 Dynamic Capability Theory**

The dynamic capability of a business are resources that are both external and internal that allow it to integrate, learn and reconfigure its assets and processes to attain and maintain competitive advantage (Teece et al, 1997). The theory conjectures that firm level dissimilarities in capabilities are embedded in their asset positions.

Dynamic capabilities theory appeared as an alternative approach to solve some of the weaknesses of RBV theory (Galvin et al, 2014). Dynamic capability theory presents path-dependent processes that allow firms to adapt to rapidly changing environments by building, integrating and reconfiguring their resource and capabilities portfolio (Teece et al, 1997).

Both Pisano and Teece (1994) advanced DCT and they made a major contribution to DC theory by writing about the micro-foundations for each of the three following dimensions: sensing (identification and assessment of an opportunity), seizing (mobilization of resources to address an opportunity and to capture value) and transforming (continued renewal reconfiguring the business firm's intangible and tangible assets) and Martin and Eisenhardt (2000) further refined the theory by stating that the functionality of dynamic capabilities can be duplicated, so that value for competitive advantage lies in the arrangement of resources. Therefore, dynamic capabilities are organization and strategic routines that enables firms to achieve new resource configurations as markets, emerge, and evolve.

Dynamic capability is a concept of a larger system that includes a resource and a strategy. Resources include people, equipment, structures, and intangible assets. Many resources are generic, meaning they can be replaced, if necessary, through a market transaction. Barney's (1991) criteria of value, scarcity, imperfect imitability, and non-substitutability apply to the most critical type of resource (VRIN). VRIN resources can assist a company in gaining sustainable competitive edge. Because most intangible assets have ill-defined property rights, they are effectively non-tradable and thus difficult to obtain (Teece, 2015).

The concept of dynamic capability arose from the company's resource-based view's fallibility. The RBV was faulted for disregarding resource factors, believing that they simply exist. How resources are produced, reconfigured in the organization and how they are integrated were under-explored in the RBV model (Priem & Butler, 2001). The RBV focused on the choice of resources or the selection of suitable resources whereas the dynamic capability theory emphasized on resource development and renewal.

Dynamic capabilities go even further by recognizing that organizations do not only adapt to their environment; they frequently aim to alter it as well. Dynamic capability theory eliminates resource view gaps by acting as a buffer between firm resources and the changing dynamic environment through execution of a process strategy (Teece, 2015). In this study the researcher aimed to look at whether dynamic capabilities affected growth sustainability of listed construction and allied firms. Based on the results of the study, it showed that dynamic capabilities influenced growth sustainability and the tenets of this theory were upheld.

Dynamic capabilities are key to long-term growth, because they enable a firm to successfully evolve over time (Sirmon, Hitt & Ireland, 2007). Thus, the company's growth plan needs to be relatable to the dynamic resource it possesses. Dynamic capabilities allow companies to choose strategies. According to Prats et al., (2012), emerging markets need clear strategic choices to endure volatility and react to market changes. The researcher opines that in emerging markets, high-growth firms prefer using certain strategies or a mix of strategies. Polunin (2013) argues that most businesses find it difficult to survive after expansion because they lack strategic specialization and provide the same product or service as competitors with minor variations. This is true for developing markets, that have recently begun to register economic development but still have substantial product gaps in their product offerings. Hence, firms that are able to find a clear narrow niche in the market are more likely to take advantage, grow quickly, and sustain growth.

DC theory has been criticized on the basis of difficulties in analyzing the merits of the outcomes. In addition, there are no clear frameworks for measuring dynamic capabilities and their influence on performance (Zott, 2003). In spite of the criticisms, dynamic capability theory is relevant to the study because dynamic capabilities influence the company's resource base (internal and external), which are sources of competitive advantage (Ambrosini & Bowman, 2009). Dynamic resources assist a business to change its resource mix and thereby preserve the longevity of its competitive advantage that could otherwise be extinguished. A company's overall strategy is primarily concerned with ensuring a fit between the organization's offerings and the demands of the environment (Miles & Snow, 1978). Attaining this fit again calls for the organization to be able to alter its processes. As such a business must have DCs which in addition to raising the company survival chances, also offers growth possibilities (Helfat et al., 2007).

### **2.2.2 Resource Based View**

This Resource based principle underlines the value of organizational internal resources to gain a competitive advantage. A resource holder can maintain a relative position in relation to another holder when they act reasonably (Wernerfelt, 1984). Furthermore, Barney (1991) makes the case that businesses in the same industry may differ in terms of their own capital, and because resources are difficult to transfer between businesses, this heterogeneity and the resulting competitive advantage may be long-lasting.

The resource-based view (RBV) characterizes a firm as a pool of resources and knowledge capable of developing and maintaining competitive advantage (Talaja, 2012). Barney (1991) proposed four unique resources that a firm should possess to remain competitive: He suggests that the resources should be durable, scarce, imitable and irreplaceable. Amit and Schoemaker (1993) referred to the resources as inventories of open factors owned or controlled by a firm. They include both tangibles like money and physical assets like machinery, land, and buildings as well as intangibles like people resources, customer trust, firm reputation, and know-how (Nath et al., 2010).

The theory is relevant to the current study as it emphasizes the importance of possession of unique resources (dynamic capabilities) for firms to attain and sustain growth. A firm is able to gain and sustain growth if it possesses resources that are rare, valuable, inimitable and organizable. The resource-based theory posits that it is easier for industrial firms to build and maintain their growth by developing internal capabilities rather than relying on external capabilities that are prone to be copied by other firms in the same market.

### **2.3 Empirical Review**

The section provides a review of related empirical research which is in line with the study.

#### **2.3.1 Learning Capability and Growth Sustainability**

Learning capability encompasses the accumulation of experience from repeated practices and prior mistakes, as well as a more devoted method for searching, articulating, and codifying new knowledge relevant to a dynamic setting (Zollo & Winter, 2002). Once organizations recognize the value of learning, they need to ensure that knowledge is constantly acquired and mastered by staff (Drucker, 1993). Huysman (2001) notes that by establishing structures and developing strategies that enable workers to learn, a firm creates conditions that are vital in improving performance. Once the learning processes is in place, it is possible to achieve outcomes such as creativity, alignment of the firm's internal and external factors, efficiency and competitive advantage.

Kaya and Patton (2011) opine that learning capability is a vital component in information acquisition and dissemination process. They opine that because information is communicated or shared between employees of the organization through the activities of individuals and the corporation as a whole, it would have a beneficial influence on the performance of the firm and hence impact on the growth prospects.

Altınay, Madanoğlu, Vita and Araslı (2013) determined the link between organizational learning and SME growth in North Cyprus. 350 SMEs sampled had between 2 to 50 employees. Data was collected via questionnaires which were semi-structured. The measurement of growth consisted of sales growth, market share growth and employment growth. Data analysis was via exploratory factor analysis. The study found a positive association between organizational learning and SME growth. Firms that aggressively innovate (new products and services), behave proactively to seize market opportunities, and take risks are more likely to succeed.

Zheng and Khavul (2005) explored the link between learning capability and growth in Chinese firms. Technological firms in China formed the study population. Data collected was for the period September 2003 to December 2003. 146 firms were selected for the study. Interviews were conducted to gather data. Overall, the results of the study supported the notion that entrepreneurial firms must build core skills internally while also learning from international markets in order to achieve growth. Companies that succeed in these tasks would attain faster international growth.

Oketch, Kuria and Kariuki (2018) investigated the association between organizational learning and organizational culture among NGOs in Kenya. 3 NGOs in Nairobi County formed the study population. 84 respondents were sampled for the study. Research design used was descriptive in nature. Data was collected using questionnaires that was mailed to respondents. The results revealed that every aspect of organizational culture has an influence on the multiple perspectives of organizational learning.

Gicheru and Kariuki (2019) investigated dynamic capability impact on commercial banks performance in Kenya. 40 banks formed the population and 202 respondents formed the sample population. Questionnaires were used in collating data and analysis was by SPSS software. The learning capabilities dimensions investigated were systems thinking, team learning and information sharing. Descriptive design tool was used in the study. All the learning capabilities dimensions were found to impact on organizational performance positively.

Most studies on learning capability have focused on entrepreneurial firms, SMEs, IT firms and banks and not construction and allied firms. Even for studies conducted in the construction sector, the focus was on organizational sustainability and not growth sustainability. A gap also arises in the context of the data collection tool used as some studies relied on interview guides while the study utilized questionnaires as the collection tool.

### **2.3.2 Innovation Capability and Growth Sustainability**

The ability or tendency of a business to innovate or produce new products, services and processes is innovation capability (Andreassi & Sbragia, 2002). Hult et al., (2004) argues that innovation may be an element of a firm's culture, its desire, propensity and readiness to be imaginative and to introduce new ideas and abandon common routines. This makes innovativeness an intrinsic feature of the business, a powerful and difficult resource to emulate.

Gabriele and Corsino (2010) explored product innovation and firm growth in Italy. The study covered the integrated circuit industry in Italy. The study covered the period 1998-2004. 30 companies were selected for the study. Interviews were used as data collection tools. The research

design used was descriptive. According to the results of the study, increased product innovations had a beneficial impact on firm growth, especially for units domiciled in dynamic markets.

Bianchini, Pellegrino and Tamagni (2014) investigated innovation strategies and firm's growth in Spain. The study covered the period 2004 to 2011. Growth indicator was sales while innovation indicator was product innovation and process innovation. The study focuses on manufacturing firms. The study sample is 26,386 firms. Research findings revealed that internal research and development (R&D) impacted positively on sales growth. Additionally, external R&D and process innovation were found to have insignificant impact on sales growth.

Santi and Santoleri (2016) established the association between innovation and growth of firms in Chile. The researchers focused on product and process innovations. Data covered the years, 2007, 2009 and 2013. 1668 firms in the manufacturing and retail sector were utilized. Data was obtained from the Chilean manufacturing survey database. Research findings indicated that product innovation and sale growth were negatively associated. Process innovation and sales growth were found to be positively associated.

Mugambi and Kinyua (2020) determine the link between innovation capability and banks performance in Nairobi County. The researcher examined response to market change and technological infrastructure. Design used was descriptive. Respondents were 40 senior managers. A questionnaire was created with the number of statements regarding each dimension. The findings showed that innovation capability was crucial for invention management and creativity that can boost growth.

Past studies on innovation capability examine its relationship to sales growth and not growth sustainability. The current study sought to extend the discussion to relational growth and innovation growth. Moreover, the studies seem to have focused on process and product innovation and not innovation capability as a whole, hence the knowledge gap.

### **2.3.3 Networking Capability and Growth Sustainability**

The ability of a firm to build and exploit inter-organizational relationships to gain diverse resources is networking capability (Walter, Auer & Ritter, 2006). It refers to a company's ability to place itself strategically inside a network and form beneficial partnerships with specific partners. Businesses can cooperate with suppliers and competitors to develop a formidable network to achieve and maintain growth. Companies will be more competitive when they adopt inter-organizational collaboration that exposes them to fresh ideas and business techniques (Sawers, Pretorius & Oerlemans, 2008).

Shah, Yasir, Majid and Javed (2019) established the link between networking capability and organizational survival of SMEs in Pakistan. Study respondents consisted of 469 managers/owners of SMEs. Data collection was via self-administered questionnaires using Likert scale. Research design adopted was descriptive. Correlation and regression were employed in data analysis. Results findings indicated that all the aspects of networking capability impacted on the organization survival positively.

Inigo, Ritala and Albareda (2020) explored networking capability and sustainability orientation in innovation. The study focused on alliance capability. 170 firms in Spain formed the study sample. The model used was the partial least square model. Study findings revealed that alliance capability link to sustainability-oriented innovation was positive. The study recommends that companies focusing on incremental sustainable innovation will gain more from open innovation by partnering.

Roininen (2008) examines networking as a competitive advantage tool in Swedish ventures. The study population consisted of 7520 new Swedish business ventures. The study narrowed to 1384 firms obtained through random sampling. Secondary data was derived from Swedish database. Cross-sectional design was employed. Data was gathered by use of questionnaires. Firms with high levels of network capabilities were found to improve their competitive advantage.

The reviewed studies on networking capability majorly focused on the link to competitive advantage or organizational survival. In addition, the researchers limited studies to either new venture firms or SMEs overlooking firms in the construction and allied sector hence the knowledge gap.

### **2.3.4 Marketing Capability and Growth Sustainability**

Marketing capability is a company's willingness to systematically and intentionally learn about consumers, rivals and channel participants in ways that allow not only for a thorough grasp of current market trends, but also prediction of potential market changes (Morgan, 2012). Marketing capabilities enable businesses to better understand their present and potential consumers' demands so that they may improve on their products and services, as well as assess their competition accurately (Fowler, 2000). The marketing expertise of one person may be combined with that of other experts in various areas and cross-functional teams (Teece et al. 1997).

Naidoo (2010) explored the influence of marketing orientation and marketing innovation on firm's survival in China. The study covered the period 2008 to 2009. 184 SMEs in the manufacturing sector were sampled. Questionnaires were used in data collection. The findings revealed that Chinese manufacturing SMEs had a higher chance of survival if they built and maintained a competitive advantage and that marketing innovation capabilities of the manufacturing SMEs increased because they were competitor-oriented and had clear inter-functional capabilities.

Shen, Sha and Wu (2020) investigated marketing capabilities and innovation link in China. The research focused on market vigilance, market experimentation and open marketing capabilities. 163 IT firms formed the population. Chemical engineering, biotechnology, and machinery manufacturing were among the industries representing the respondents. Study findings revealed that all the marketing capabilities forms impacted positively on sustainable innovation performance.

Takahashi, Bulgacov, Semprebon and Giacomini (2017) explore marketing capability and performance in Brazil. 316 universities formed the population. Because of its highly competitive nature, the study focused on the private sector, which had developed academic and administrative standard procedures. Marketing capability was found to positively influence organizational performance.

The reviewed studies on market capability centred on SMEs, higher institutions of learning and IT firms whose size growth is not that typical as it is in the construction industry thus a knowledge gap. Moreover, the studies majorly focused on marketing capability and organizational performance and not growth sustainability which the current study sought to explore.

#### **2.4 Summary of Knowledge Gaps in Research**

Many studies conducted on dynamic capability have centred on its effect on competitive advantage, organization performance and firm's growth. There has been few research on DCs and growth sustainability, resulting in a conceptual gap. Naidoo (2010) explores marketing orientation and firm's survival while Roininen (2008) examines networking and competitive advantage. Some studies focused on the direct link between the variables while ignoring the causal effect and the magnitude of the effect: Inigo et al., (2020) looks at networking capability and sustainability innovation while Opoku and Fortune (2011) investigated organizational learning and sustainability in the UK.

Contextual gaps arise where studies were done in other sectors, ignoring the construction sector: Zheng and Khavul (2005) investigated learning capability in technological firms whereas Bianchini, et al., (2014) investigated innovation capability in manufacturing firms. The findings have also been mixed with respect to some DC variables like innovation capability: Santi and Santoleri (2016) find product innovation and sales growth are negatively linked. This study sought to fill these gaps by investigating the influence of dynamic capability on growth sustainability of listed construction and allied firms in Kenya.

**Table 2.1 Research Gaps**

| <b>Author</b>                              | <b>Focus of study</b>  | <b>Methodology</b>   | <b>Findings</b>   | <b>Research Gap</b>   |
|--|--|--|---|---|
| Gabriele and Corsino (2010)                | To investigate the association between product innovation and firm growth in the integrated circuit industry in Italy. | The study covered the period 1998-2004. Research design was descriptive and regression was used in analysis of data.                               | The study found that increased product innovations had a beneficial impact on firm growth, especially for units domiciled in dynamic markets. | Need to incorporate other variables such as networking capability, learning and marketing capability. and extend the study to developing countries such as Kenya. |
| Mugambi and Kinyua (2020)                  | To determine the link between innovation capability and banks performance in Nairobi County                            | The period covered by the study was from 2002 to 2011. Multiple regression was applied in the analysis   | The findings show that innovation capability is crucial for invention management and creativity that can boost growth                         | Extension of the study to other sectors such as construction and allied sector and do the findings hold true in other regions such as Kenya.                      |
| Bianchini, Pellegrino and Tamagni (2014)   | To establish the effect of product and process innovation strategies on manufacturing firm's growth in Spain.          | The study covers the period 2004 to 2011. Regression was used in the analysis  | Research findings revealed that internal research and development (R&D) impacted positively on sales growth.                                  | Need to incorporate other variables such as networking capability, learning and marketing capability and extend the study to developing countries such as Kenya.  |
| Altinay, Madanoglu, Vita and Arasli (2013) | To determine the link between organizational learning and SME growth in North Cyprus.                                  | The measurement of growth consisted of sales growth, market share growth and employment growth. Data analysis was via exploratory factor analysis. | The study finds a positive association between organizational learning and SME growth   | Need to explore other growth measures like size, relational and innovation growth.  |
| Oketch, Kuria and Kariuki (2018)           | To investigate the association between organizational learning and organizational culture among NGOs in Kenya          | Research design used was descriptive in nature. Data was collected using questionnaires that was mailed to respondents                             | Research design used was descriptive in nature. Data was collected using questionnaires that was mailed to respondents.                       | Investigation of growth sustainability and not organizational culture.  |

|                                     |   |   |   |   |
|-------------------------------------|---|---|---|---|
| Shah, Yasir, Majid and Javed (2019) | To establish the link between networking capability and organizational survival of SMEs in Pakistan | Data collection was via self-administered questionnaires using Likert scale. Research design adopted was descriptive. Correlation and regression were employed in data analysis | Results findings indicated that all the aspects of networking capability impacted on the organization survival positively.  | Need to extend the study to construction and allied firms.      |
| Roininen (2008)                     | To examine networking as a competitive advantage tool in Swedish ventures                           | Cross-sectional design was employed. Data was gathered by use of questionnaires.  | Networking capability and competitive advantage were found to be positively related.  | Information lacking on the growth sustainability variable.      |
| Naidoo (2010)                       | The influence of marketing orientation and marketing innovation on firm's survival in China         | The study covered the period 2008 to 2009. Data was analyzed using regression.  | The findings revealed that Chinese manufacturing marketing innovation capabilities increased because they were competitor-oriented and had clear inter-functional capabilities. | Need to incorporate other variables like growth sustainability. |

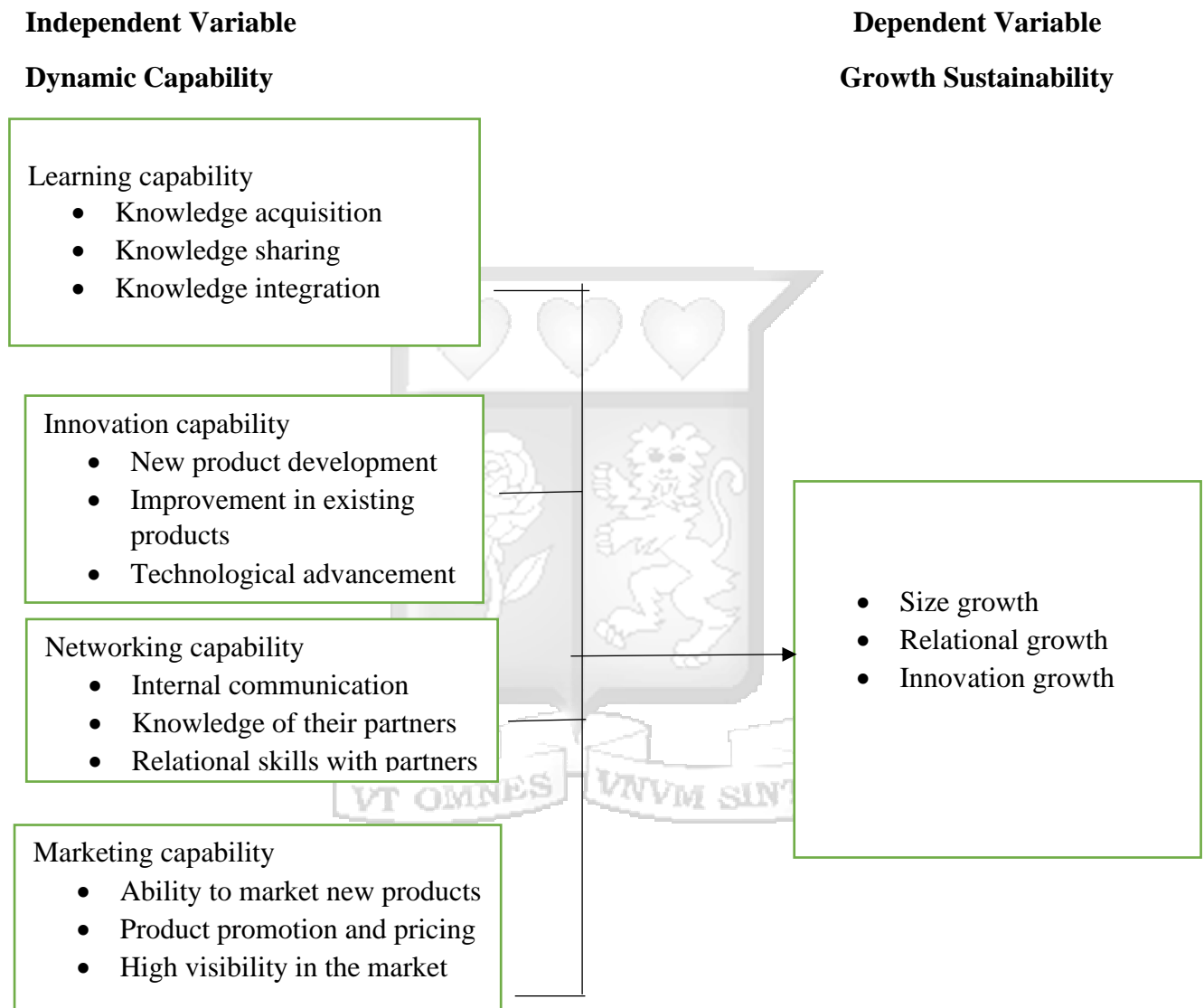
Source: Author (2022)



## 2.5 Conceptual Framework

It represents the relationship between dynamic capability and growth sustainability. The independent variable for the research is dynamic capability while the dependent variable is growth sustainability.

**Figure 2.1 Conceptual Framework**



**Source: Author (2022)**

## 2.6 Operationalization of Study Variables

It is the conversion of variables into measurable components. The method defines concepts and enables them to be empirically and statistically measured. Dynamic capabilities are the independent variables while growth sustainability is the dependent variable. The table 2.2 below demonstrates how the study variables were measured.

**Table 2.2 Operationalization of the Variables**

| Type of variable     | Indicators  | Operational Definition   | Rating Measures      | Data Analysis              | Literature Source  |
|----------------------|---|--|----------------------|----------------------------|--|
| Independent variable | Learning capability                                   | Knowledge acquisition<br>Knowledge sharing<br>Knowledge integration  | 5-point Likert scale | Descriptive and Regression | (Pavlou & El Sawy, 2011; Lichtenthaler, 2009).                             |
|                      | Innovation capability                                 | New products and services development.<br>Improvements in existing products.<br>Technological advancement.   | 5-point Likert scale | Descriptive and Regression | Gunday et al. (2011), Hassan et al. (2013), Atalay et al. (2013),          |
| Dynamic Capability   | Networking capability                                 | Internal communication.<br>Knowledge of their partners.<br>Relational skills with other firms.   | 5-point Likert scale | Descriptive and Regression | Walter et al., (2006)  |
|                      | Marketing capability                                  | Identification of customers.<br>High visibility in the market.<br>Monitoring of prices and products.   | 5-point Likert scale | Descriptive and Regression | Cepeda and Vera, 2007; Wang and Ahmed, 2007)                               |
| Dependent variable   | Size growth<br>Relational growth<br>Innovation growth | Gain in market share (size growth)<br>New relationships and non-equity partnerships with other firms or organizations.<br>Introducing innovative features to the existing products or creating and developing brand new projects | 5-point Likert scale | Descriptive and Regression | Furlan and Grandinetti (2011), Li and Liu (2014) and Peters et al. (2016). |

**Source: Author (2022)**

## 2.7 Chapter Summary

The second chapter primarily focused on the study's guiding theory: the dynamic capability hypothesis. The conceptual framework and four dynamic capability practices were also discussed. The goal of literature review was to depict the link between dynamic capability practices and growth sustainability. Many studies that have been conducted on dynamic capability, centred on its effect on competitive advantage, organization performance, firm's survival or firm's growth and not growth sustainability. The findings have also been mixed with respect to DC variables. The conceptual model depicting the relationship between the constructs of interest were also discussed. Growth sustainability was the dependent construct, while dynamic capability practices were the independent constructs. Finally, the operational framework and the research gap are discussed in the chapter as well.



## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The procedures for obtaining and analyzing data are discussed in this chapter. The research design, target demographic, sampling design, data collection, validity and reliability of data, data analysis and ethics are all covered.

#### **3.2 Research Philosophy**

A research philosophy is a set of principles for conducting research that is founded on beliefs about reality and the nature of knowledge (Collis & Hussey, 2014). Positivism and interpretivism are the two basic research philosophies. These two ideologies describe two fundamentally different ways in which we as humans make sense of the world around us: positivism holds that reality exists independently of us, allowing researchers to observe reality objectively. Reality is considered as very subjective in interpretivism since it is molded by our perceptions. The study adopted the positivism approach. Positivistic thinkers use scientific approaches to standardize the knowledge generating process and use quantification to improve the precision of parameter descriptions and relationships. Positivism is focused with finding and conveying truth through empirical means (Henning & Van Rensburg, 2004).

#### **3.3 Research Design**

The study used a descriptive design since it involved a one-time interaction with the respondents. The design enabled the researcher to collect data, knowledge and beliefs from the population under investigation (Mugenda & Mugenda, 2008). A descriptive research design explains and describes the current state of a phenomenon. A descriptive study is concerned with existing situations, practices, structures, distinctions or relationships, held attitudes, ongoing processes, or discernible trends (Punch, 2013). As a result, this study used the descriptive research approach to describe the dynamic capability practices in the listed construction and allied firms and their relationship to growth sustainability.

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

The study total population consisted of all five construction firms listed at the NSE as at 31 July 2022. They include: Bamburi Cement, Athi River Cement, Crown Paints, East African Portland and East African Cables (NSE, 2022).

A census survey was carried out on the five firms because of the small population size. Construction and allied firms are selected as population because product innovation is a key strategy for Kenyan firms seeking to be competitive. Secondly, construction and allied firms often form networking alliances to fastract innovation and mitigate risks associated with economic growth. Thirdly, because of its competitive business climate and increasing innovation activities, the construction and allied sector has become a common setting for studying innovation.

### **3.5 Sampling Design**

The research utilized a judgmental sampling technique where respondents are selected based on the researcher's knowledge as to who provided the best information for the study to succeed. Judgemental sampling technique involves selection of informants who posses specific knowledge that the researcher is looking out for and does not need to be backed up by theories (Tongco,2007)The target respondents were senior level staff and middle level staff in the department of business development, marketing, research, finance, human resources and corporate affairs. Five respondents were selected from each department (Javis, Mackenzie & Podsakoff, 2003). The study therefore had a total of 150 respondents for all the firms.

### **3.6 Data Collection**

To gather data from the participants, the study employed primary research tools. Noor (2008) opines that primary data can be obtained by a variety of methods, including interviewing, direct observation, cultural records, artifact analysis, the use of visual materials, and the use of personal experiences. A questionnaire was used as the primary data collection tool because a larger number of respondents could be contacted in a short time. Data was collected by emailing questionnaires and some were physically dropped to the respondents accompanied with an introductory letter from Strathmore Business School and a Nacosti permit.

The questionnaire had three sections. Section A collected background and demographic data about the respondents and the construction and allied companies. Section B collected data on the dynamic capabilities' strategies considered important by the listed firms. Section C collected data on the growth sustainability of the construction and allied firms. A five-point Likert scale was used in the questionnaire (Blessing & Chakrabarti, 2009).

### 3.7 Research Quality

This entailed determining the questionnaire's suitability. Piloting helps determine whether the questionnaire is legitimate, whether the research participants comprehend the questions in the same way, whether the phrasing is clear, and whether implicit bias is present in the study (Singh, 2014).

The study used a 10% of the sample size representing one firm in the manufacturing sector (Mugenda & Mugenda, 2003). After piloting, adjustments were made in order to address areas of concern.

#### 3.7.1 Reliability of Research Instruments

It's a metric for determining the accuracy of the results produced by the research instrument after numerous trials. Cronbach's alpha was utilized to verify the instrument's internal consistency. Cronbach Alpha of 0.7 or higher is deemed acceptable and suggests that the scale is dependable. Questions from the pilot study with a low Cronbach Alpha were modified or removed from the questionnaire.

**Table 3.1 Reliability Coefficients**

| Scale                 | Number of items | Cronbach's Alpha |
|-----------------------|-----------------|------------------|
| Innovation capability | 4               | 0.711            |
| Learning capability   | 5               | 0.788            |
| Marketing capability  | 5               | 0.819            |
| Networking capability | 5               | 0.833            |
| Growth Sustainability | 5               | 0.842            |

**Source: Survey Results (2022)**

As shown in Table 3.1, all scales were significant, with an alpha value greater than 0.7. As a result, the analysis was judged to be reliable and applicable for further research. The results are consistent with those of Cooper & Schindler (2014), who established that a study can proceed when the Cronbach's Alpha values are larger than 0.5.

### 3.7.2 Validity of Research Instruments

Validity refers to how well data accurately reflects the phenomenon being studied as captured by the study instrument (Mugenda & Mugenda, 2003). By assessing the validity of the instruments, the researcher ensured that the questions are testing the relevant constructs. The content validity of the questions was determined by consulting the supervisor, who compared questions against the objectives.

### 3.8 Data Analysis

The information gathered was checked for inaccuracies and completeness and the analysis procedure included, data cleansing to remove any extraneous information, as well as grouping and coding in excel. The data was then entered into the SPSS software and descriptive analysis was done using percentages, mean, frequency distributions, measures of central tendency, and standard deviation. Correlation analysis was done using Pearson correlation to determine the nature of interaction between variables using a significance level of 0.05. Any p value above 0.05 signified insignificant relationship between the variable and vice-versa. The thresholds in Pearson correlation also show that any value greater than 0.05 is said to be statistically insignificant any value less than 0.05 is said to be statistically significant. Regression was also done to establish the relationship between dynamic capability and growth sustainability.

#### 3.8.1 Analytical Model

The study adopted the multiple regression model to establish the relationship between dynamic capabilities and growth sustainability as shown below:

$$Y = \alpha + \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where: Y = growth sustainability

$\alpha$  = constant (y intercept)

$X_1$  = Innovation capability

$X_2$  = Learning capability

$X_3$  = Marketing capability

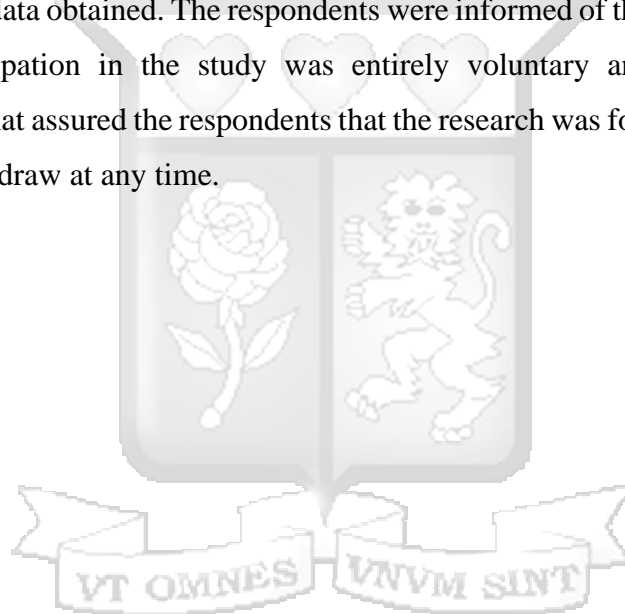
$X_4$  = Networking capability

$\beta_i$  (i= 1, 2, 3, 4) = Coefficients of regression.

### 3.9 Ethical Considerations

In research, ethics refers to an individual conduct when performing research (Coopers & Schindler, 2014). The basic goal of ethics is to protect participants from damage caused by research and to ensure that data is obtained and processed fairly in order to yield legitimate results (Kothari, 2004). The researcher sought an introductory letter from Strathmore Business School and a research permit from NACOSTI since it's the only state corporation mandated to grant research licenses in Kenya. Permission to gather data was also sought from the Institutional Ethics Review Committee at Strathmore University.

To ensure the study was conducted ethically, the respondents involved in the study were treated ethically. This was accomplished through obtaining prior consent and maintaining the confidentiality of the data obtained. The respondents were informed of their rights and benefits, including that participation in the study was entirely voluntary and there was also an introductory section that assured the respondents that the research was for educational purposes and that they can withdraw at any time.



## CHAPTER FOUR

### DATA ANALYSIS, FINDINGS AND INTERPRETATIONS

#### 4.1 Introduction

The data analysis and interpretation are presented in this chapter. The response rate, demographic details, descriptive analysis, correlation analysis and regression analysis are among the sections examined.

#### 4.2 Response Rate

The researcher administered 150 questionnaires but 105 questionnaires were filled and returned. Thus, the response rate was 70%. Babbie (2004) argues that a 70% response rate is excellent for a researcher to proceed with analysis. Thus, the study proceeded to process the questionnaires and the response rate is as shown below:

**Table 4.1 Response Rate**

| Questionnaire      | Frequency  | Percentage  |
|--------------------|------------|-------------|
| Returned           | 105        | 70%         |
| Unreturned         | 45         | 30%         |
| <b>Distributed</b> | <b>150</b> | <b>100%</b> |

Source: Survey Results (2022)

#### 4.3 Demographic Characteristic of the Respondents

This section captures the responses by gender, age, highest education level, level of seniority, the department they work for and the length of service. The findings are presented and analyzed in the tables and figures.

##### 4.3.1 Gender of the Respondents

The researcher asked the respondents to disclose information about their gender and the findings are indicated in Table 4.2.

**Table 4.2 Response by Gender**

| <b>Gender</b> | <b>Frequency</b> | <b>Percentage</b> |
|---------------|------------------|-------------------|
| Male          | 57               | 54.29%            |
| Female        | 48               | 45.71%            |
| <b>Total</b>  | <b>105</b>       | <b>100%</b>       |

**Source: Survey Results (2022)**

As shown in Table 4.2 the male respondents registered the highest percentage 57 (54.29%) compared to female respondents 48 (45.71%). Therefore, based on the results, men are the majority gender among respondents. Further evidence that both genders are fairly represented in the studied firms comes from the fair distribution of male and female respondents. This suggests that all genders participated in the study and that there was no gender bias in the research.

#### **4.3.2 Age of the Respondents**

The study deemed age an important demographic characteristic with a view to establish any pertinent trends in the variables under study as well as to have an overview of the age distribution thereof. Table 4.3 presents the findings.

**Table 4.3 Age of the Respondents**

| <b>Age Group</b> | <b>Frequency</b> | <b>Percentage</b> |
|------------------|------------------|-------------------|
| 18-24            | 0                | 0%                |
| 25-34            | 10               | 10%               |
| 35-44            | 63               | 60%               |
| Over 45 years    | 32               | 30%               |

**Source: Survey Results (2022)**

According to Table 4.3, the bulk of respondents 60% fall within the 35-44 age group. A close second, at 30%, is individuals over 45 years old. Only 10% of respondents are in the 25-34 age range.

The investigation showed that the listed construction and allied enterprises had a very even distribution of ages. Additionally, it was clear that all five listed construction and allied firms were made up of senior, experienced workers between the ages of 35 and over 45.

A rich diversity in experience was thus established in the responses. This is in line with Jan & Stoeldraijer (2010) who claimed that a person's age is directly proportionate to their contribution to the work. The researcher was confident in the data acquired because the majority of respondents were experienced and had the necessary abilities to respond to the questionnaire.

#### 4.3.4 Level of Education of Respondents

Respondents were questioned about their highest levels of education. In addition to providing a general overview of education levels at the listed construction and allied firms, this would serve to demonstrate the academic qualifications of respondents in their particular roles.

**Table 4.4 Level of Education of the Respondents**

| Education Level | Frequency | Percentage |
|-----------------|-----------|------------|
| Masters         | 42        | 40%        |
| Bachelor        | 53        | 50%        |
| Diploma         | 10        | 10%        |
| Certificate     | 0         | 0%         |

**Source: Survey Results (2022)**

The respondents' highest degrees of education are shown in Table 4.4. According to the results, the majority of respondents 50% had earned a bachelor's degree, followed by 40% who had earned a postgraduate degree. No one had a certificate, although another 10% claimed to have earned a diploma. Overall, it can be claimed that the studied area employs highly literate staff. Therefore, it can be inferred that due to their high levels of education, respondents were able to understand the objectives and provide accurate answers to questions.

#### 4.3.5 Management Role

The respondents were asked to state their role. The findings are as shown in table 4.5. Results indicated that majority of the respondents 57.14 % were senior level managers while 42.85% were middle level staff. These findings suggest that senior management roles could be in high demand in the construction and allied firm given the high percentages.

**Table 4.5 Management Role**

| <b>Role</b>        | <b>Frequency</b> | <b>Percentage</b> |
|--------------------|------------------|-------------------|
| Senior level staff | 60               | 57.14%            |
| Middle level staff | 45               | 42.85%            |
| Lower-level staff  | 0                | 0.00%             |

**Source: Survey Results (2022)**

#### 4.3.6 The Department of the Respondents

The respondents were asked to state which department they are deployed. The findings are as shown in table 4.6. Results indicated that majority of the respondents 28.57% were employees from the marketing department. This suggests that marketers play a significant role in influencing and maintaining the growth sustainability of construction and allied firms.

**Table 4.6 Respondents Department**

| <b>Department</b>    | <b>Frequency</b> | <b>Percentage</b> |
|----------------------|------------------|-------------------|
| Business Development | 20               | 19.04%            |
| Marketing            | 30               | 28.57%            |
| Corporate affairs    | 12               | 11.43%            |
| Research             | 18               | 17.14%            |
| Finance              | 13               | 12.39%            |
| Human Resources      | 12               | 11.43%            |

**Source: Survey Results (2022)**

### 4.3.7 Length of Service

The study found it necessary to establish the length of service of the respondents, in years, serving at the institution. Table 4.7 presents the findings.

**Table 4.7 Length of Service of the Respondents**

| Education Level | Frequency | Percentage |
|-----------------|-----------|------------|
| Below 1 year    | 10        | 9.52%      |
| 5-10 years      | 16        | 15.24%     |
| 10-15 years     | 53        | 50.48%     |
| Over 15 years   | 26        | 24.76%     |

**Source: Survey Results (2022)**

According to Table 4.7, the majority of respondents, 50.48 percent, had been employed by the company for between 10 and 15 years. Only 9.52 percent of respondents were discovered to have recently joined the company. The results show a very even distribution of years, indicating different experience levels. Responses can be regarded as being adequately informed by experience because most respondents had 10 to 15 years of work experience.

### 4.4 Descriptive Statistics

This section presents the employee's view of dynamic capabilities impact on growth sustainability of listed construction and allied firms that were analyzed in four key areas; innovation capability, marketing capability, learning capability, networking capability and growth sustainability. The study objective was achieved by asking the respondents to indicate to what extent they concurred with statements presented to them relating to dynamic capability practices used by their organization on a five-point Likert scale where 1 = Strongly Disagree (SD), 2=Disagree (D), 3= Neutral (N), 4= Agree (A), 5=Strongly agree (SA).

#### 4.4.1 Innovation Capability

The respondents were asked to indicate their response to how innovation capability influences growth sustainability at their firms. The results presented in Table 4.8 below.

**Table 4.8 Innovation Capability**

| <b>Statements</b>   | <b>Mean</b> | <b>SD</b>   |
|---|-------------|-------------|
| New technologies are easily adopted in the organization.  | 4.66        | 1.12        |
| The firm structured new product development can grasp new opportunities.                        | 4.49        | 1.77        |
| The firm is inclined towards pursuing incremental products improvements with existing products. | 4.56        | 1.43        |
| The company develops in house solutions to improve the manufacturing process.                   | 4.32        | 1.47        |
| <b>Composite Mean</b>   | <b>4.51</b> | <b>1.45</b> |

**Source: Survey Results (2022)**

The results of table 4.8 indicated that most respondents strongly believed that their organization quickly adopted new technology as represented by the highest mean of 4.66. In addition, most respondents also agreed that their company preferred to produce new products by upgrading their current products, as demonstrated by a mean of 4.56. Similarly, many respondents strongly agreed that new or innovative items allowed their companies to take advantage of market opportunities, as indicated by the mean of 4.49. Additionally, according to the mean value of 4.32, a significant number of respondents strongly agreed that the company develops in house solutions to improve the manufacturing process. The overall mean was 4.51 implies that most respondents concur that the listed construction enterprises innovation capability affected their growth sustainability.

#### 4.4.2 Learning Capability

The respondents were asked to indicate their response to how learning capability influences growth sustainability at their firms. The results are presented in Table 4.9 below:

**Table 4.9 Learning Capability**

| <b>Statements</b>  | <b>Mean</b> | <b>SD</b>   |
|--|-------------|-------------|
| The firm foresees changes in the industry and train its staff.   | 5.00        | 0.001       |
| The firm has improved its innovation capability through learning.  | 4.67        | 0.474       |
| The company has leaders that support learning at the team and firm level.                                      | 4.50        | 0.761       |
| The firm has established systems that capture and share learning.  | 3.99        | 0.814       |
| To boost growth sustainability, the company applies lessons learned from earlier product development missteps. | 4.34        | 0.745       |
| <b>Composite Mean</b>  | <b>4.50</b> | <b>0.56</b> |

**Source: Survey Results (2022)**

The majority of the respondents agreed that their firms anticipate changes in the industry and train staff in advance, as depicted by the highest mean of 5. Most of the respondents also strongly agreed that organizational learning had improved the ability of their company to innovate, as depicted by the second-largest mean value of 4.67. It was closely followed by respondents who also strongly believed that their leaders support learning at their firms. The mean value was 4.50. A considerable number of respondents agreed that their firm applies the lessons learned from earlier product development missteps and established systems that capture and share learning. The two statements were represented by relatively higher means of 4.34 and 3.99, respectively. The composite means of 4.5 revealed that learning influenced growth sustainability.

**4.4.3 Marketing Capability**

The respondents were asked to indicate their response if marketing capability influences growth sustainability at their firms. The results presented in Table 4.10 below.

**Table 4.10 Marketing Capability**

| <b>Statements</b>   | <b>Mean</b> | <b>SD</b> |
|---|-------------|-----------|
| The firm monitor competitors' prices and price changes.                                   | 4.32        | .470      |
| The firm has adopted innovative marketing techniques to increase their market visibility. | 4.50        | .502      |
| The firm uses its marketing capabilities to identify new customers in the market.         | 4.50        | .502      |

|  |             |             |
|--|-------------|-------------|
| The firm marketing capability enables it to monitor competitive products in the export market. | 4.34        | .477        |
| The company makes improvements in customer relationships to ensure customer satisfaction.      | 4.31        | .424        |
| <b>Composite Mean</b>  | <b>4.39</b> | <b>0.48</b> |

**Source: Survey Results (2022)**

Most respondents, as seen in table 4.10 above, strongly agreed that their firm had adopted innovative marketing techniques to increase its market viability. The mean was among the highest at 4.50. In addition, they contended that their firms employ market capabilities to attract prospective consumers, as represented by a mean of 4.50. Further, majority agreed that by continuously improving their customer relations, their firms would increase customer satisfaction, as represented by a mean of 4.31. Moreover, they also agreed that their firms strongly monitored competitive products in the export market and competitor prices and price changes. The two statements were represented by means of 4.34 and 4.32, respectively. The high composite means of 4.39 revealed that market capability influenced the growth sustainability of the listed firms.

#### 4.4.4 Networking Capability

The respondents were asked to indicate their response if networking capability influences growth sustainability of their firms. The results presented in Table 4.11 below

**Table 4.11 Networking Capability**

| <b>Statements</b>  | <b>Mean</b> | <b>SD</b>   |
|--|-------------|-------------|
| The company can build long-lasting relationships with business partners      | 4.17        | .379        |
| The company strong networking and joint ventures promote relational growth.  | 4.10        | .502        |
| The company believes in co-operating with other firms to remain competitive. | 4.33        | .474        |
| Firms' business information is often communicated across departments.        | 4.16        | .695        |
| The company studies partners strength and weaknesses.                        | 4.67        | .731        |
| <b>Composite Mean</b>  | <b>4.28</b> | <b>0.56</b> |

**Source: Survey Results (2022)**

The results of Table 4.11 indicated that most respondents agreed that their company networking and joint venture agreements promoted relational growth, as demonstrated by a mean of 4.10 and that firms examined their potential partners strengths and weaknesses as indicated by highest mean of 4.67. They also contended that by their firm co-operating, they gained a competitive advantage and that information is disseminated throughout the firm. The statements were represented by means of 4.33 and 4.16 respectively.

A relatively high number of respondents agreed that their firm had the ability to build strong relationship with business partners. The composite mean was 4.28 implying that most respondents concur that the listed construction enterprises' networking capability affects growth sustainability.

#### 4.4.5 Growth Sustainability

The respondents were asked to indicate their response on growth sustainability at their firms. The results presented in Table 4.12 below.

**Table 4.12 Growth Sustainability**

| <b>Statements</b>   | <b>Mean</b> | <b>SD</b>   |
|---|-------------|-------------|
| There has been an increase in growth sustainability due to adoption of dynamic capabilities by the firm.                            | 4.67        | .474        |
| The firm is able to sustain innovation growth because it can develop new products and grasp new opportunities.                      | 4.34        | .477        |
| The firm has improved and sustained its relational growth due to partnerships that have made it more competitive.                   | 4.16        | .695        |
| The firm's learning capability has made its staff adaptable to technological advancements which are vital in growth sustainability. | 4.15        | .690        |
| The firm has expanded and maintained its size growth because it can sense new product markets and venture into these markets.       | 4.50        | .502        |
| <b>Composite Mean</b>   | <b>4.36</b> | <b>0.57</b> |

**Source: Survey Results (2022)**

The majority of the respondents, as seen in table 4.12, agreed that their firms could increase and maintain size growth due to their ability to diversify into new markets. In addition, the

respondents agreed that learning capability, networking capability, and innovation capability influenced their companies' growth sustainability.

#### 4.5 Correlation Analysis

The strength of the connection between the variables is determined by Pearson coefficient  $r$  where the  $p$  values signifies whether the relationship is significant or insignificant.

**Table 4.13 Correlation Analysis**

|    |                     | GS     | IC     | LC     | MC     | NC     |
|----|---------------------|--------|--------|--------|--------|--------|
| GS | Pearson Correlation | 1      | .66**  | .574** | .405** | .590** |
|    | Sig. (2-tailed)     |        | .042   | .000   | .020   | .044   |
| IC | Pearson Correlation | .66**  | 1      | .333*  | .149   | .263** |
|    | Sig. (2-tailed)     | .042   |        | .022   | .056   | .000   |
| LC | Pearson Correlation | .574** | .333*  | 1      | .452*  | .669   |
|    | Sig. (2-tailed)     | .000   | .022   |        | .000   | .074   |
| MC | Pearson Correlation | .405** | .149   | .452** | 1      | -.386  |
|    | Sig. (2-tailed)     | .020   | .056   | .000   |        | .071   |
| NC | Pearson Correlation | .590*  | .263** | .669   | -.386  | 1      |
|    | Sig. (2-tailed)     | .044   | .000   | .074   | .071   |        |

\*\* . Correlation is significant at the 0.05 level.

**Source: Survey Results (2022)**

The link between the variables was investigated using the Pearson correlation matrix. The results in table 4.13 above show that innovation capability and growth sustainability had a strong positive correlation since the  $r$  value was 0.66. Learning capability had a moderate correlation with growth sustainability, as indicated by the  $r$  value of 0.574. Marketing capability also had a moderate positive association with growth sustainability since the  $r$  value

was 0.405. Networking capability also had a moderate positive correlation with growth sustainability, as indicated by the r value of 0.590. Yue, Pillon, and Cavadias (2002) noted that the range between 0.00 to 0.19 is very weak, while 0.20 to 0.39 is weak, 0.40 to 0.59 is moderate, 0.60 to 0.79 is strong and 0.80 to 1.0 is very strong. In addition, all the independent variables had significant relationships with growth sustainability since the p values were less than 0.05.

#### 4.7 Regression Analysis

Multi regression analysis was done so as to establish the association between dependent (Growth sustainability) and independent variables (Innovation, Learning, Marketing and Networking Capability). The regression results for the study's variables are presented below:

**Table 4.14 Innovation Capability and Growth Sustainability Regression Results**

| <b>Model Summary</b>                          |                   |                |                   |             |                |                   |
|---|-------------------|----------------|-------------------|-------------|----------------|-------------------|
| Model   | R                 | R Square       | Adjusted R Square |             | Standard Error |                   |
| 1   | 0.66 <sup>a</sup> | 0.436          | 0.419             |             | 2.9046         |                   |
| Predictors: (Constant), Innovation capability |                   |                |                   |             |                |                   |
| <b>ANOVA<sup>a</sup></b>                      |                   |                |                   |             |                |                   |
| Model   |                   | Sum of Squares | df                | Mean Square | F              | Sig.              |
| 1   | Regression        | 1.733          | 1                 | 1.733       | 23.36          | .042 <sup>b</sup> |
|   | Residual          | 7.644          | 103               | .0742       |                |                   |
|   | Total             | 9.377          | 104               |             |                |                   |

- a. Dependent Variable: Growth Sustainability  
 b. Predictors (Constant): Innovation capability.

#### **Coefficients<sup>a</sup>**

| Model                 | Unstandardized Coefficients |            | Standardized Coefficients Beta | T     | Sig  |
|-----------------------|-----------------------------|------------|--------------------------------|-------|------|
|                       | B                           | Std. Error |                                |       |      |
| (Constant)            | 1.001                       | .131       |                                | 7.635 | 0.01 |
| Innovation capability | .052                        | .043       | .122                           | 1.209 | .036 |

**Source: Survey Data (2022)**

Table 4.14 above summarizes the regression model illustrating the influence of innovation capabilities on growth sustainability. The R squared value of 0.436 suggests that 43.6 % of variations in growth sustainability occur due to the innovation capability variable, while other variables cause 56.4%. The ANOVA table indicates that the model was significant since the p-value of 0.042 < 0.05. The coefficient table shows that innovation capability is statistically significant, and increasing it by one unit while holding other factors constant results in a growth increase of 5.2%. The linear model for the variable is as follows:

$$Y = 1.001 + 0.052 X_1$$

Where: Y=Growth Sustainability X<sub>1</sub>=Innovation Capability

**Table 4.15 Learning Capability and Growth Sustainability Regression Results**

| Model Summary |                    |          |                   |                |
|---------------|--------------------|----------|-------------------|----------------|
| Model         | R                  | R Square | Adjusted R Square | Standard Error |
| 1             | 0.574 <sup>a</sup> | 0.330    | 0.253             | 1.590          |

Predictors: (Constant), Learning capability

| ANOVA <sup>a</sup> |            |                |     |             |      |                   |
|--------------------|------------|----------------|-----|-------------|------|-------------------|
| Model              |            | Sum of Squares | df  | Mean Square | F    | Sig.              |
| 1                  | Regression | 0.776          | 1   | 0.776       | 9.29 | 0.00 <sup>b</sup> |
|                    | Residual   | 8.601          | 103 | .0835       |      |                   |
|                    | Total      | 9.377          | 104 |             |      |                   |

a. Dependent Variable: Growth Sustainability

b. Predictors (Constant): Learning capability.

| Coefficients <sup>a</sup> |                |            |              |       |       |
|---------------------------|----------------|------------|--------------|-------|-------|
| Model                     | Unstandardized |            | Standardized | T     | Sig.  |
|                           | Coefficients   |            | Coefficients |       |       |
|                           | B              | Std. Error | Beta         |       |       |
| (Constant)                | 4.431          | .466       |              | 9.508 | 0.040 |
| Learning capability       | .442           | .131       | -.831        | 3.374 | .0226 |

**Source: Survey Data (2022)**

Table 4.15 above summarizes the regression model illustrating the influence of learning capabilities on growth sustainability. The R squared value of 0.330 suggests that 33 % of variations in growth sustainability occur due to the learning capability variable, while other variables cause 66.7%. The ANOVA table indicates that the model was significant since the p-value of  $0.00 < 0.05$ . The coefficient table shows that learning capability is statistically significant ( $0.0226 < 0.05$ ), and increasing it by one unit while holding other factors constant results in a growth increase of 44.2%. The linear model for the variable is as follows:

$$Y = 4.431 + 0.442 X_2$$

Where: Y=Growth Sustainability  $X_2$ =Learning Capability

**Table 4.16 Marketing Capability and Growth Sustainability Regression Results**

| <b>Model Summary</b> |                    |          |                   |                |
|----------------------|--------------------|----------|-------------------|----------------|
| Model                | R                  | R Square | Adjusted R Square | Standard Error |
| 1                    | 0.405 <sup>a</sup> | 0.164    | 0.094             | 0.10019194     |

Predictors: (Constant), Marketing capability

| <b>ANOVA<sup>a</sup></b> |            |                |     |             |       |                   |
|--------------------------|------------|----------------|-----|-------------|-------|-------------------|
| Model                    |            | Sum of Squares | df  | Mean Square | F     | Sig.              |
| 1                        | Regression | 0.968          | 1   | .968        | 11.86 | 0.02 <sup>b</sup> |
|                          | Residual   | 8.409          | 103 | .0816       |       |                   |
|                          | Total      | 9.377          | 104 |             |       |                   |

a. Dependent Variable: Growth Sustainability

b. Predictors (Constant): Marketing capability.

| <b>Coefficients<sup>a</sup></b> |                |            |              |        |      |
|---------------------------------|----------------|------------|--------------|--------|------|
| Model                           | Unstandardized |            | Standardized | T      | Sig. |
|                                 | Coefficients   |            | Coefficients |        |      |
|                                 | B              | Std. Error | Beta         |        |      |
| (Constant)                      | 6.332          | .547       |              | 11.576 | 0.03 |

|                      |       |      |       |       |      |
|----------------------|-------|------|-------|-------|------|
| Marketing capability | 2.214 | .491 | 1.231 | 4.509 | .001 |
|----------------------|-------|------|-------|-------|------|

Dependent Variable: Growth Sustainability

Source: Survey Data (2022)

Table 4.16 above summarizes the regression model illustrating the influence of marketing capabilities on growth sustainability. The R squared value of 0.164 suggests that 16.4 % of variations in growth sustainability occur due to the marketing capability variable, while other variables cause 83.6%. The ANOVA table indicates that the model was significant since the p-value of  $0.02 < 0.05$ . The coefficient table shows that learning capability is statistically significant ( $0.001 < 0.05$ ), and increasing it by one unit while holding other factors constant results in a growth increase of 2.214 units. The linear model for the variable is as follows:

$$Y = 6.332 + 2.214 X_3$$

Where: Y=Growth Sustainability  $X_3$ =Marketing Capability

**Table 4.17 Networking Capability and Growth Sustainability Regression Results**

**Model Summary**

| Model | R                  | R Square | Adjusted R Square | Standard Error |
|-------|--------------------|----------|-------------------|----------------|
| 1     | 0.590 <sup>a</sup> | 0.348    | 0.330             | 0.01592        |

Predictors: (Constant), Networking capability

**ANOVA<sup>a</sup>**

| Model        | Sum of Squares | df  | Mean Square | F    | Sig.               |
|--------------|----------------|-----|-------------|------|--------------------|
| 1 Regression | 0.558          | 1   | 0.558       | 6.52 | 0.044 <sup>b</sup> |
| Residual     | 8.819          | 103 | .0856       |      |                    |
| Total        | 9.377          | 104 |             |      |                    |

a. Dependent Variable: Growth Sustainability

b. Predictors (Constant): Networking capability.

| Model                 | Coefficients <sup>a</sup> |            |              |  | T     | Sig  |
|-----------------------|---------------------------|------------|--------------|--|-------|------|
|                       | Unstandardized            |            | Standardized |  |       |      |
|                       | B                         | Std. Error | Beta         |  |       |      |
| (Constant)            | 4.667                     | .631       |              |  | 7.396 | .033 |
| Networking capability | .753                      | .181       | .264         |  | 0.241 | .021 |

Dependent Variable: Growth Sustainability

Source: Survey Data (2022)

Table 4.17 above summarizes the regression model illustrating the influence of networking capabilities on growth sustainability. The R squared value of 0.348 suggests that 34.8 % of variations in growth sustainability occur due to the networking capability variable, while other variables cause 65.2%. The ANOVA table indicates that the model was significant since the p-value of  $0.044 < 0.05$ . The coefficient table shows that networking capability is statistically significant ( $0.0211 < 0.05$ ), and increasing it by one unit while holding other factors constant results in a growth increase of 0.753 units. The linear model for the variable is as follows:

$$Y = 4.667 + 0.753 X_4$$

Where: Y=Growth Sustainability  $X_4$ =Networking Capability

**Table 4.18 Dynamic Capabilities and Growth Sustainability Regression Results**

| Model Summary |                    |          |                   |                |
|---------------|--------------------|----------|-------------------|----------------|
| Model         | R                  | R Square | Adjusted R Square | Standard Error |
| 1             | 0.716 <sup>a</sup> | 0.512    | 0.504             | 0.16286        |

a.Predictors: (Constant), Innovation Capability, Learning Capability, Marketing Capability, Networking Capability

**ANOVA<sup>a</sup>**

| Model | Sum of Squares | df    | Mean Square | F     | Sig. |                    |
|-------|----------------|-------|-------------|-------|------|--------------------|
| 1     | Regression     | 0.793 | 1           | 0.793 | 9.52 | 0.002 <sup>b</sup> |
|       | Residual       | 8.584 | 103         | .0833 |      |                    |
|       | Total          | 9.377 | 104         |       |      |                    |

a. Dependent Variable: Growth Sustainability

b. Predictors (Constant): Innovation Capability, Learning Capability, Marketing capability, Networking capability.

**Coefficients<sup>a</sup>**

| Model        | Unstandardized Coefficients |            | Standardized Coefficient | t     | Sig. |
|--------------|-----------------------------|------------|--------------------------|-------|------|
|              | B                           | Std. Error | Beta                     |       |      |
| 1 (Constant) | 8.786                       | 2.396      |                          | 3.667 | .000 |
| Innovation   | .053                        | .044       | .134                     | 1.187 | .000 |
| Learning     | .562                        | .147       | -.941                    | 3.819 | .000 |
| Marketing    | 2.627                       | .536       | 1.276                    | 4.904 | .000 |
| Networking   | .862                        | .203       | .6664                    | .253  | .000 |

a. Dependent Variable: Growth sustainability

Table 4.18 above gives a summary of the regression results. The R squared value of 0.512 suggests that 51.2% of variations in growth sustainability occur due to four dynamic capability variables, while other variables cause 48.8%. The ANOVA table indicates that the overall model was significant since the p-value of  $0.02 < 0.05$ . The coefficients findings indicate that, all the p-values were less than 0.05 for independent variables, namely innovation capability, marketing capability, learning capability and networking capability. This implies that the test results are all significant at 0.05 significance level. The multiple linear equations for the four constructs can be expressed as:

$$Y = 8.786 + 0.053 X_1 + 0.562 X_2 + 2.627 X_3 + 0.862X_4 + \varepsilon$$

Where:

Y=Growth Sustainability

X<sub>1</sub>=Innovation Capability

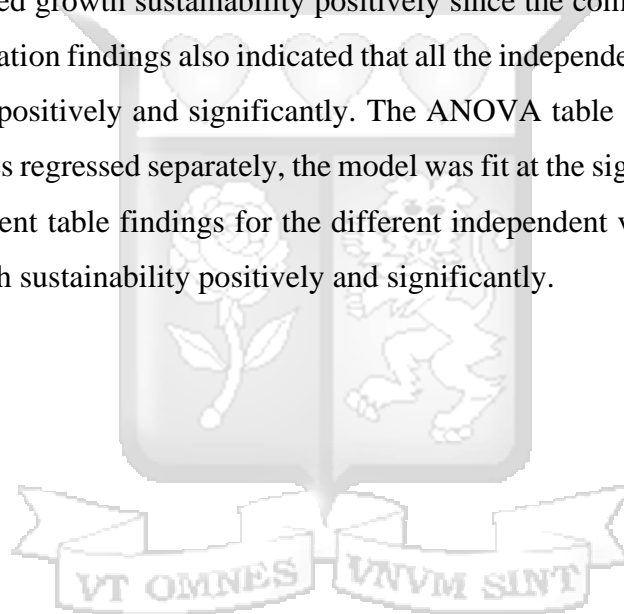
X<sub>2</sub>=Learning Capability

X<sub>3</sub>=Marketing Capability

X<sub>4</sub>=Networking Capability

#### **4.8 Chapter Summary**

The study's objective was to establish the influence of dynamic capabilities on growth sustainability of listed construction and allied firms in Kenya. The descriptive findings indicated that innovation capability, learning capability, marketing capability and networking capability all influenced growth sustainability positively since the composite mean score was above four. The correlation findings also indicated that all the independent variables influenced growth sustainability positively and significantly. The ANOVA table findings also indicated that for all the variables regressed separately, the model was fit at the significance level of 0.05. Similarly, the coefficient table findings for the different independent variables indicated that they influenced growth sustainability positively and significantly.



## **CHAPTER FIVE**

### **DISCUSSIONS, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

The primary goal of this study was to establish the influence of dynamic capabilities on growth sustainability of listed construction and allied firms in Kenya. The chapter is organized into three sections: the summary of the findings, discussion of findings, the conclusion and the suggestions for further research. The chapter also makes recommendations for future academics to investigate in order to gain a better understanding of the influence of dynamic capability practices on growth sustainability.

#### **5.2 Summary**

Construction and allied firms are key contributors to the Gross domestic product and employment creation in a country. As a result, scholars and policymakers have increased their interests in understanding what affects the growth sustainability of these institutions. This study examined the influence of dynamic capability on growth sustainability of listed construction and allied firms. The study was grounded on the dynamic capabilities theory. The dynamic capabilities theory enabled the study to better understand how dynamic capabilities can be utilized by the firms to improve their growth sustainability. The study employed both descriptive and inferential analysis.

The descriptive findings indicated that innovation capability, learning capability, marketing capability and networking capability all influenced growth sustainability positively since the composite mean score was above four. The correlation findings also indicated that all the independent variables influenced growth sustainability positively and significantly. The ANOVA table findings also indicated that for all the variables regressed separately, the model was fit at the significance level of 0.05. Similarly, the coefficient table findings for the different independent variables indicated that they influenced growth sustainability positively and significantly.

#### **5.3 Discussion of findings of the Research Study**

The study examined the influence of dynamic capabilities on growth sustainability. The study was based on innovation capability, marketing capability, learning capability and networking capability. The dependent variable was growth sustainability.

### **5.3.1 Innovation Capability and Growth Sustainability**

The study sought to establish the influence of innovation capability on growth sustainability of listed construction and allied firms in Kenya. The participants were asked to respond to statements about the influence of innovation capabilities on growth sustainability of the firm.

From the response provided, it was evident that innovation capability influenced the growth sustainability of their firms. The majority of the employees noted that their firms quickly adopted new technologies. They also agreed that new or innovative products enabled their companies to seize market opportunities. Further, they opined that their firms preferred to produce new products by upgrading their existing products and that sustainability-driven innovation strategies increased the competitiveness of their firms. In addition, correlation and regression results revealed that innovation capability positively and significantly impacts the listed construction firm's growth sustainability positively and significantly.

The results support the assertion by Sawhney, Wallcot and Arroniz (2007) who posit that a corporation can alter the nature of competition by identifying and pursuing neglected innovation dimensions, placing other companies at a disadvantage. Additionally, if done correctly, innovation in one area might lead to new processes in other ones, which could ensure long-term growth. Akin to that Mugambi and Kinyua (2020) established that innovation capability is crucial for invention management and creativity that can boost growth.

Similarly, Kiron et al. (2013) contend that businesses in developing nations are more likely to adopt business model innovations related to sustainability. This is partly due to resource scarcity and population increase challenges. As the research results showed, nearly 60% of companies proved a significant profit increase due to implemented sustainability initiatives, with some reporting double-digit revenue growth after business model innovations connected with sustainability. Akin to that, Cohen and Levinthal (2010) also indicated that organizations with advanced innovation capability practices tend to be more proactive, to the extent that they take more significant advantage of market opportunities and achieve better performance.

Gabriele and Corsino (2010) also find in their study of product innovation and firm growth in Italy that increased product innovations had a beneficial impact on solid growth, especially for units domiciled in dynamic markets. However, the findings contradict that of Bianchini Tamagni and Pellegrino (2014), whose study of innovation strategies and firm growth in Spain indicated that process innovation had an insignificant impact on sales growth and Santi and

Santoleri (2016) whose findings indicated that product innovation was negatively associated with sales growth.

### **5.3.2 Learning Capability and Growth Sustainability**

The study sought to establish the influence of learning capability on the growth sustainability of listed construction and allied firms in Kenya. The participants were asked to respond to statements about the influence of learning capabilities on growth sustainability of the firm. From the response provided, it was evident that learning capability influenced the growth sustainability of their firms. Most of the employees noted that their firms train staff in anticipation of industry changes. They also agreed that their firms had become more innovative due to learning capability and that their leaders or the top management support organizational learning. Many employees also contended that their firms applied the lessons learned from earlier product development missteps and established systems that captured and shared learning. In addition, correlation and regression results revealed that learning capability positively and significantly impacts the listed construction firm's growth sustainability.

The results are consistent with those of Altinay, Madanoglu, Vita and Arasli (2013) who found a positive association between organizational learning and SME growth in North Cyprus and Oketch, Kuria and Kariuki (2018) who established that organizational learning and organizational culture impacts on the growth of NGOs in Kenya positively. Similarly, Nabong (2015) stated that the benefits of an organizational learning culture include enhanced employee adaptability to change, increased levels of employee happiness, the formation of a culture of knowledge inquiry, and increased productivity. A favorable learning environment promotes acquiring knowledge and skills and encourages innovation, which may result in long-term success and sustainable growth. Akin to that, Zheng and Khavul (2005) supported the notion that entrepreneurial firms must build core skills internally while learning from international markets to achieve growth. The authors contend that firms that succeed in these tasks would attain faster international growth. Kaya and Patton (2011) also opine that learning capability is a vital component in the information acquisition and dissemination process because the information is communicated or shared between employees.

### 5.3.3 Marketing Capability and Growth Sustainability

The study sought to establish the influence of marketing capability on growth sustainability of listed construction and allied firms in Kenya. The participants were asked to respond to statements about the influence of innovation capabilities on growth sustainability of the firm. From the response provided, it was evident that marketing capability influenced the growth sustainability of their firms. Most employees noted that their firms had adopted innovative marketing strategies to increase market viability. They also agreed that their firms employ market capabilities to attract prospective consumers. Many employees also contended that continuously improving their firm's customer relations would increase customer satisfaction. In addition, correlation and regression results revealed that learning capability positively and significantly impacts the listed construction firm's growth sustainability. Moreover, the respondents agreed that their firms strongly monitor competitive products in the export market and competitor prices and price changes. In addition, correlation and regression results revealed that marketing capability positively and significantly impacts the listed construction firm's growth sustainability.

According to Deviatykh and Sobakina (2014), a company's size growth can be attributed to the expansion of its physical presence. They contend that size expansion in the IT sector is less typical than in any other manufacturing or construction industry sector. Marketing campaign investments can be seen as dynamic capabilities due to their continual nature and focus on shifting consumer attitudes and behaviors. A company's brand awareness in the international markets and its market penetration in some countries are considerably boosted by marketing efforts, particularly sponsorship programs, leading to growth. Shen, Sha and Wu (2020) also found that market experimentation and open marketing capabilities impacted positively on the growth sustainability of firms in China. Takahashi, Bulgacov and Giacomini (2017) also established that marketing capabilities enabled firms in Brazil to maintain their growth. Similarly, Naido (2010) finds evidence of a positive association between marketing capability and growth sustainability. However, Morgan, Slotegraaf, and Vorhies (2009) found that marketing capabilities influences the growth rate of a firm in various ways. For instance, market sensing affected revenue growth but had no effect on the gross margin of a firm. Akin to that Lindblom et al. (2008) found that market sensing did not impact the growth of firms.

### **5.3.4 Networking Capability and Growth Sustainability**

The study sought to establish the influence of networking capability on the growth sustainability of listed construction and allied firms in Kenya. The participants were asked to respond to statements about the influence of innovation capabilities on growth sustainability of the firm. From the response provided, it was evident that networking capability influenced the growth sustainability of their firms. Most employees noted that their company networking and joint venture agreements promoted relational growth. They also agreed that their firms examine their potential partners' strengths and weaknesses before forming partnerships. However, a relatively small number of employees agreed that their firms could build strong relationships with business partners.

Shah, Yasir, Majid and Javed (2019) also established that networking capability and organizational survival of SMEs in Pakistan has a positive association. Inigo, Ritala and Albareda (2020) findings also indicated that alliance capability link to sustainability-oriented innovation was positive. Roininen (2008) also found that Swedish business ventures with high levels of network capabilities had better prospects for growth. The findings are also consistent with McKelvie and Wiklund (2010) who also argue that cooperation between firms in its various forms of strategic partnerships is a specific mode of firm growth, which they call hybrid, along with organic and acquisitive growth.

Furlan and Grandinetti (2011) also view relationship growth as a specific way to grow, which they define as an increment of the extent to which a firm uses external resources over a given time. External resources are identified as those assets (physical or otherwise) over which the firm has no direct ownership but are accessible through relationships with other organizations. The more critical these resources are for the company's competitive advantage, the higher the value of the relationships. So, this type of growth is predetermined by the number and value of the firm's strategic partners.

### **5.4 Conclusion**

The study also established that listed construction and allied firms tend to adapt their products or services to the changing business environment or create and develop brand new products. Innovation growth requires constant monitoring of industry trends through partners' networking, tracking competitors' activities and responding to customers increasing needs.

To grow in this dimension, the listed construction companies conducted permanent investments in R&D and human capital to remain at the cutting edge of science and technology. The study concludes that innovation capability influenced the innovation growth of listed construction firms positively and significantly.

The study established that the listed construction firms conducted training programs for their staff in anticipation of industry changes. Also, the firms had become more innovative due to learning capability and that their leaders or the top management support organizational learning. The study concludes that learning capability influenced innovation and relational growth of listed construction firms positively and significantly.

The study established that the growth in the listed construction firms' size was attributable to the extension of their physical presence via marketing activities. The study contends that such extension may occur due to the necessity of operating closer to the customer, in order to gain market share in regions with high demands, to establish another business dimension related to the core business or from consideration of technological convenience. Thus, the study concludes that marketing capability influenced the size growth of the listed construction firms positively and significantly.

The study established that all the listed construction firms had identified strategic partnerships as an essential direction for their development. The value of these relationships was high since external resources and opportunities that arise are critical for companies' competitive advantage. Establishing partnerships facilitates customer base expansion which also ensures sustaining growth in the long run. In the case of the construction companies, partners can also provide more channels for product distribution and, thus, help to sustain growth. Thus, the study concludes that networking capability influenced the relational growth of the listed construction firms positively and significantly.

### **5.5 Recommendations for Further Studies**

The study recommends that policymakers, including the ministry of industrialization and other government ministries, provide an ideal environment for the construction and allied firms to exploit their dynamic capabilities. This can be achieved by waiving high tariffs and giving support through subsidies to these firms during challenging periods to encourage innovativeness.

The study recommends that the management of the listed construction and allied firms should continue providing a suitable learning culture that will facilitate knowledge acquisition that in turn encourages innovativeness and result to long term profitability and sustainable growth. The leadership of the construction and allied firms should also increase their innovativeness and proactively think regarding strategic management and ensure that their strategies are effective and differentiated. The management of the construction and allied firms can ensure innovation in different areas such as new products and services and new form of organizations.

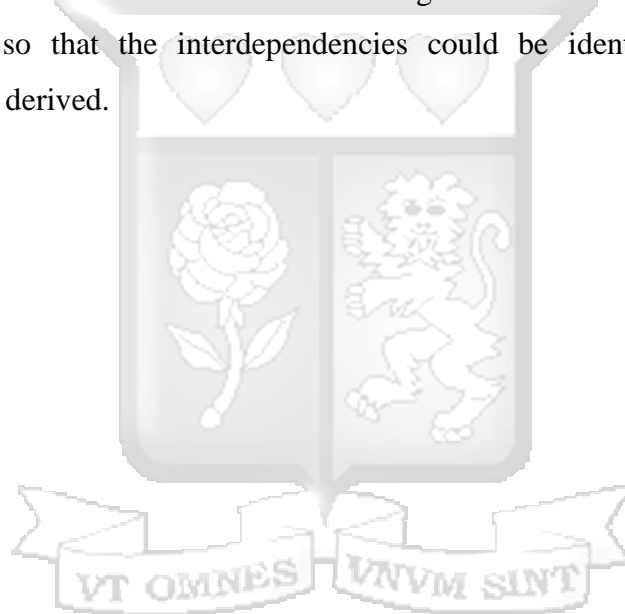
The dynamic capability theory and the resource-based view theory explain the important role that DCs play in enhancing a firm's growth, but fail short to explain the internal mechanism of how and when it becomes effective for ensuring growth sustainability, particularly in the case of construction and allied firms. In this study, the idea has been expanded by proposing that the organizational capacity for strategically renewing resources depends on the effect of DCs on growth sustainability. The study thus proposes the adoption of sound dynamic capabilities such as innovation, learning, marketing and networking since they may aid in improving the utilization of important resources for long-term growth in organizations domiciled in developing countries. In order to ensure their long-term survival in developing economies, organizations must successfully network with the right partners and regularly renew themselves by leveraging the knowledge and other resources that they mutually share.

### **5.6 Limitations of the Study**

The study faced a number of limitations. The study focused on companies from only the construction and allied industry, implying that the study conclusions can be applicable for this industry only and they can hardly be generalized. The study also focused on analysing high-growth publicly listed construction and allied companies and identified the sustainability of their growth strategies. However, such analysis cannot reveal the gap between average-growth or low-growth firms and the object of the study, i.e., it does not allow the researcher to analyze factors which can undermine growth other things being equal.

## 5.7 Suggestions for Further Studies

In order to verify if our findings can be generalized, further quantitative research could be performed to study dynamic capabilities and growth strategies for sustainability pursued by other companies in Kenya. Moreover, further research of high-growth companies within other industries could reveal whether growth strategies for pursuing sustainability are different for various industries. Qualitative study of companies from different areas of Kenya can also be performed to reveal if the results are consistent with high-growth companies from different regions of Kenya. There is also a possibility to perform a comparative study between high growth companies from different emerging markets. Also, medium-growth and low-growth companies can be studied in order to identify the factors preventing from sustainable growth. Finally, more studies should be devoted to innovation growth and multidimensional nature of growth as a whole so that the interdependencies could be identified and managerial prescriptions could be derived.



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## APPENDICES

### Appendix I: Consent Form

Strathmore University  
Strathmore Business School  
Ole Sangale Road, Madaraka Estate  
P.O Box 59857-00200  
Nairobi, Kenya

Dear (Respondent)

#### **RE: VOLUNTARY PARTICIPATION IN DATA COLLECTION**

I am a postgraduate student at Strathmore University undertaking a research project on **“Influence of dynamic capability on growth sustainability of listed construction and allied firms in Kenya.”**

Because your organization has been chosen for this study, I am kindly requesting your involvement. Please answer the questions in the questionnaire provided. The information you provide will be used strictly for academic reasons and treated with the highest confidentiality. A copy of the final report will be provided to you upon request.

Your cooperation will be highly appreciated.

Yours Sincerely,

Caroline Ariga

## Appendix II: Introductory Letter

Ole Sangale Rd, Madaraka Estate,  
P.O Box 59857 00200, Nairobi, Kenya,  
Cell: +254 703 414/6/7, Twitter: @SBSKenya  
Email: [info@sbs.ac.ke](mailto:info@sbs.ac.ke) or visit [www.sbs.strathmore.edu](http://www.sbs.strathmore.edu)



12<sup>th</sup> January 2022

To Whom It May Concern

**RE: FACILITATION OF RESEARCH – CAROLINE ARIGA**

This is to introduce Caroline Ariga who is a Master of Commerce (MCOM) Student at Strathmore University Business School, admission number MCOM/082016. As part of our MCOM Program, Caroline is expected to do applied research and undertake a project. This is in partial fulfilment of the requirements of the MCOM course. To this effect, Caroline would like to request for appropriate data from your organization.

Caroline is undertaking a research paper on “**Influence of Dynamic Capability on Growth Sustainability of Listed Construction and Allied firms in Kenya.**” The information obtained shall be treated confidentially and shall be used for academic purposes only.

Our MCOM seeks to establish links with industry, and one of these ways is by directing our research to areas that would be of direct use to industry. We would be glad to share our findings with you after the research, and we trust that you will find them of great interest and of practical value to your organization.

We appreciate your support and shall be willing to provide any further information if required.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Njoki Kiagiri".

Njoki Kiagiri  
Associate Manager Graduate Programs.  
Strathmore University Business School.

## Appendix III: SU-IERC Ethical Approval



16<sup>th</sup> May 2022

Ms Ariga Caroline,  
caroline.ariga@strathmore.edu

Dear Ms Ariga,

**RE: Influence of dynamic capability on growth sustainability of listed construction and allied firms in Kenya**

This is to inform you that SU-IERC has reviewed and **approved** your above **SU Masters'** research proposal. Your application reference number is **SU-IERC1315/22**. The approval period is **16<sup>th</sup> May 2022 to 15<sup>th</sup> May 2023**.

This approval is subject to compliance with the following requirements:

- i. Only approved documents including (informed consents, study instruments, MTA) will be used
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by SU-IERC.
- iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to SU-IERC within 48 hours of notification
- iv. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to SU-IERC within 48 hours
- v. Clearance for export of biological specimens must be obtained from relevant institutions.
- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- vii. Submission of an executive summary report within 90 days upon completion of the study to SU-IERC.

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology, and Innovation (NACOSTI) <https://research-portal.nacosti.go.ke/> and obtain other clearances needed.

Yours sincerely,

for: **Dr Ben Ngoye,**  
**Secretary; SU-IERC**

**Cc: Prof Fred Were,**  
**Chairperson; SU-IERC**



## Appendix IV: Questionnaire

This questionnaire is meant to collect information on the influence of dynamic capability on growth sustainability of listed construction and allied firms in Kenya. The information collected through this questionnaire will be treated with utmost confidentiality and used for academic purpose only. Kindly take a moment to answer all the questions as accurately as possible. For confidentiality purposes do not indicate your name or that of your organization.

### SECTION A: BACKGROUND INFORMATION

Please tick within the boxes and fill the questionnaire with applicable answers to enable the study to be a success.

1. Kindly select your gender.

- a) Male ( )                      b) Female ( )

2. In which of the following age brackets do you belong.

- a) 18-24 ( )      b) 25-34 ( )      c) 35-44 ( )      d) 45 years and above ( )

3. Kindly select the highest education level you have attained.

- a) Masters/Phd ( )      b) Bachelor Degree ( )      c) Diploma ( )      d) Certificate ( )

4. Please indicate your level of seniority in the company.

- a) Senior level staff ( )      b) Middle level staff ( )      c) Lower level staff ( )      d) Other ( )

5. Kindly select the department that you work for in the company

- a) Business Development ( )      b) Marketing ( )      c) Research ( )      d) Corporate affairs ( )  
Finance ( )      Human Resource ( )

6. Please select the duration you have worked for the company.

- a) 0 to 5 years ( )      b) 5 to 10 years ( )      c) 10- 15 years ( )      d) over 15 years ( )

**SECTION B: DYNAMIC CAPABILITY PRACTICES**

To what extent do you agree with the following statements related to various dynamic capability practices in your organization? On a scale of 1-5 where 1 = Strongly disagree, 2= Disagree, 3= Neutral 4 = Agree and 5= Strongly agree, please indicate the extent to which you agree or disagree with the following statements by ticking (✓) the appropriate response.

|            | <b>Statements</b>   | <b>1</b>                     | <b>2</b>        | <b>3</b>       | <b>4</b>     | <b>5</b>                  |
|------------|---|------------------------------|-----------------|----------------|--------------|---------------------------|
| <b>(a)</b> | <b>Innovation capability</b>  | <b>Strongly<br/>Disagree</b> | <b>Disagree</b> | <b>Neutral</b> | <b>Agree</b> | <b>Strongly<br/>agree</b> |
| 8          | New technologies are easily adopted in the organization.  |                              |                 |                |              |                           |
| 9          | The firm structured new product development can grasp new opportunities.                                  |                              |                 |                |              |                           |
| 10         | The firm is inclined towards pursuing incremental products improvements with existing products.           |                              |                 |                |              |                           |
| 11         | Sustainability driven innovation practices makes the firm more competitive                                |                              |                 |                |              |                           |
|            | <b>Statements</b>   | <b>1</b>                     | <b>2</b>        | <b>3</b>       | <b>4</b>     | <b>5</b>                  |
| <b>(b)</b> | <b>Learning capability</b>  | <b>Strongly<br/>Disagree</b> | <b>Disagree</b> | <b>Neutral</b> | <b>Agree</b> | <b>Strongly<br/>agree</b> |
| 12         | The firm foresees changes in the industry and train its staff accordingly.                                |                              |                 |                |              |                           |
| 13         | The firm has improved its innovation capability through the learning process.                             |                              |                 |                |              |                           |
| 14         | The company has leaders who model and support learning at the individual team, and organizational levels. |                              |                 |                |              |                           |
| 15         | The firm has established systems that capture and share learning  |                              |                 |                |              |                           |

|            |  |                          |                 |                |              |                       |
|------------|--|--------------------------|-----------------|----------------|--------------|-----------------------|
| 16         | To boost growth sustainability, the company applies lessons learned from earlier product development missteps. |                          |                 |                |              |                       |
|            |  | <b>1</b>                 | <b>2</b>        | <b>3</b>       | <b>4</b>     | <b>5</b>              |
| <b>(c)</b> | <b>Marketing capability</b>  | <b>Strongly Disagree</b> | <b>Disagree</b> | <b>Neutral</b> | <b>Agree</b> | <b>Strongly agree</b> |
| 17         | The firm monitor competitors' prices and price changes.  |                          |                 |                |              |                       |
| 18         | The firm has adopted innovative marketing techniques that increases visibility in the market.                  |                          |                 |                |              |                       |
| 19         | The firm uses its marketing capabilities to identify prospective customers in the market.                      |                          |                 |                |              |                       |
| 20         | The firm marketing capability enables it to monitoring competitive products in the export market.              |                          |                 |                |              |                       |
| 21         | The company makes improvements in the manner of customer relationships to obtain customer satisfaction.        |                          |                 |                |              |                       |
|            |  | <b>1</b>                 | <b>2</b>        | <b>3</b>       | <b>4</b>     | <b>5</b>              |
| <b>(d)</b> | <b>Networking capability</b>   | <b>Strongly Disagree</b> | <b>Disagree</b> | <b>Neutral</b> | <b>Agree</b> | <b>Strongly agree</b> |
| 22         | The company has the ability to build good personal relationship with business partners                         |                          |                 |                |              |                       |
| 23         | The company strong networking and joint venture agreements promotes relational growth                          |                          |                 |                |              |                       |
| 24         | The company believes in having co-operation with other firms to be competitive in the market                   |                          |                 |                |              |                       |
| 25         | Firms' business information is often communicated across departments / all workers                             |                          |                 |                |              |                       |
| 26         | The company studies partners strength and weaknesses   |                          |                 |                |              |                       |

**Section C: Growth sustainability**

On a scale of 1-5 where 1 = Strongly disagree, 2= Disagree, 3= Not sure 4 = Agree and 5= Strongly agree, please indicate the extent to which you agree with the following statements as they relate to the influence of dynamic capability on growth sustainability of your organization.

|    | <b>Statements</b>   | <b>1</b>                 | <b>2</b>        | <b>3</b>        | <b>4</b>     | <b>5</b>              |
|----|---|--------------------------|-----------------|-----------------|--------------|-----------------------|
|    | <b>Growth Sustainability</b>  | <b>Strongly Disagree</b> | <b>Disagree</b> | <b>Not sure</b> | <b>Agree</b> | <b>Strongly agree</b> |
| 27 | There has been an increase in growth sustainability due to the firms' dynamic capabilities  |                          |                 |                 |              |                       |
| 28 | The firm is able to sustain innovation growth due to its ability to develop new products and grasp new opportunities.                                 |                          |                 |                 |              |                       |
| 29 | The firm has been able to improve and sustain its relational growth due to its rich network of partners who have increased its competitive advantage. |                          |                 |                 |              |                       |
| 30 | The firm's learning capability has enabled its staff adapt to the technological advancements which are vital in sustaining innovation growth.         |                          |                 |                 |              |                       |
| 31 | The firm has been able to expand and maintain the size growth due to its ability to sense new product markets and diversify into these markets.       |                          |                 |                 |              |                       |

**Thank you very much for your time and participation in the research**

## Appendix V: Listed Construction and Allied Firms in Kenya

1. Bamburi Cement
2. Crown Paints
3. East African Cables
4. EA Portland Cement
5. Athi River Mining Company

Source: NSE (2022)



## Appendix VI: NACOSTI License

|   |   |
|---|---|
| <br><b>REPUBLIC OF KENYA</b>   | <br><b>NATIONAL COMMISSION FOR<br/>SCIENCE, TECHNOLOGY &amp; INNOVATION</b> |
| <b>Ref No: 197316</b>   | <b>Date of Issue: 24/May/2022</b>   |
| <b>RESEARCH LICENSE</b>   |   |
|    |   |
| <b>This is to Certify that Ms.. Carol Nyamoita Ariga of Strathmore University, has been licensed to conduct research in Nairobi on the topic: Influence of dynamic capability on growth sustainability of listed construction and allied firms in Kenya. for the period ending : 24/May/2023.</b> |   |
| <b>License No: NACOSTI/P/22/17683</b>   |   |
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