# Innovation Capability as a Predictor of Firm Performance: A Systematic Review of Literature

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## Abstract

Innovation capability is a critical driver of firm performance on a global scale, particularly in dynamic and uncertain markets. Innovation capability enables firms to adapt to market changes, meet customer demands, and secure a competitive advantage. It is linked to improved firm performance, market expansion, and resilience. Innovation capability allows organizations to navigate complex environments, adapt to disruptions, and achieve sustainable success and fosters competitive advantage, operational efficiency, and external collaborations. Research indicates that firms that have adopted strong innovation capabilities achieve superior financial and market growth. Organizational culture further supports this synergy, with firms that promote creativity, learning, and flexibility being better equipped to integrate innovation for long-term competitiveness. The purpose of this study was to examine the impact of innovation capability on firm performance. The study has integrated a number of theories to underpin the variables. It has relied on Dynamics capability Theory, Resource Based View and Knowledge Based View. The study has identified a gap on the need to carry out longitudinal studies focusing on these variables to show long-term relationships and studies focusing on SMEs in the African context.

**Keywords:** *Innovation Capability, Business Resilience, Entrepreneurial Orientation, Firm Performance, Organizational Adaptability, Competitive Advantage, Dynamic Environments*

## 1.0 Introduction

In today's volatile and complex market environments, continuous innovation is essential to maintain competitiveness (Garrido-Moreno, Martín-Rojas, & García-Morales, 2024). According to O'Cass and Sok (2017). Innovation capability is an organization's ability to create and apply new products, services or processes to create growth. It allows firms to quickly adapt to changing market dynamics, satisfy customer needs and achieve a sustainable competitive advantages (Herhausen, Morgan, Brozović, & Volberda, 2020). Consequently, organizations that cultivate rich innovation cultures outperform their peers in virtually all industries (Crossan & Apaydin, 2018).

Innovation performance is particularly important in a rapidly changing business environment where the ability to develop new products, services and processes can give businesses a competitive edge (Otchia, 2020). In recent times, firms operate in a chaotic business environment where they must continuously overcome new challenges to compete and survive (Pathak, 2022). Since global disruptions such as the COVID-19 pandemic, there has been a surge of scholarly and practical interest in innovation capability.

Innovativeness is associated with superior financial performance, increased market share, and global expansion. Many firms continue to struggle with persistent issues including lack of funds, lack of infrastructure and outdated or ineffective policies. These prevent these organizations from fostering innovation and becoming sustainable, which creates challenges to growth and resilience (OECD, 2021). Digital technologies have become crucial to fostering innovative services, transferring the way companies do business and create value in this changing business landscape (Dwivedi, 2022).

## 1.1 Statement of the Problem.

Firm performance is a key metric for measuring a firm's effectiveness in achieving its main goals and objectives. Improved performance enables firms to achieve higher profits, expand its job market, increase investor returns, grow national economy, and create a competitive edge (Omar Taouab, Zineb Issar, 2019). Innovation plays a critical role in firm performance. Firms that integrate innovation strategies often reap improved performance. Most companies are seeking to improve their performance in any way possible. Those who endeavor to innovate to obtain and sustain performance can hold the winning card. Innovation helps a company develop new products and services, improve efficiency and adapt to change (Shouyu, 2017).

Despite Kenya's reputation for innovation, a majority of firms' experience resource gaps, including inadequate funding, skill mismatches, and insufficient infrastructure, which impede their ability to embrace innovation and achieve inclusive performance (Mwangi & Ngugi, 2019). Business sustainability continues to be a pressing issue, with many firms lacking the resilience to withstand disruptions arising from technological changes, political activities, and health crises. Strategic challenges, such as limited financial support from both local governments and international organizations, further hinder these firms from attaining their goals (Kinyua, 2019).

Research by Mwangi and Ngugi (2019) highlights the innovation-related challenges faced by SMEs, whereas Kamau and Wambugu (2020) emphasize the need for improved sustainability strategies. Similarly, Kinyua (2019) underscores the potential for firms in Kenya to achieve greater success by adopting innovative and proactive business strategies.Further research is needed to explore these linkages comprehensively and identify actionable strategies for leveraging these dimensions to enhance firm performance. Another significant gap has been a dearth of longitudinal

studies focusing on these variables to provide a way of understanding long-term relationships of the variables and studies focusing on SMEs and particularly in Africa and other developing countries.

### 1.2 Objectives of the Study

The objective of this study was to review conceptual, empirical and theoretical literature on innovation capability and firm performance and the predictor effect on firm performance from innovation capability.

## 2.0 The Concept of Innovation Capability

Innovation capability is a firm's ability to generate new ideas, new products, new processes or new business models, which help it stay competitive and adapt in changing market conditions. This is considered a fundamental organizational competence that enable firms to generate, take up and effectively implement innovative solutions (Lawson & Samson, 2019). It is a capability that goes beyond the technical component of creating new products or services to organizational processes, culture and strategic orientation that support continuous improvement and transformation. Firms with strong innovation capabilities outperform their competitors with resources including skilled personnel, research and development (R&D) investments and collaboration networks. Raymond et al. (2019) state that these firms combine internal and external knowledge to innovate new products or processes, maintain operational flexibility and quickly respond to market shifts with agility. Innovation capability is especially important in rapidly changing industries like technology, healthcare, and manufacturing, because staying ahead in the race is essential.

Innovation capability is multi-dimensional and involves all business elements like the support of innovation by the leadership, culture of experimentation and risk taking and alignment of innovation strategies with the business objectives (Teece, 2018). It involves a creative setting, which engenders new ideas, where the organizational structures permit the flow of information and the sharing of thoughts from one department to another. In emerging markets, the capability for innovation has become increasingly important for firms to compete both locally and globally. Firms in Africa and other developing economies improve their innovation capability by investing in technology, adopting a lean manufacturing practice, and joining international partnerships (Mwangi & Ngugi, 2019). In response to resource constraints and market volatility, these firms adopt a strategy of innovation.

### 2.1 Perspectives of Innovation Capability

From a strategic perspective, innovation capability drives competitive advantage. Strategically, organizations that prioritized organizations for innovation often allocate a great amount of resources to research and development (R&D), technology adoption, and market analysis. This approach always keeps innovation efforts in tandem with the organization's overall business objective, mostly by addressing the market needs and opportunities (Teece, 2018).

Organizational perspective is the approach that focuses on structural and operational parts of the organization that supports or hinders innovation within a firm. This viewpoint has leadership support, organizational structure, and processes helping to share and collaborate knowledge critical elements. Firms with a robust organizational structure that promotes cross-functional teamwork and open communication are more able to tap into their collective capabilities for innovation (Lawson and Samson, 2019).

Our analysis of innovation capability further considers a cultural perspective and focuses on the influence of organizational culture that enables an environment for innovation. As such, innovation

capability requires cultures that encourage risk taking, experimentation, and learning from failures. Organizations that develop a mindset of continuous improvement that empowers their employees to provide ideas are more likely to achieve successful innovations (Raymond et al., 2019). This perspective emphasizes the necessity of human factors in innovation process.

The network view draws attention to the usefulness of external partnerships and collaborations in improving innovation capability. The external stakeholders, such as customers, suppliers, and research institutions, provide firms with new knowledge and technologies, which foster innovation. Consequently, networking helps build an innovation ecosystem where firms offer resources and ideas to each other in order to create new solutions (García-Morales et al., 2019).

The technological perspective also addresses technological perspective issues, including the role of technology in shaping innovation capability. Organizations with advanced technologies like digital platforms, artificial intelligence, and data analytics can innovate better and better. Furthermore, the use of technology in the firm's organizational practices allows the firms to reduce the cost of operations, accelerate the development of products and respond to market changes (Fang et al., 2021).

**2.2 Dimensions of Innovation Capability**

The technological dimension involves a firm's capacity to deploy technology to create new products, processes and services. Such organizations with strong technological competence can successfully adopt and integrate advanced technologies like automation, artificial intelligence, and data analytics into their operation. In addition, to accelerating operational efficiency, this also contributes to the development of innovative offerings suitable for increasingly evolving market demands (Fang et al., 2021). For that reason, investing in the development of talent, training, and knowledge management is also key in the development of a workforce able to propose new ideas and to develop and implement innovative solutions. To tap into the collective creativity and expertise within the organization, it is important to engage and collaborate with employees (Lawson & Samson, 2019).

The organizational structure dimensions are strongly related to a firm's innovation capability. Firms with flexible and adaptive structures, enabling cross-functional teams and open communication, are in a better position to respond to changes and new opportunities. An organizational structure that is supportive of knowledge flow and collaboration is key to nurturing knowledge-based innovation (Raymond et al., 2019).

As with innovation capability, the cultural dimension is equally important. An environment conducive to innovation is created by organizational culture. Environments that encourage experimentation, risk taking, and learning from failures are created which allows innovation to thrive. Teece (2018) posits that firms that pay attention to develop an innovative culture are better in stimulating employee creativity, and are in favour of new product and services introduction.

Organizations with a strong market orientation are constantly required to gather and analyze market intelligence to identify opportunities for innovation. The implementation of this customer -centric approach leads to the aligning of innovation efforts with consumer desires and market developments to keep the organization competitive in their respective markets (García-Morales et al., 2019).

### 2.3 Adoption of Innovation Capability in Strategic Management and Outcomes

In today's dynamic markets, where time to market plays a very critical role, innovation capability has become important for organizations to maintain competitiveness within a competitive environment. Firms better able to manage innovation capability have better performance outcomes because they are more capable of responding to new technologies and new customer preferences. The integration of innovation into the strategic management practices provides an opportunity for organizations to harness creative potential, create an environment for experimentation and risk taking (Fang et al., 2021).

A major advantage of adopting innovation capability is an increased competitive advantage. As a way to curve a niche, organizations that effectively implement innovative practices can then differentiate themselves in the market through the offering of unique products and services that are designed to meet customer demands than their competition. Increased market share and profitability (Fang et al., 2021) can result from this differentiation. Furthermore, the development of innovation capability can also lead to operational improvement in firms through process streamlining as well as integration of new technologies that enhance efficiency (Khalili & Ranjbar, 2022).

An innovation culture can create positive employee outcomes, more motivation and engagement. Empowering employees to provide ideas and actively participate in the innovation process, which leads to increased commitment to achieving the organization's objectives and to higher productivity and lower turnover rates. Additionally, obtaining a strategic adoption of innovation capability leads to the formation of tight customer-supplier networks and collaborations with external suppliers, customers and research institution. These partnerships may create opportunities for co-creation of value and resource sharing that goes beyond innovation outcomes (García-Morales et al., 2019).

### 3.0 The Concept of Firm Performance

Firm performance is a multidimensional construct with both financial and operational facets. Research identifies four primary aspects; profitability, liquidity, growth, and stock market performance (Hamann et al., 2013). It has been demonstrated that firm performance goes beyond the traditional financial indicators to include operational efficiency and the strategic outcome measures. Santos & Brito (2009) present a broader framework grounded in stakeholder theory, highlighting six first-order dimensions; growth, profitability, market value, customer satisfaction, employee satisfaction and environmental/social performance. Second order dimension is financial performance also. Though traditional measures of accounting and market have dominated performance evaluation, it is recognized that subjective measures can be an additional dimension (Rowe & Morrow, 2009). The definition and dimensions of firm performance continue to be features of ongoing research, and, as such, merit further investigation to fully grasp such an important construct within strategic management (Hamann et al., 2013; Santos & Brito, 2009).

Firm performance is the use of methods by firms to generate profitability, maintain competitive edge and efficiently render services. Financial metrics such as return on equity (ROE) and profitability indicators are part of the package of customer satisfaction through high quality products and innovation (Lebas, 2019). Moreover, firm performance is a criterion for achieving a competitive advantage and the sustainability of firm growth, as well as adapting to the rapid changes in the business environment. According to Richard et al. (2009), firm performance can be categorized into three levels; product market performance, financial performance and returns on shareholding. Profitability, liquidity status and product market performance such as sales levels, market share and customer satisfaction constitute financial and product market performance

respectively. The basis of these aspects provide valuable insights into the ability of a firm to achieve its strategic objectives.

Both internal and external factors influence firm performance. This includes leadership quality, organizational structure, innovation capability, and human resource management, which would help the firms to execute their strategies (Venkatraman & Ramanujam, 2018). Firm performance is highly susceptible to external factors, that is fluctuating economic conditions and regulatory frameworks, which could lead to reduced business activity or affect the firm growth. An example of the limitations on the performance of SME's in Kenya is a lack of resources, poor infrastructure and economic uncertainty. In this case, firms that create innovative strategies to meet the new profit will certainly outperform their competitors under any circumstances (Mwangi & Ngudi, 2019) Moreover, firms with an entrepreneurial orientation, as characterized by risk taking, aggressiveness and innovation, tend to perform and maintain strong performance in the business environment (Kinyua, 2019). Firms, therefore, must develop strategies of continuous monitoring and improvement of their performance as it is very critical to business success. However, with markets becoming increasingly competitive both globally, regionally, and locally firm performance continues to be the basic pillar for business success.

### 3.1 Perspectives of Firm Performance

The performance of the firm can be evaluated from various perspectives, which have distinctive contributions towards organizational success. The financial perspective is one key perspective which focuses upon quantifiable metrics, such as profitability, return on investment (ROI), revenue growth, and market share, amongst other things; (Richard et al., 2009). Historically, this perspective has prevailed in the firm performance assessment, which is evidenced by financial metrics that facilitate tangible evidence of a firm's economic wellbeing and value creation for shareholders.

According to Kaplan and Norton's Balanced Scorecard (1992), the customer perspective focuses on important aspects of customer satisfaction, customer loyalty and market positioning. It is this view that the firms that excel in satisfying the needs of the customers are most likely to deliver superior performance in the competitive markets with the resultant financial success (Kaplan & Norton, 1992).

The internal business process perspective looks at how effectively a firm works internally. Metrics that relate to operational efficiency, innovation processes, and production cycles, all of which directly contribute to a company's ability to produce products or services, and sustain performance levels, are considered (Lebas, 2019). This is a perspective on the fact that the performance is not only determined by the external market dynamics but also depend on the management of internal resources and processes.

The innovation and learning perspective relates to firms' ability to grow, innovate and learn in changing market conditions. Companies that invest in continuous improvement, employee development, and innovation capability are positioned for long-term success because they are better suited to respond to industry changes and keep competitive advantages (Raymond et al., 2019). As a result, there is a growing belief that companies who focus on sustainable practices and ethical governance are better positioned to attain sustained performance; especially in markets that reward behavior, which is socially responsible (Venkatraman & Ramanujam, 2018).

### 3.2 Measurement of Firm Performance

As business environments become complex, non-financial measures are gaining importance in assessing firm competitiveness. The measures here include customer satisfaction, employee

engagement, innovation capability and operational efficiency (Venkatraman & Ramanujam, 2018). As an alternative to financial metrics, non-financial metrics offer a more sophisticated view of performance by capturing intangible assets and capabilities that contribute to long-term success but may not be fully captured in financials. To address the limitations of a solely financial perspective, frameworks like the Balanced Scorecard developed by Kaplan and Norton (1992) integrate both financial and non-financial measures across four dimensions: customer satisfaction, internal business processes, learning and growth, and financial performance. This helps organizations get closer to aligning their strategies with actual firm performance.

Firm performance in dynamic industries, where innovation, agility, and stakeholder relationships are vital for survival and success, are particularly suited for multi-dimensional performance measures. It has been seen that firms in knowledge-based sectors can gain by assessing their innovation capacity and learning capabilities as these directly impact the competitiveness and long-term performance (Raymond et al., 2019). Despite the continued use of financial metrics in assessing firm performance, the contemporary frameworks increasingly emphasize the significance to evaluate a firm via non-financial metrics to capture a firm's complete operational and strategic effectiveness.

## 4.0 Theoretical Literature Review

In this section, three foundational theories are examined to give an overall understanding of the variables and underpin them in conjunction with the related phenomena within organizations. The theories include the Resource Based View (RBV), which stresses the use of internal resources for competitive advantage. Dynamic Capability Theory (DCT) that emphasizes an organization's ability to adapt and innovate in a changing environment and Knowledge Based View (KBV) that emphasizes the key role of knowledge as a strategic resource.

### 4.1 Resource-Based View

RBV is considered the theory of the growth of the firm, pioneered by Edith Penrose in her seminal 1959 work, The Theory of the Growth of the Firm (Penrose, 1960). In her pioneering approach, the firm was seen as a container of productive resources, and managerial capabilities featured as central to exploitation and renewal of these resources to provide growth (Penrose & Oughton, 2019). The paper lays the groundwork for a new general theory of firm growth, examining why some firms grow while others do not, even under similar market conditions (Lockett et al., 2010). Penrose & Oughton (2019) state that her insights have played a considerable role in the fields of economics and management, for the formulation of the resource based view of the firm and the dynamic capabilities of strategic management.

According to the Resource-Based View (RBV) theory, a firm's competitive advantage and superior performance are derived from its unique, valuable and difficult to imitate resources and capabilities (Raduan Che Rose, Ismail, Abdullah, 2010). It advocates an 'inside out' perspective on heterogeneity and resource immobility as key to sustained competitive advantage. According to the RBV, firms can utilize internal resources and capabilities to create value for customers, develop new products or expand into new markets (Madhani, 2010). Inputs into the production process are defined as resources, such as capital equipment, employee skills, while capabilities are the ability to carry out tasks or activities (Grant, 1991). According to the RBV, competitive advantage results from resource heterogeneity and immobility; strategic resources are rare, valuable, inimitable and non-substitutable. By leveraging their unique resources and capabilities, firms can create value for

customers and secure sustainable competitive advantages through entering new markets (McGee, 2015).

The Resource Based View (RBV) model is a way for management to measure the capabilities and resources that make up the firm and help it gain competitive advantage. Its main limitation however, is its inability to predict resource that lead to superior performance (Hinterhuber, 2013). Hinterhuber proposes extending the RBV by including demand based variables, such as customer needs and market size of segments. According to this enhanced model, competitive advantage results from resources being valuable, rare, and non-imitable, organized and responding to unmet customer needs in sufficiently sized market segments. According to David et al. (2007) structuring, bundling, and leveraging resources is a model of resource management in dynamic environments to create value. Madhani (2009) highlights that competitive advantage occurs when there is resource heterogeneity and immobility across firms. The objective of these extensions is to enhance the RBV's practical applicability, as well as improve its predictive power in strategic management. RBV has been extensively applied in extant empirical inquiries in the field of strategic management (Kinyua, Muathe & Kilika, 2015; Gabow, & Kinyua, 2018; King'oo, Kimencu, & Kinyua, 2020; Muthoni & Kinyua, 2020; King'oo, Kimencu, & Kinyua, 2020; Kinyua & Kinyua, 2020).

Both the tangible and intangible resources are believed to play their part in an organization's competitive advantage and performance. Leadership plays a crucial role in creating competitive advantage, with tangible resources also significantly contributing (Godfrey & Razafiarivony, 2024). Nevertheless, strategic and valuable are intangible resources, especially knowledge-based assets (Jugdev & Mathur, 2006). Research has shown empirically that intangible resources provide additional explanatory effects on firm performance beyond tangible resources (Galbreath & Galvin, 2004). The results are consistent with the resource-based view of the firm and strengthen the association between tangible and intangible resources and sustained competitive advantage placing special emphasis on intangible assets.

While widely accepted, the Resource Based View (RBV) of the firm has been criticized extensively. Based on the indeterminate concepts of 'resource' and 'value', Kraaijenbrink, Spender and Groen (2009) identify eight categories of critiques, three of which warrant further research because of the narrow conceptualization of competitive advantage. Truijens (2008) highlight RBV's theoretical status and definitions, methodology and deficiency. Nevertheless, RBV is an essential tool for strengthening company performance. As Cawley & Snyder (2012) acknowledge, the limitations of RBV are that it is tautological and inaccurate of predicting sustained competitive advantage sources. Yet, they propose that RBV can still be a useful orienting perspective for focusing on resource use and configuration within the environment.

**4.2 Dynamic Capabilities Theory**

The dynamic capabilities (DC) framework, developed in the 1990s, adds an additional dimension by 'broadening' the resource based view, to account for how valuable resources can be created and renewed in changing environments (Ambrosini & Bowman, 2009). Building on earlier work (Arndt, 2019; Karadağ, 2019) Teece and Pisano formalized the theory in 1994. The seminal paper by Teece, Pisano and Shuen (1997) is highly influential in management research (Arndt, 2019). While there are ongoing debates about the conceptualization, measurement, and outcomes of the DC framework, it has made several achievements (Arndt, 2019). It places emphasis on the internal process, resource utilization and structural transformation for the sustainable competitive advantage (Carnes, 2019). It has been applied to various contexts including emerging markets and network dynamics (Arndt,

2019). The basic concept of DC is often understood by looking at Teece, Pisano and Shuen (1997) definition, which remains important for newcomers to the field (Faizal, Zaidi and Othman, 2012).

Dynamic capabilities (DC) theory was developed as a response to some of the limitations of the Resource Based View (RBV) (Galvin, Rice & Liao, 2014). This study focuses on the DC framework and processes that are shaped by historical paths, allowing organizations to adapt to fast changing environments by developing, integrating, and reconfiguring their resource and capability base (Teece, Pisano & Shuen, 1997). Strategic management as a discipline did not receive attention until the 1980s. Previously, and during that decade the field was dominated by Porter's industry focused framework (Porter, 1979, 1980, 1985) (Barney & Ouchi, 1986). At the same time, the RBV came of age, with firms seen as conglomeration of both tangible and intangible resources like human capital, and the innovative and appropriate combination of these resources being the defining unique capabilities of these firms (Wernerfelt 1984; Grant 1991; Helfat et al. 2007; Barney 1991). This perspective states that achieving a competitive edge is when a company performs a value creating strategy that no existing or future rival is undertaking (Barney, 1991). Additionally, such a strategy gives sustained competitive advantage because imitators cannot replicate its benefits (Barney, 1991). VRIN attributes – valuable, rare, inimitable and non-substitutable resources are the root of these concepts (Barney, 1991; Tondolo & Bitencourt, 2014).

According to Teece, Pisano and Shuen (1997), DC theory consist of the firm's capacity to integrate, develop and adapt both internal and external skills in order to respond effectively to fast changing conditions. Firms that are able to sustain high performance in rapidly changing environments are also able to coordinate and develop new resource configurations faster than their competitors. Eisenhardt and Martin (2000) suggest that DCs can be characterized as the organizational and strategic processes that enable firms to rapidly develop new resource configurations in response to emerging, transforming, fragmenting or declining markets. Teece (2007) significantly advanced the framework by outlining micro-foundations across three key dimensions: opportunity sensing, seizing, and transforming the latter being continually renewing and reconfiguring both tangible and intangible assets of the business.

Yet the theory has come under heavy fire, particularly the ambiguity defining the terminology and difficulties in determining its outcomes (Zahra, Sapienza & Davidson, 2006). One difficult issue is to understand the true essence of dynamic capabilities and to find definitive models for quantification of the capabilities or their impact on organizational performance (Zott, 2003). Secondly, the theory is overladen with redundancy (Zollo & Winter, 2002) and suffers from an insufficiency of explanation of how dynamic capabilities perform (Schreyögg & Kliesch-Eberl, 2007). Another recurrent criticism has been ambiguity concerning the fundamental concepts of the framework (Ambrosini & Bowman, 2009). Other scholars (Muthoni & Kinyua, 2020; Legeny & Kinyua, 2023) have made use of the dynamic capabilities theory as a theoretical basis for their studies.

The study of dynamic capability theory is pertinent, as they show how organizations can adapt, innovate and reconfigure their resources and capabilities, to navigate rapidly changing environments more effectively. This identifies the mechanisms by which firms produce sustainable competitive advantage and maintain excellence in performance in meeting evolving market demands and uncertainties alike. This is aligned with the focus of the study on innovation capability and resource optimization in dynamic contexts.

**4.3 The Knowledge-Based View**

The knowledge-based view (KBV) (Wernerfelt 1984, Barney 1991, Conner 1991) is widely recognized as placing the knowledge as the strategic resource (Curado & Bontis, 2006; Curado, 2006). Unlike traditional economic factors, knowledge is a unique resource that does not depreciate and may generate increasing returns (Curado, 2006). Knowledge based resource development is idiosyncratic as a result of path dependency and causal ambiguity, based on the intangible and dynamic nature of knowledge based resources, which facilitates the creation of economic realisation in the KBV (Curado & Bontis, 2006).

The Knowledge Based View (KBV) emphasizes that firms are heterogeneous entities characterized by knowledge (Hoskisson et al., 1999). An increasing proportion of an organization's resources are knowledge oriented (Roos et al., 1997; Stewart, 1997; Sveiby, 2001b; Marr, 2004). In the context of the RBV framework, research priorities should follow the unique traits of intangible resources, especially knowledge (Rouse and Daellenbach, 2002). Therefore, knowledge assets are a key driver of enduring differentiation, as their complexity and resistance to imitation make them important to sustaining competitive advantages (Wiklund and Shepherd, 2003). A major claim in the Knowledge-Based View (KBV) is that firms exist to create, disperse, and convert knowledge as source of competitive advantage (Kogut and Zander, 1992). Yet knowledge dissemination in an organization is often times difficult to achieve. This is a concept that stresses internal barriers that would facilitate the attainment of competitive advantage yet would hinder the full realization of benefits accruing from existing knowledge assets (Szulanski, 2003).

The Knowledge-Based View is consistent with the notion of organizations as cultural systems (Balogun and Jenkins, 2003). Since organizations are seen as cultures, it is assumed that they should carry out processes of cultural learning, of learning with cultural symbols and practices. Firms learn through organizational learning, and develop, adapt, and sustain their capabilities (Cook & Yanow, 1995). According to (Balogun and Jenkins, 2003), culture is a collection of shared assumptions and beliefs among members or common knowledge and beliefs (Schein, 1985, cited by Balogun and Jenkins (2003). Like Nonaka (1991) famously said, ‘knowledge is the only enduring source of competitive advantage’ and there has been a lot of work focusing on concepts such as the knowledge driven organization (Blackler, 2002) and the knowledge centric advantage (McEvily and Chakravarthy, 2002). These scholars stress the important role of intangible factors in determining firms’ outcomes. Managerial expertise, specialized technical skills and modes of implicit organisational practices become critical to the success of the whole company (Dess et al., 1995). The knowledge based view has also been used by past scholars in the empirical investigation (Kinyua, 2015).

Similarly, in a knowledge management literature, research has been conducted between superior knowledge foundations, which are from organizational learning, and increased business performance (Senge, 1990 cited in Garvin, 1998). Furthermore, it stresses the fact that knowledge variations can constitute a source of competitive advantage (Miller, 2002). Increased strategic adaptability, and faster responses to changes in the environment, are associated with a robust knowledge base (Grant, 1996b; Volberda, 1996) and knowledge is considered as a critical asset to sustaining competitive advantages (Umemoto, 2002). Organizations are able to integrate, developing and adjusting internal and external resources through the dynamic capabilities to navigate rapidly changing conditions (Teece et al., 1997). The evolution of these organizational capabilities over time is a process of learning that is continous (Levitt and March, 1988, cited by Szulanski, 2003). DeNisi et al. (2003) regard knowledge driven capabilities as essential to setting and maintaining competitive advantage. In high performing companies (Hiltrop 1999), exceptional

talent is identified as the key driver of enduring competitive advantage. Over time, the only sustainable competitive edge may be the ability to learn faster than rivals ( de Geus, 1988). This capability evolves over time in a historical or path dependent manner (Collis, 1991; Winter, 1987) that generates causal ambiguity that creates barriers to imitation, which is exceedingly difficult for competitors to imitate the uniquely evolving path of each organization and forms a basis for competitive advantage (Lei et al., 1996).

The Knowledge Based View (KBV) of the firm has been a driving force within international business research in explaining different phenomena (Stoian et al., 2024). It is however criticized on a number of accounts. Styhre (2004) argues that the concept of tacit knowledge, central to KBV, is problematic and should be used cautiously as it often serves as a catch-all term for unrepresentable knowledge. Di Guardo & Galvagno (2005) highlight the KBV's limitation in addressing inter-firm relations, suggesting a need to integrate network perspectives for a more comprehensive understanding of knowledge transfer in local business networks. Zack & Singh (2010) contend that KBV has been underutilized in outsourcing decisions, potentially leading to oversight of crucial knowledge and learning implications. The latter underlines the importance of a more complicated perspective to conceptualization and management of knowledge in the organizations and a more comprehensive view to the network dynamics and the strategic decision-making in relation to resources of knowledge.

The theory is criticized, but it remains the basis upon which many of the key constructs such as innovation capability, entrepreneurial orientation, and firm performance are built. The theory highlights that dynamic capabilities play an important role in the ability of firms to integrate, reconfigure and leverage their knowledge and resources thereby helping organizations to adapt to changes and compete effectively. The capacity to generate and apply new knowledge is seen as critically important for effecting sustainable growth and responding to market shifts, and is considered an important part of innovation capability. Dynamic capabilities support firms in seizing opportunities and managing uncertainty by enhancing entrepreneurial orientation that is, a firm’s proactive, risk-taking, innovative behavior. This theory provides useful insights into how these constructs jointly affects overall firm performance in dynamic and competitive contexts.

This theoretical review is important for this study as it has helped the understanding of the theories used and their relevance to the constructs and variables in the study and helps establish a foundation for the review. It has also aimed at understanding of the theories and concepts relevant to the topic of research and provides a broader area of knowledge under consideration.

## 5.0 Empirical Literature Review.

Empirical evidence of association between firm performance and innovation capability is abundant in several studies. Nevertheless, many of these studies are not applicable worldwide since they were conducted in developed countries rather than developing ones. The literature review on empirical studies of innovation capability is reviewed, based on the scope of study.

### 5.1 Product Innovation and Firm Performance

Research shows that technological innovation positively affects firm performance and competitiveness. In their study, Younas and Rehman (2020) investigated the nexus between technological innovation and productivity in four European countries. In the investigation, an extended version of CDM model was used to model the structural relationship between R&D, technological innovation and firm performance. The results of the analysis show that technological

innovation has great positive impact that has a role to play in the firm trading decision to go into exporting. One drawback of this study is that results cannot be generalized into other contexts, as the study focused on selected European countries.
Using the case of IT capabilities and innovation, Zhang, Wang and Song (2020) interrogated how IT capabilities influence firm performance. The study, analyzing firms in high technology sector of China, showed that IT capability defined as the ability for firms to use IT resources to integrate, deploy and leverage them is a must to IT innovation. On the other hand, IT innovation positively affects firm performance by enabling firms to develop new product, streamline processes, and improve customer experience. The authors argued that IT capability at the firm level is a determinant for firms' innovation capacity and the firms with higher IT capability are more likely to have superior performance outcomes than those with low IT capability. This study only analyzed IT innovation without considering other aspects of innovation like product innovation, process innovation, network and business model innovation.

In the case of e-commerce firms, Roh et al. (2020) examined the effect of IT innovation in e-commerce firms, including digital innovations that is e-commerce platforms, mobile apps, online payment systems that lead to firm outcomes. Their research shows that IT innovation significantly improves customer engagement, speeds market entry and decreases the cost to operate, which in turn translate into financial performance improvements. The firms with more advanced e-commerce had higher revenue growth and higher loyalty. In developing economies, however, the adoption of IT innovation can have a large impact on firm performance by enabling streamlining of operational processes and expansion of market reach. Chege (2019) in a study of firms in Kenya investigated how IT innovation, such as mobile applications and cloud based services, significantly improved business performance for example through the reduction of operational costs and enhanced reach to customers. While adoptions of IT innovation pose a financial barrier for many organizations, nevertheless those that successfully adopted IT innovation recorded impressive gains in market penetration and profit.

The success of innovative products depends on marketing strategies and aligning them with product attributes and overcoming commercialization barriers. Market analysis, segmentation, and developing suitable product portfolios are some of the effective strategies (Kharchuk et al., 2014; Kanagal, 2015). Kanagal (2015) states that innovation processes transform 'innovation events' into marketable offerings, which then create intellectual property and deliver superior value to customers. However, marketing strategies to target for disruptive technologies are very important to understand how consumers behave for successful penetration of market (Ganguly et al., 2017). The key components of good marketing strategies include choosing the right target audience, utilizing the best type of advertising channels, as well as coming up with fresh ideas to communicate to customers.

Finally, the usefulness of marketing efforts for innovative products can be further increased by the integration of marketing concepts, the improvement of structures of market research and the agreement of the interests of the company with those of the society and consumers (Kerimova, Minure, Hadzhi et al., 2024).

Product innovation requires customer integration, and different approaches lead to success. Early customer integration in the innovation process can significantly improve success rates, with four key customer roles identified: Three other positions that an opportunity is expected to adopt include

a complementary specialist, specifier and selector (Gassmann & Wecht, 2005). Higher volumes and more diverse feedback can lead to positive product improvement and diffusion (Wu et al. 2021), and user innovators with a strong customer focus can receive them. Customization and co creation strategies promote success in innovation. User types such as consumers, businesses, and public sector do contribute differently, and at different innovation stages (Stojčić et al., 2024). Iterative and adaptive innovation processes of development contractors lead to a better realization of customer contributions in the product innovation process than in house developers (Sandmeier et al., 2010). These findings emphasize the importance of drawing customers into product innovation in order to achieve market alignment as well as overall performance.

### 5.2 Process Innovation and Firm Performance

Research shows that leadership is critical to successfully promoting innovation that contributes to better organizational performance (Yang & Yang, 2018). Process innovation and new product development are correlated with leadership (O'Regan & Ghobadian, 2007). This also greatly affects innovation and organizational performance (Sethibe & Steyn, 2015). This study shows that transformational leadership affects knowledge management capability directly and indirectly, which affects firms' innovation capabilities (Gui et al., 2022). Nevertheless, the kind of leadership style has shown to be effective depends on the competition environment and the innovation type. For highly competitive environments, transformational leadership is suggested to be stronger, and process innovation should be moderated (Yang & Yang, 2018).

Transactional leadership may be more suitable for incremental innovations and efficiency-related activities (O'Regan & Ghobadian, 2007; Sethibe & Steyn, 2015). Fostering an innovative organizational culture (Gui et al., 2022) can further contribute to the impact of leadership on innovation and performance.Additionally, research suggests that proactive employee behavior substantially contributes to innovation performance in high technology firms. Subsequent to Segarra-Ciprés et al. (2019), proactive behaviors are positively associated with both product and process innovation. The relationship between proactive behavior and product innovation is also strengthened by organizational controls such as perceived support for innovation and innovation process formalization. Perhaps more interesting, though, is that there is a curvilinear relationship between formalization and innovation, such that there is a tradeoff between product and process innovation and formalization (Segarra-Ciprés et al., 2019). In addition, initiative and psychological safety organizational climates are important to the successful implementation of process innovations. Not only do these climates have positive relation with the firm performance measures such as return on assets and goal achievement, they also moderate the relation between process innovations and firm performance (Baer & Frese, 2003).

The implications of these findings highlight the value of creating organizational environments that encourage supportive attitudes toward employee proactivity and process innovation. Like any organization, process innovation is vital for organizational success and success in dynamic industries (Piening & Salge, 2015). The implementation of innovations, however, is effective in the hands of skilled and consistent employees, under good organizational climate, management support, financial resources, and a learning orientation (Klein & Knight, 2005). The firms that are better endowed with resources such as skilled labor, financial capital, technological infrastructure, are more likely to put process innovations into practice (Awino, 2020). Since these enablements are key enablers of process innovation (Davenport, 1992), these resources allow for investment in research, development, process redesign, and information technology. Process innovation success leads to enhancing firm financial performance through a broad range of innovation activities (Piening &

Salge 2015). But there are decreasing marginal returns to innovation activities (Piening & Salge, 2015), therefore suggesting an optimal level of engagement. However, in general, organizational resources and organization capabilities such as innovation capabilities drive performance and competitive advantage (Awino, 2020).

**5.3 Business Model and Firm Performance**

Business model innovation and firm performance are driven by organizational culture, according to research. Successful business model adaptation and implementation requires a culture that encourages risk taking, creativity and innovation (Hock et al., 2016; Ningsih & Tyas, 2024). Hock et al. (2016) have demonstrated that firms endowed with novelty oriented cultural values have higher capabilities for business model innovation, in terms of strategic sensitivity and resource fluidity. The role of organizational structure is also important: simplifying structure and gaining control over non-core functions enhance strategic flexibility in business model innovation (Bock et al., 2012). To develop a strong innovation culture, leadership, flexible organizational structures and right incentives are key (Ningsih & Tyas, 2024). Results reveal that business model innovation is a significant predictor of firm performance, competitive advantage, and strategic flexibility (Bashir & Verma, 2019). Nevertheless, partner reliance may hamper strategic flexibility in business model innovation (Bock et al., 2012). These findings reinforce the notion that organizations must promote an organizational culture geared towards fostering an innovation culture to increase business model effectiveness and overall firm performance.

Business model innovation (BMI) and firm performance are greatly reliant on organizational intelligence and capabilities. Key organizational capabilities that drive BMI, improve business performance are market orientation, strategic flexibility and technological capability (Kafetzopoulos et al., 2023). Business intelligence (BI) systems contribute to the adaptability of the firms to dynamic environments and to the organizational learning and knowledge management (Giménez-Figueroa et al., 2018). Research shows that companies with more 'organizational IQ' are more profitable and grow faster, especially in fast moving industries (Mendelson, 2000). However, there are several mediating and moderating factors such as firm characteristics, industry characteristics, and BM implementation practices in which BMI profoundly affects firm performance (Latifi et al., 2018). Together, these studies call for better organizational intelligence and competencies as these would enable business models innovation, market adaption, and superior performance in competitive business environments.

In addition, research proves that a firm’s long-term success and competitive advantage can only be achieved when it has a clear vision, strategic alignment and coherent business model. Organizations that have well-articulated strategies and a fitted business model have shown to have higher financial performance and market positioning (Braun et al., 2019; Powell, 1992). However, deviations in the strategy-business model fit are particularly detrimental for performance (Chereau & Meschi, 2019). Positive relationship with profit, competitive advantage and other performance metrics exists (Mielcarek, 2024), which is explained by strategic coherence, i.e. vertical alignment (strategy–business model fit), horizontal alignment (business model cohesion). Yet, managers must allocate attention between the strategy and business model to ensure they do not lose focus on changing customer behavior or become defenseless to competition (Braun et al., 2019). By increasing levels of strategic coherence, the integration of goals, actions and business model components could increase, facilitating higher organizational performance (Mielcarek, 2024).

### 5.4 Network and Firm Performance

Moreover, firm performance and innovation are strongly related to network structure and intensity. Dense, high intensity networks increase the firm value of innovative capabilities and increase firm performance (Mahmood & Zhu, 2015; Liu et al., 2011). Furthermore, firm performance in strategic networks has been shown to be contingent upon the interaction between generalized reciprocity among partners and networks ties (Wincent et al., 2010). The results show that technological innovation performance is positively related to network characteristics (Liu et al., 2011). Firms that span structural holes in their external networks tend to be more capable of exploiting their internal capabilities, and thus perform better (Zaheer & Bell, 2005). Yet the effectiveness of network ties might differ, while dense networks of buyer–supplier and equity ties positively enhance the value of innovative capability, directorship ties do not (Mahmood and Zhu, 2015). The results here highlight the importance of considering not only internal capabilities but also network structure in understanding firm performance and innovation outcomes.

Financial performance, sales growth, and profitability of firms with more external connections and central network positions are enhanced (Kim, 2018; Dolfsma & Eijk, 2017). In great part, however, these benefits are mediated by increased innovativeness, as better-connected firms are able to draw upon a larger pool of ideas and knowledge (Dolfsma & Eijk, 2017, Schilling & Phelps, 2007). Results show that firms that bridge structural holes enjoy additional performance advantage by using their innovative capabilities more effectively (Zaheer & Bell, 2005). Furthermore, networks with both high clustering and high reach feature greater innovative output of member firms (Schilling & Phelps, 2007). Network connections also enhance the firm performance in terms of sales growth and cost reduction (Kim, 2018), and well connected board members factor into that success. Overall, networks provide firm performance benefits from strategic positioning within networks compared to other strategic options (Dolfsma & Eijk, 2017).

Additionally, firms located at network central positions experience greater access to resources, information and partnerships, that generate higher innovation and financial outcomes (Dolfsma & Eijk, 2017; Powell et al., 1999). Entrepreneurial performance is positively associated with network competence and centrality, and centrality mediates the association between network competence and performance (Zhang, 2011). Despite the benefits of network positioning, however, they are not enjoyed uniformly across firms. For example, the relationship between structural holes and performance is moderated by a firm's capacity to absorb heterogeneous information, ability to protect against partner non-cooperation and bargaining power (Shipilov, 2009). The ability of firms to extract performance benefits from highly interconnected network positions characterized by structural holes (Shipilov, 2009) is greater for firms with wider scope experience, a higher level of historic multimarket contact with partners, and lower centrality in the industry network. This network interconnectivity must be linked with other factors like knowledge sharing to achieve desirable results.

### 6.0 Proposed Theoretical Model

In order to unravel the connections between independent and dependent variables, a theoretical framework is necessary. In developing this research, I established a conceptual model that illustrates the linkages between innovation capability and firm performance

The figure presented in Figure 1 shows this relationship.

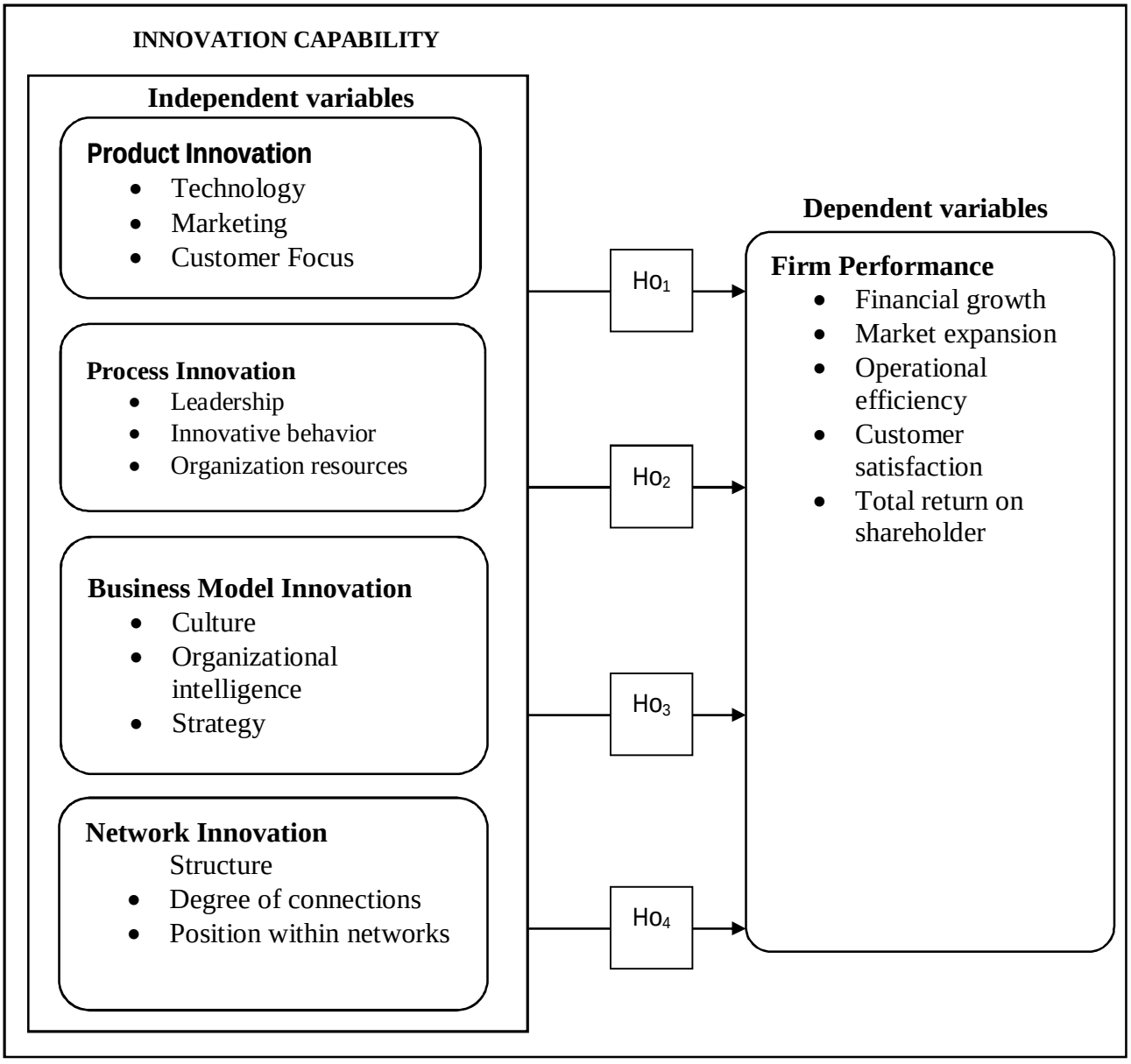


**Figure 1: Proposed Conceptual Model**

**Source: Author (2024)**

Product innovation is the process of creating new products and services aimed at their improvement and creating better value to customers**.**

Successful product innovation requires a combination of creativity, market research, customer insights, technological expertise and effective project management. It is driven by a desire to meet evolving customer needs, to stay ahead of competition and create sustainable business growth. Companies that actively practice product innovation generally experience positive outcomes like increased market share, higher profitability, enhanced competitive advantage, improved customer satisfaction and the ability to change market trends.

Process innovation is the implementation of new or significantly improved production or delivery method that includes techniques, equipment and/or software. Firms that successfully implement process innovation typically experience increased efficiency, reduced costs, improved productivity, a competitive advantage and the ability to better meet customer demands due to optimized internal operations and streamlined production methods, especially allowing them to produce goods or services faster and at a lower cost.

Business model innovation is the art of enhancing advantage and value creation by making simultaneous and mutually supportive changes both to an organizations value proposition to customers and to its underlying operating model. Business process innovation can be perceived as a method to align resources with the firm's business strategies. Business process innovation enables a firm to improve and enhance operations whether by solving problems, resolving pain points or improving efficiencies.

Network innovation provides a way for firms to take advantage of other companies processes, technologies, offerings and brands. In today's hyper-competitive, digitalized, knowledge and innovation based high velocity business environments, it is challenging for firms to stand alone ad rely solely on their own resources to get sustainable competitive advantage. Research findings shows that firms utilizing network innovation experience significant benefits like increase access to diverse knowledge, faster time to market, reduced development costs, and enhanced market reach, ultimately boosting competitiveness.

Results from this independent study indicate that the constructs of the study were innovation capability and firm performance. In the study, innovation capability is the independent variable and firm performance is the dependent variable. The product, process, business model and network are used as measures of innovation capability in this study. These are the very elements that enable organizations to design and implement strategies that lead to better outcomes. With the use of these constructs, businesses are enabled to improve adaptability, optimally operate, and achieve sustainable performance improvements. As a dependent variable in this study, firm performance is measured in terms of financial growth, market expansion, operational efficiency, customer satisfaction and total return on shareholders. Organizational ability to grow its financials by increasing revenue and profitability over time is an output to be measured by financial growth. Market expansion consists of evaluating how well a firm enters new markets or increase its market share in current markets. Organizational efficiency involves how the organization can minimize processes and resources to save cost and increase productivity. Measures of customer satisfaction are used to determine how far a firm's products or services meet or exceed customer expectations, which affects the level of customer loyalty and the firm's reputation. Finally, total return on shareholders is an indicator of the long-term success, which combines dividend receipts and capital appreciation to assess overall financial benefits to the investors.

## 7.0 Conclusion

The interrelationship between innovation capability and organizational success are established in the conceptual model. Innovation capability serves as an independent variable to increase a firm's ability to react to market shifts, create new products, and maintain a competitive advantage. Application of varied strategies of innovation along the innovation cycle indicates that firms are able to reconfigure and integrate their own capabilities and are able to adopt to volatile and unpredictable business environments and sustain their competitive advantage.

Firm performance, the dependent variable, encompasses outcomes such as financial growth, market expansion, and operational efficiency, which are enhanced through effective innovation and entrepreneurial strategies. Together, these variables indicate that firms with strong innovation capabilities are better equipped to achieve superior performance in dynamic and uncertain environments. There is a need to carry out longitudinal studies focusing on these variables to provide a way of understanding long term relationships of the variables and also studies focusing on SMEs particularly in the African context.

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