



BUSINESS MODEL INNOVATION AND PERFORMANCE OF SMALL AND MEDIUM-SIZED ENTERPRISES IN MOMBASA COUNTY, KENYA

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ABSTRACT

The purpose of this study was to examine the influence of business model innovation on performance of small and medium-sized enterprises in Mombasa County, Kenya. Specifically, the study sought to examine the influence of value capture innovation and value proposition innovation on performance of small and medium-sized enterprises in Mombasa County, Kenya. The theoretical framework was informed by the resource-based theory, dynamic capability theory and firm growth theory. The study employed the correlational, cross-sectional survey research design to test non-causal relationships between the study variables. The proportionate stratified random sampling technique was utilized to select a sample size of 351 small and medium-sized enterprises a target population of 2890 small and medium-sized enterprises in Mombasa County, Kenya. A pilot study was conducted to ascertain the validity and reliability of the constructed survey questionnaire. A structured self-administered survey questionnaire was used as the means of collecting primary data. The collected data was processed and entered into the statistical package for social sciences (SPSS) version 26 to create a data sheet used for analysis. Data analysis involved the use of descriptive statistics and inferential statistics. The Pearson's correlation results indicated that value capture innovation and value proposition innovation had positive and significant relationship with the performance of small and medium-sized enterprises in Mombasa County, Kenya. The regression results indicated that value capture innovation and value proposition innovation had positive and significant influence on the performance of small and medium-sized enterprises in Mombasa County, Kenya. The study recommends that the managers and practitioners within the diverse industries should implement the business model innovation to foster the performance of small and medium-sized enterprises. The policymakers within the diverse industries should initiate policy review to encourage managers and practitioners to implement business model innovation to foster the performance of small and medium-sized enterprises. The study recommends intriguing areas for further research. Future research should examine the influence of business model innovation on firm performance with environmental turbulence as a moderator in other sectors or contexts.

Key Words

Business model innovation, Firm Performance, Small and medium-sized enterprises, Value capture innovation, Value proposition innovation, Kenya

INTRODUCTION

Globally, small and medium-sized enterprises (SMEs) are generally vital in enhancing national development. SMEs play a significant role in the economic development of many nations (Afrane, 2024). The SMEs significantly contribute to job creation, poverty reduction, and overall economic growth (Mutisya, 2023). The SMEs have been recognized for their socio-economic contribution (Abdallah, Harraf, Ghura, & Abrar, 2024; Al Malki, 2023). Although SMEs employ few people and do not have large revenues, their collective impact is enormous (Changalima *et al.*, 2023). Large proportions of SMEs are family controlled and play an important role not only in the development of many national economies, but also have great potential to reduce negative effects of human activities on the natural environment and society (Duh & Primec, 2024). SMEs contribute to about 60% of all employment opportunities worldwide, more than 35% of gross domestic product (GDP) in developing countries, and 50% in developed countries (Rahman, Lal, & Rena, 2025). However, although the importance of SMEs in economic growth is becoming more widely recognized and there is a massive establishment of SMEs, the rate of failure is also alarmingly high (Islam, Wahab, & Latiff, 2022).

Despite the contributions of the SMEs, the sector has been affected by existing performance challenges, as reported in various contexts (Huynh, 2022; Ringo, Kazungu, & Tegambwage, 2024; Setyaningsih, Widjojo, & Kelle, 2024). The SMEs are still grappling with a number of challenges that slow down their contributions toward attaining the sustainable development goals (SDGs) (Mutisya, 2023). Most SMEs operating in the emerging economies are still informal, limiting their long-term sustainability and meaningful contributions toward achieving SDGs (Mugano & Dorasamy, 2024). Given the performance challenges faced by SMEs, particularly in developing countries, scholarly literature widely acknowledges the significance of business model innovation in these enterprises (Dung & Dung, 2024; Islam *et al.*, 2022; Salmerón, Valle, & Molina-Castillo, 2025). Although business model innovation holds promise for establishing competitive advantages and improving firm performance, many SMEs face significant challenges in realizing expected benefits during the innovation process (Arandia Arzabe, Bengtsson, & Olivares Ugarte, 2024; Latifi, Nikou, & Bouwman, 2021).

Business model innovation is an important construct in strategic management and entrepreneurship. Business model innovation has been highlighted in the literature as a key dynamic capability to respond better to external environmental changes and to create a competitive advantage (Andreini, Bettinelli, & Foss, 2021; Heider, Gerken, van Dinther, & Hülsbeck, 2021). However, business model innovation represents a high-risk, time, and resource-consuming process that can also lead to negative outcomes (Sabaruddin, MacBryde, & D'Ippolito, 2023). Existent literature posits that unlike larger companies, SMEs suffer from specific limitations that might increase the likelihood of these negative outcomes (Codini, Abbate, & Petruzzelli, 2023). For instance, when designing new business models, SMEs may lack managerial capabilities or feel more tension when managing the trade-offs between the old and the new business model (Ferrerías-Méndez, Olmos-Penuela, Salas-Vallina, & Alegre, 2021). Additionally, the implementation of the new business model is a challenge, because it requires access to skilled human resources and specialized knowledge that might not be available to all SMEs (Verhagen, de Reuver, & Bouwman, 2021).

Business model innovation is an important construct in strategic management and entrepreneurship (Lanzolla & Markides, 2021; Andreini, Bettinelli, Foss, & Mismetti, 2022; Snihur & Eisenhardt, 2022). However, the current research landscape still lacks empirical efforts aimed at investigating the underexplored link between business model innovation and firm performance (Prokop, Zapletal, Stejskal, Giglio, & Appolloni, 2024). The continued theoretical advancement and practical application of business model innovation is threatened by the lack of conceptual and empirical models that comprehensively integrate critical contingency factors and boundary conditions that characterize the relationship between business model innovation and firm

performance (White, Markin, Marshall, & Gupta, 2022). Sustainable business model innovation has recently drawn great interest among academia and in practice (Schneckenberg, Matzler, & Spieth, 2022). Therefore, there is a need for a framework that quantitatively evaluates business models to inform the transition based on their relative environmental performance in creating and delivering value (Mukoro, Sharmina, & Gallego-Schmid, 2022). However, despite the surge in related academic and non-academic literature, a validated measurement scale for sustainable business model innovation is not yet available (Bashir, Alfalih, & Pradhan, 2022).

Statement of the Problem

Despite their significant role in the economic development of many nations, the SMEs are still grappling with a number of challenges that slow down their contributions toward attaining the SDGs (Mutisya, 2023). Although the importance of SMEs in economic growth is becoming more widely recognized and there is a massive establishment of SMEs, the rate of failure is also alarmingly high (Islam *et al.*, 2022). Most SMEs operating in the emerging economies are still informal, limiting their long-term sustainability and meaningful contributions toward achieving SDGs (Mugano & Dorasamy, 2024).

In spite of the contributions of the SMEs, the sector has been affected by existing performance challenges, as reported in various contexts (Huynh, 2022; Ringo, Kazungu, & Tegambwage, 2024; Setyaningsih *et al.*, 2024). Given the performance challenges faced by SMEs, particularly in developing countries, scholarly literature widely acknowledges the significance of business model innovation in these enterprises (Dung & Dung, 2024; Islam *et al.*, 2022). However, though research has shown that business model innovation holds promise for establishing competitive advantage and improving firm performance, many SMEs face significant challenges in realizing expected outcomes when innovating their business model (Arandia Arzabe *et al.*, 2024; Salmerón *et al.*, 2025).

Despite the extensive literature on business model innovation and firm performance, the current research landscape still lacks empirical efforts aimed at investigating the underexplored link between business model innovation and firm performance (Prokop *et al.*, 2024). While business model innovation is widely acknowledged for its potential to enhance firm performance, the existing empirical literature presents mixed results and inconclusive findings (Jean, Kim, Sinkovics, & Cavusgil, 2024; Latifi *et al.*, 2021). Some studies showed a positive significant relationship, whereas others found no significant relationship or even a negative relationship, highlighting the complex relationship between business model innovation and firm performance outcomes (Menter, Göcke, Zeeb, & Clauss, 2023). Therefore, the general business problem is that while business model innovation holds promise for improving firm performance, many SMEs struggle to realize the benefits during the innovation process which can hinder their ability to achieve the desired performance improvements.

Research Objectives

The general objective of this research was to examine the influence of business model innovation on performance of small and medium-sized enterprises in Mombasa County, Kenya. The specific objectives were;

- To determine the influence of value capture innovation on performance of small and medium-sized enterprises in Mombasa County, Kenya.
- To assess the influence of value proposition innovation on performance of small and medium-sized enterprises in Mombasa County, Kenya.

In this research, two null hypotheses were tested.

- H₀₁: Value capture innovation has no significant influence on performance of small and medium-sized enterprises in Mombasa County, Kenya.
- H₀₂: Value proposition innovation has no significant influence on performance of small and medium-

sized enterprises in Mombasa County, Kenya.

LITERATURE REVIEW

Theoretical Framework

The theoretical framework was guided by the resource-based theory, dynamic capability theory and firm growth theory.

Resource-Based Theory

The resource-based theory (RBT) of the firm (Barney, 1991; Wernerfelt, 1984) provides a framework for understanding how a firm's unique resources and capabilities can be a source of sustained competitive advantage (Alkaraan *et al.*, 2024). The RBT of the firm (Penrose, 1959; Wernerfelt, 1995) suggests that a firm's distinctive resources, which are valuable, rare, inimitable, and non-substitutable (VRIN) can encompass tangible assets, intangible assets, human capital, organizational capabilities, and other strategic assets that are unique to a firm (Barney, Ketchen Jr, & Wright, 2021). The RBT of the firm (Barney, 1991; Peteraf & Barney, 2003) emphasizes that a firm's VRIN resources can enable the firm to achieve superior performance and outperform competitors (Tandika, 2024). Therefore, the RBT of the firm provides a relevant underpinning theoretical framework to explain the influence of business model innovation on performance of small and medium-sized enterprises in Mombasa County, Kenya.

The RBT of the firm is an influential approach in strategic management. The RBT explores heterogeneity in performance across firms through the lens of VRIN resource advantages, and the organization for exploiting their potential (Bojesson & Fundin, 2021; Bosman, 2024). The RBT provides an essential framework to explain and predict the fundamentals of a company's performance and competitive advantage (Barney *et al.*, 2021; Chaudhuri, Subramanian, & Dora, 2022; Datche, Kising'u, & Kalimbo, 2023). Therefore, the RBT of the firm provides a relevant underpinning theoretical framework to explain the influence of value capture innovation and value proposition innovation on performance of small and medium-sized enterprises in Mombasa County, Kenya.

Dynamic Capability Theory

The dynamic capability (DC) theory (Barney, 1991; Barney, 2001; Peteraf, 1993; Teece, Pisano, & Shuen, 1997a) is a strategic management framework that focuses on a firm's ability to adapt, innovate, and reconfigure its resources and capabilities in response to changing external environments and evolving market conditions (Bağış, Altınay, & Saygılı, 2024; Bosman, 2024). The DC theory (Barney, 2018; Peteraf & Barney, 2003; Teece, Pisano, & Shuen, 1997b) posits that a firm's sustainable competitive advantage is derived not only from possessing valuable and rare resources but also from its dynamic capabilities, enabling it to integrate, build, and reconfigure resources to meet the demands of a dynamic market (Alkaraan *et al.*, 2024; Alves, & Carvalho, 2022). Therefore, the DC theory provides a relevant theoretical framework to examine the influence of business model innovation on performance of small and medium-sized enterprises in Mombasa County, Kenya.

The DC theory specifically focuses on how organizations can develop and use their capabilities in a highly dynamic and uncertain environment (Buzzao & Rizzi, 2023; Chen, Michel, & Lin, 2021). The DC theory is suitable for measuring business performance in a dynamic environment, as it focuses on a company's ability to change and adapt to the changing environment (Baía & Ferreira, 2024; Teece, 2023). The DC theory concerns the development of strategies for senior managers of successful companies to adapt to radical discontinuous change, while maintaining minimum capability standards to ensure competitive survival (Yoshikuni, Galvão, & Albertin, 2022). Therefore, the DC theory provides a relevant theoretical framework to explain the influence of value capture innovation and value proposition innovation on performance of small and medium-sized enterprises in Mombasa County, Kenya.

Firm Growth Theory

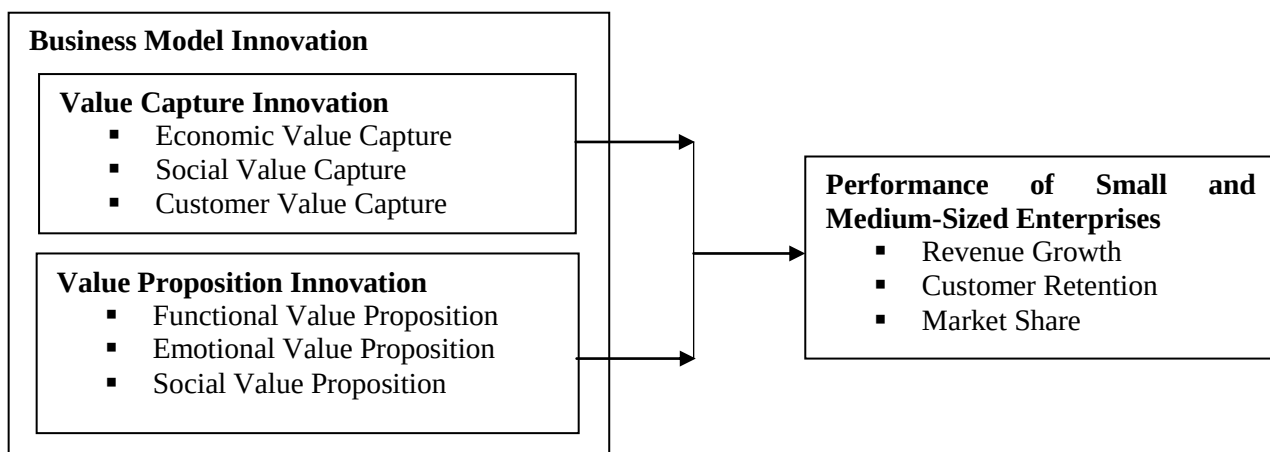
The theory of the growth of the firm (Lee, 2010; Penrose, 1959) is widely recognized in strategic management (Han & Tong, 2024). The firm growth theory assumes that multifunctional resources enable firms to restructure resources in novel ways to create growth (Ye *et al.*, 2023). The theory of the growth of the firm (Helfat & Eisenhardt, 2004; Penrose, 2009) is one the most commonly used basic theories to explain firm growth and firm performance (Buckley & de la Torre, 2024). Therefore, the theory of the growth of the firm provides a relevant theoretical framework to explain to explain the influence of business model innovation on performance of small and medium-sized enterprises in Mombasa County, Kenya.

The theory of the growth of the firm proposes that the relationship between multifunctional resources and firm growth is more closely aligned with firm growth theory (Najafabadi, Sajadi, & Davari, 2022). The theory of the growth of the firm suggests that the firm represents a collection of productive resources, the disposal of which between different uses and over time is determined by administrative decision (von Nitzsch, Bird, & Saiedi, 2024). The theory of the growth of the firm posits that the effective exploitation of unused resources is central to achieving firm growth and how firm growth depends on entrepreneurs' supply of entrepreneurial services to their firms (Ye *et al.*, 2023). The theory of the growth of the firm posits that the firm resources can be will be utilized, redeployed or recombined in different ways to create value (Han & Tong, 2024).

The theory of the growth of the firm postulates that entrepreneurs have to choose between different alternatives of how to allocate resources to achieve growth under uncertainty (von Nitzsch *et al.*, 2024). The theory of the growth of the firm suggests that entrepreneurial judgment plays an important role in firm growth (Najafabadi & Sajadi, 2023). Therefore, the theory of the growth of the firm provides a relevant theoretical framework to explain to explain the influence of value capture innovation and value proposition innovation on performance of small and medium-sized enterprises in Mombasa County, Kenya.

Conceptual Framework

The conceptual framework demonstrates that the performance of small and medium-sized enterprises is conceptualized as the dependent variable. However, value capture innovation and value proposition innovation are conceptualized as the independent variables. Figure 1 presents the conceptual framework.



Independent Variables

Dependent Variable

Figure 1: Conceptual Framework

Review of Literature on Variables

Value Capture Innovation

Value capture innovation is the process of creating and implementing a business model or strategy to convert the value an organization creates into profits for its shareholders (Schimmenti, Galati, Varisco, Mirabella, & Borsellino, 2025). It is the outcome of a bargaining process, through which several partners divide among themselves the value created (Ross, 2024). Value capture innovation involves innovating how the company makes money from its innovations, going beyond just product development to include the financial mechanisms that allow it to secure returns, command higher prices, or gain market share (Di Stefano & Fosfuri, 2025). The model capturing value rotates in five basic options: internal development, partnership, and alliance, sell out, license-out, and, finally, withdrawal (Lee & Zhong, 2021). Therefore, while value creation is about the impact of an innovation, value capture is specifically about securing the financial returns from it.

Value capture innovation involve shifting from selling products to selling services or adopting new pricing strategies, as seen with subscription-based models (Ross, 2024). Value-capture mechanisms build on the provider's role in the value-creation network and ensure that profits are fairly distributed throughout the value-creation network (Santos, 2024). The subcontracts related to value capture include, new revenue opportunities, increased offer integrated services like contract maintenance (Lavie, Lunnan, & Truong, 2022). The value capture approach depends on the type of technology and the access to complementary assets (Göttfried, 2025).

Value Proposition Innovation

Value proposition innovation is the promise of value to be delivered. It refers to the company's bundle of products and services that are of value to customers and the way in which they are offered (Salfore *et al.*, 2023). It denotes to a clear, simple statement of the benefits, both tangible and intangible, that the company will provide, along with the approximate price it will charge each customer segment for those benefits (Othman, Halim, Hasbollah, & Abd Aziz, 2024). It can be defined as products and services that an enterprise or entrepreneur offers and for which customers are willing to pay or buy (Ociepa-Kubicka, 2024). Value proposition is an element that is essential because it involves what a company makes and for whom it makes it (Azura & Ghina, 2024). The value proposition summarizes how a firm creates value for its customers, and it is a concept known from both marketing and business models (Rodríguez & Calvario, 2024).

The value proposition provides a useful construct and starting point for approaching digital transformation as a focus on value propositions appears to provide a strategic path to transformation (Spinuzzi & Guile, 2024). Continuously satisfying customer demands in terms of quality and delivery requirements is very important in sustaining a business venture (Brunner, Bachmann, Tripathi, Pöchtrager, & Jodlbauer, 2024). The value proposition emphasizes the importance of value creation, places customers at the center of change, and relies on the core of strategy, thereby serving as a bridge between customers and a firm's strategic considerations (Azura & Ghina, 2024). Businesses and firms rely strongly on their capacity to articulate and innovate their value proposition (Rodríguez & Calvario, 2024). Therefore, a value proposition is a strategic statement that defines the unique benefits a company offers to customers and why they should choose its product or service over competitors.

Firm Performance

Firm performance has emerged as a key concept in strategic management research. It is a complex, multidimensional construct with no single, universally accepted definition or measure (Gutiérrez-Broncano, Linuesa-Langreo, Rubio-Andrés, & Sastre-Castillo, 2024). It represents a measure of how well or poorly an entity is putting its resources into use (Benvolio & Ironkwe, 2022). Firm performance is a measure of how an organization to efficiently exploits available resources to make achievements consistent with the objectives of the firm (Gruber, Dencker, & Nikiforou, 2024). It refers to the efficient coordination and enhancement of work activities and outcomes within a company (Alzghoul, Khaddam, Abousweilem, Irtaimeh, & Alshaar,

2024). Firm performance is the set of financial and nonfinancial indicators which provide information on the degree of achievement of set goals and objectives (Úbeda-García, Claver-Cortés, Marco-Lajara, & Zaragoza-Sáez, 2021). It refers to the measure of how an organization achieves better results than its competitors (Liu, 2024; Liu, Gao, Tang, & Cheng, 2024).

Firm performance is frequently used as a dependent variable (Gutiérrez-Broncano *et al.*, 2024; Nzeki, Datche, Kising'u, & Mwirigi, 2024). However, the question of how to measure firm performance is the subject of ongoing discussions (Oudgou, 2021). Firm performance is a multidimensional construct that comprises of financial and non-financial measures (Alzghoul *et al.*, 2024). The financial performance indicators are expressed in monetary terms (Titilayo *et al.*, 2022). However, the non-financial performance indicators are not expressed in monetary terms and are characterized by greater subjectivity in regards to financial measures (Benvolio & Ironkwe, 2022).

The financial performance measures are generally more easily measurable, as they are based on objective data (Benvolio & Ironkwe, 2022; Cupertino, Vitale, & Taticchi, 2023). Nevertheless, the non-financial performance measures can be more difficult to measure as they are often subjective, based on perceptions, attitudes, and opinions (Maletič, Gomišček, & Maletič, 2021). The financial performance measures only reveal past performance of an organization which may not reflect the present or future state of a firm (Alzghoul *et al.*, 2024). Nonetheless, the non-financial performance measures are superior predictors of the future economic performance of the firm and are more closely tied to the corporate and business-level strategy of the firms (Mahohoma, 2024). Therefore, the non-financial performance measures act as a missing link between the value-driving activities and economic performance of the firm (Zarzycka & Krasodomska, 2022).

Empirical Review

Value Capture Innovation and Firm Performance

Salfore *et al.* (2023) examined the influence of value capture innovation on performance of manufacturing SMEs in Addis Ababa, Ethiopia. The results indicated that value capture innovation had a positive and significant relationship with the performance of manufacturing SMEs. The findings indicated that value capture innovation had a positive and significant influence on the performance of manufacturing SMEs.

Khaddam *et al.* (2021) examined the influence of value capture innovation on performance of a leading dairy company in Jordan. The results indicated that value capture innovation had a positive and significant relationship with firm performance. The findings indicated that value capture innovation had a positive and significant influence on firm performance.

Kalu and Onuoha (2023) examined the relationship between value capture innovation and competitive advantage of manufacturing firms in Rivers State, Nigeria. The results revealed that value capture innovation had a positive and significant relationship with competitive advantage of manufacturing firms. The findings indicated that business model innovation in terms of value capture innovation had a positive and significant influence on competitive advantage of manufacturing firms.

Åström, Reim and Parida (2022) investigated the role of value capture for artificial Intelligence (AI) business model innovation. The findings were consolidated into a process framework that explicitly illustrates the key activities that companies need to perform concerning value creation and value capture for AI business model innovation and commercialization. The framework explained that AI providers need to follow three phases—namely, identifying prerequisites for AI value creation, matching value capture mechanisms, and developing AI business model offer. They also found that AI providers need to test and develop multiple AI business models and operate them simultaneously to ensure commercial success.

Grieco and Iasevoli (2022) investigated paths and patterns of value capture in sharing economy. The results

from the first step of the research showed that four main typologies of innovation emerge in the analyzed platforms. Furthermore, the results revealed that the three main patterns (network, monetization, lock-in) and the possible paths a platform can undergo when innovate its value capture mechanisms.

Value Proposition Innovation and Firm Performance

Salfore *et al.* (2023) examined the influence of value proposition innovation on performance of manufacturing small and medium-sized enterprises in Addis Ababa, Ethiopia. The results indicated that value proposition innovation had a significant positive relationship with performance of manufacturing small and medium-sized enterprises. The findings indicated that value proposition innovation had a significant positive effect on performance of manufacturing small and medium-sized enterprises.

Ogbunuju *et al.* (2025) examined the influence of value proposition on economic sustainability of small and medium-scale enterprises in Enugu State, Nigeria. The findings indicated that value proposition had a significant positive effect on the customer satisfaction of small and medium-scale enterprises. The results indicated that value proposition had a significant positive effect on the economic sustainability of small and medium-scale enterprises.

Molina-Castillo *et al.* (2025) examined the influence of value proposition on performance of small and medium-sized enterprises in Europe. The results indicated that value proposition had a significant positive relationship with performance of small and medium-sized enterprises. The findings indicated that value proposition had a significant positive effect on performance of small and medium-sized enterprises.

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Mayanja, Ntayi, Munene, Kagaari and Waswa (2021) examined the mediating effect of value proposition on the relationship between entrepreneurial networking and opportunity exploitation among small and medium-sized enterprises (SMEs) in Uganda. The findings indicated that value proposition partially mediates the relationship between entrepreneurial networking and opportunity exploitation. The results showed that value proposition had a positive and significant influence on entrepreneurial networking and opportunity exploitation.

Faloye and Owioye (2021) examined the effect of value proposition innovation on performance of micro and small enterprises (MSEs) in Ondo State, Nigeria. The results revealed that value proposition innovation had a positive and significant influence on performance of micro and small enterprises. The findings showed that entrepreneurial orientation mediates the relationship between value proposition innovation and performance of micro and small enterprises.

METHODOLOGY

Research Philosophy

The research was guided by the positivist research philosophy which regards the world as made up of observable and measurable facts and assumes that there is an objective reality out there. The positivist research philosophy regards the world as made up of observable and measurable facts and assumes that there

is an objective reality out there (Ma & Xie, 2023; Saunders, Lewis, & Thornhill, 2023).

Research Design

The research employed the correlational, cross-sectional survey research design to test non-causal relationships among variables without controlling any of the variables. The design was appropriate for collecting data once from many individuals at a single point in time to test statistical relationships between two or more variables without the researcher controlling or manipulating any of them (Haslam, McGarty, Cruwys, & Steffens, 2024; Leavy, 2022).

Target Population

The target population consisted of the 2890 small and medium-sized enterprises in Mombasa County, Kenya. The target population was as per the County Government of Mombasa - Licensing Office's database as at 31st December 2024. The unit of observation consisted of the individual owner-manager, while the unit of analysis consisted of the small and medium-sized enterprise. Table 1 presents the target population.

Table 1: Sample Size

Strata		Target Population	Percentage
Trade Enterprises	General Trade (Wholesale and Retail)	494	17.0%
	Clothing and Textile Outlets (Clothes, Boutique, Footwear)	390	13.5%
	Real Estate, Building, and Construction	368	12.7%
	Agriculture, and Commodities Outlets	288	10.0%
Service Enterprises	Learning Institutions (Schools, Colleges, and Universities)	230	8.7%
	Healthcare Institutions (Hospitals, Clinics, and Pharmacies)	250	8.0%
	Entertainment Enterprises (Hotels and Restaurants)	275	11.8%
	Logistics, Transport, Petrol Stations, and Auto Repairs	340	9.5%
Manufacturing Enterprises	Manufacturing Enterprises	85	2.9%
Other Enterprises	Other Enterprises	170	5.9%
Total		2890	100.0%

Source: County Government of Mombasa - Licensing Office, CGM, 2024)

Sampling Frame

A sampling frame is the complete and correct list of population constituency of a given population (Thomassen, le Cessie, van Houwelingen, & Steyerberg, 2024). The sampling frame consisted of the list of the 2890 small and medium-sized enterprises in Mombasa County, Kenya. The sampling frame was as per the Small and medium-sized enterprises Advisory Committee (SCAC, 2024)'s database as at 31st December 2024.

Sample Size

The Yamane (1967) formula was used to calculate sample size at 95% confidence level and 5% significance level to ensure that the sample size was truly reflective of the target population.

$$n = \frac{N}{1+N\epsilon^2}$$

Where:

n = Sample Size;

N = Target Population;

e = Margin of Error

For a target population of 2890 small and medium-sized enterprises in Mombasa County, Kenya, the minimum recommended sample size for this study was determined as:

$$n = \frac{2890}{1 + 2890(0.05)^2} = 351$$

Therefore, the sample size consisted of 351 small and medium-sized enterprises in Mombasa County, Kenya in Mombasa County, Kenya. Table 2 presents the sample size.

Table 2: Sample Size

Strata		Target Population	Sample Size
Trade	General Trade (Wholesale and Retail)	494	60
	Clothing and Textile Outlets (Clothes, Boutique, Footwear)	390	47
	Real Estate, Building, and Construction	368	45
	Agriculture, and Commodities Outlets	288	35
Service	Learning Institutions (Schools, Colleges, and Universities)	230	28
	Healthcare Institutions (Hospitals, Clinics, and Pharmacies)	250	30
	Entertainment Enterprises (Hotels and Restaurants)	275	33
	Logistics, Transport, Petrol Stations, and Auto Repairs	340	41
Manufacturing	Manufacturing Enterprises	85	10
Others	Others	170	21
Total		2890	351

Sampling Techniques

The proportionate stratified random sampling technique was utilized to select a sample size of 351 small and medium-sized enterprises a target population of 2890 small and medium-sized enterprises in Mombasa County, Kenya. The choice of the proportionate stratified random sampling technique was justified by the heterogeneous target population. The proportionate stratified random sampling is a probability sampling technique in which each stratum is given equal chance to be selected randomly in to the sample (Hiebl, 2023; Leavy, 2022).

Data Collection Methods

Primary data was collected using a self-administered structured survey questionnaire. The data collection method was appropriate. The choice of the self-administered structured survey questionnaire was justified by its ability to collect a large amount of information in a reasonably quick span of time (Bell, Bryman, & Harley, 2022; Dubey & Kothari, 2022).

Data Collection Procedures

A cross-sectional survey-based approach was employed for the collection of primary data. The choice of the cross-sectional survey-based approach was justified by its ability to permit the fast collection of primary data from many different individuals at a single point in time. The cross-sectional survey-based approach facilitates the collection of data from many different individuals at a single point in time (Bujang, Omar, Foo, & Hon, 2024; Leavy, 2022). With the help of 3 research assistants, the researcher utilized the drop and pick method to hand deliver the survey questionnaire. The survey questionnaire was hand delivered to the random sample of 351 small and medium-sized enterprises in Mombasa County, Kenya. A continuous follow up on responses was made by the researcher and research assistants.

Pilot Study

A pilot study was conducted to test the validity and reliability of the constructed survey questionnaire. The pilot study was performed with pilot trial sample size of 35 small and medium-sized enterprises in Mombasa

County, Kenya. The pilot trial sample size consisted of 10% of the study's sample size. A common rule of thumb for pilot study is that a pilot study should be conducted with a minimum size of at least 10%-20% of the full-scale survey sample size or at least 30-50 respondents (Leong, Hew, Ooi, Tan, & Koohang, 2024). However, the participants in the pilot study were not be part of the main survey.

Data Processing and Analysis

The collected data was checked for accuracy, completeness and consistency. The data was coded, edited, and entered into the Statistical Package for Social Sciences (SPSS) version 26 to create a data sheet that was used for analysis. The descriptive statistics and inferential statistics were used for data analysis. The descriptive statistics were used to compute, summarize the data in respect to each of the study variables and describe the sample's characteristics. The Pearson's product moment correlation analysis was performed to confirm or deny the relationship between the study variables. The Pearson's product moment correlation analysis is performed to determine the nature and the strength of the linear relationship between the variables (Haslam *et al.*, 2024). A multiple linear analysis was performed with performance of small and medium-sized enterprises as the dependent variable and value capture innovation and value proposition innovation as the predictor variables. The standard multiple linear regression analysis provides a means of objectively assessing the magnitude and direction of each predictor's relationship to its outcome variable).

Model Specification

The multiple linear regressions model was specified as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon \quad \dots\dots\dots \text{Model 1}$$

Where:

Y = Performance of Small and Medium-Sized Enterprises

β_0 = Constant Term

$\beta_1 - \beta_2$ = Regression coefficients to be estimated

X_1 = Value Capture Innovation

X_2 = Value Proposition Innovation

ε = Stochastic Error Term

Hypotheses Testing

In this research, two null hypotheses were tested. The H_{01} and H_{02} were tested at 5% level of significance ($\alpha = 0.05$; $t = 1.960$) to statistically help draw acceptable and realistic inferences. Therefore, the decision rule was to reject the H_{0i} if the $P \leq 0.05$, and otherwise fail to reject the H_{0i} if the $P > 0.05$. Table 3 presents the hypotheses testing procedure.

Table 3: Hypotheses Testing

Hypotheses	Model	Hypotheses Testing	Decision Rule
H_{01} : Value capture innovation has no significant influence on performance of small and medium-sized enterprises in Mombasa County, Kenya.	$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$ Model 1	Standard Multiple regression analysis	$H_{01}: \beta_1 = 0$ $H_{11}: \beta_1 \neq 0$ If the $P \leq 0.05$, reject the H_{01} . If the $P > 0.05$, fail to reject the H_{01} .
H_{02} : Value proposition innovation has no significant influence on performance of small and medium-sized enterprises in Mombasa County, Kenya.			$H_{02}: \beta_2 = 0$ $H_{12}: \beta_2 \neq 0$ If the $P \leq 0.05$, reject the H_{02} . If the $P > 0.05$, fail to reject the H_{02} .

FINDINGS

Response Rate

Out of the 351 survey questionnaires distributed for the main survey, only 274 usable survey questionnaires were received. Therefore, there was a valid response rate of 78.1%, which was adequate for data processing and analysis. Table 4 presents the response rate results.

Table 4: Response Rate

Strata	Frequency	Percentage
Response	274	78.1%
Non-Response	77	21.9%
Total	351	100.0%

Correlation Results

The Pearson's product moment correlation analysis was performed to confirm or deny the relationships between the study variables. The correlation results indicated that value capture innovation had a strong positive and significant relationship with the performance ($r = 0.683$, $p \leq 0.05$) of small and medium-sized enterprises in Mombasa County, Kenya. The results showed that value proposition innovation had a strong positive and significant relationship with the performance ($r = 0.671$; $p \leq 0.05$) of small and medium-sized enterprises in Mombasa County, Kenya. Table 5 presents the correlation results.

Table 5: Correlation Results

Variable		X ₁	X ₂	Y
Value Capture Innovation (X ₁)	Pearson Correlation	1		
	Sig. (2-tailed)			
	n	274		
Value Proposition Innovation (X ₂)	Pearson Correlation	.517**	1	
	Sig. (2-tailed)	.000		
	n	274	274	
Performance of Small and Medium-Sized Enterprises (Y)	Pearson Correlation	.683**	.671**	1
	Sig. (2-tailed)	.000	.000	
	n	274	274	274

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

Multiple Regression Results

A standard multiple linear analysis was performed with the performance of small and medium-sized enterprises as the dependent variable and value capture innovation and value proposition innovation as the predictor variables.

Model Summary

From the model summary in table, it is clear that the value of coefficient of correlation (R) was 0.778, suggesting that there was a strong positive correlation between the business model innovation and the performance of small and medium-sized enterprises in Mombasa County, Kenya. The value of coefficient of determination (R^2) was 0.605, suggesting that the overall model as a whole (the model involving constant, value capture innovation and value proposition innovation) was able to significantly predict and explain approximately 60.5% of the variance in the performance of small and medium-sized enterprises in Mombasa County, Kenya. The value of the adjusted R^2 was 0.602, suggesting that the overall model as a whole (the model involving constant, value capture innovation and value proposition innovation) significantly predicted and explained 60.2% of the variance in the performance of small and medium-sized enterprises in Mombasa County, Kenya.

The value of the std. error of the estimate was 0.217, suggesting that there could be other factors not included

in the model in the current study that could predict and explain the remaining 39.8% of the variance in the performance of small and medium-sized enterprises in Mombasa County, Kenya. Therefore, there is in need for future research to discover the other business model innovation not included in the model in the current study that also predict the remaining variance in the performance of small and medium-sized enterprises in Mombasa County, Kenya. The value of the Durbin-Watson test was 2.026, falling within the optimum range of 1.5 to 2.5, suggesting that there was no severe autocorrelation detected in the in the residual values in the datasets. Generally, Durbin-Watson statistics falling within the optimum range of 1.5 to 2.5 indicates that there is no severe autocorrelation detected in the in the residual values in the datasets (Bolin, 2022; Hair & Alamer, 2022; Hair & Sarstedt, 2021). Table 6 presents the model summary results.

Table 6: Model Summary^b Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.778 ^a	.605	.602	.217	2.026

a. Predictors: (Constant), Value Proposition Innovation (X₂), Value Capture Innovation (X₁)

b. Dependent Variable: Performance of Small and Medium-Sized Enterprises (Y)

Analysis of Variance

From the ANOVA table, the overall model as a whole (the model involving constant, value capture innovation and value proposition innovation), achieved a high degree of fit, as reflected by $R^2 = 0.605$, adj. $R^2 = 0.602$, $F(2, 271) = 207.167$, $p \leq 0.05$. The null hypothesis was that the linear combination of predictor variables (value capture innovation and value proposition innovation) was not able to significantly predict the performance of small and medium-sized enterprises in Mombasa County, Kenya. However, the alternative hypothesis was that the linear combination of predictor variables (value capture innovation and value proposition innovation) was able to significantly predict the performance of small and medium-sized enterprises in Mombasa County, Kenya. The standard multiple linear regression results showed that the linear combination of predictor variables (value capture innovation and value proposition innovation) significantly predicted the performance of small and medium-sized enterprises in Mombasa County, Kenya. The null hypothesis was rejected in favor of the alternative hypothesis. Therefore, the decision was that the linear combination of predictor variables (value capture innovation and value proposition innovation) significantly predict the performance of small and medium-sized enterprises in Mombasa County, Kenya. Table 7 presents the ANOVA results.

Table 7: ANOVA^a Results

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	19.476	2	9.738	207.167	.000 ^b
Residual	12.739	271	.047		
Total	32.215	273			

a. Dependent Variable: Performance of Small and Medium-Sized Enterprises (Y)

b. Predictors: (Constant), Value Proposition Innovation (X₂), Value Capture Innovation (X₁)

Multiple Regression Coefficients

From the coefficients table, when the unstandardized regression coefficients (B) were substituted to the multiple regression model specified for the study, the final predictive equation was:

$$Y = 1.883 + 0.261X_1 + 0.269X_2$$

The final predictive equation suggested that holding all factors in to account constant (value capture innovation and value proposition innovation), constant at zero, the performance of small and medium-sized enterprises would be 1.883 in Mombasa County, Kenya. The final predictive equation suggested that with all other factors held constant, a unit increase in value capture innovation would lead to 0.261 unit increase in the performance of small and medium-sized enterprises in Mombasa County, Kenya. Moreover, the final

predictive equation suggested that with all other factors held constant, a unit increase in value proposition innovation would lead to 0.269 unit increase in the performance of small and medium-sized enterprises in Mombasa County, Kenya. Based on the magnitude of the unstandardized regression coefficients (B) of the independent variables, value proposition innovation was the best predictor of the variance in the performance of small and medium-sized enterprises in Mombasa County, Kenya.

The multiple regression results indicated that value capture innovation had a positive and significant influence on the performance of small and medium-sized enterprises ($\beta_1 = 0.458$; $t = 10.277$; $p \leq 0.05$) in Mombasa County, Kenya. The regression results indicated that value proposition innovation had a positive and significant influence on the performance of small and medium-sized enterprises ($\beta_2 = 0.434$; $t = 9.736$; $p \leq 0.05$) in Mombasa County, Kenya. Table 8 presents the multiple regressions coefficients results.

Table 8: Multiple Regression Coefficients^a Results

Model	Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1 (Constant)	1.883	.100		18.913	.000		
Value Capture Innovation (X ₁)	.261	.025	.458	10.277	.000	.837	1.195
Value Proposition Innovation (X ₂)	.269	.028	.434	9.736	.000	.898	1.114

a. Dependent Variable: Performance of Small and Medium-Sized Enterprises (Y)

Hypotheses Test Results

In this research, two null hypotheses were tested. The H₀₁ and H₀₂ were tested at 5% level of significance, $\alpha = 0.05$, $t = 1.960$, and 95% confidence level to statistically help draw acceptable and realistic inferences. Therefore, the decision rule was to reject the H_{0i} if the $P \leq 0.05$, and otherwise fail to reject the H_{0i} if the $P > 0.05$.

Hypothesis One Test Results

The H₀₁ predicted that value capture innovation has no significant influence on performance of small and medium-sized enterprises in Mombasa County, Kenya. The decision rule was to reject the H₀₁ if the $\beta_1 \neq 0$, $t \geq 1.960$, $P \leq 0.05$, and otherwise fail to reject the H₀₁ if the $\beta_1 = 0$, $t < 1.960$, $P > 0.05$. The regression results indicated that value capture innovation had a positive and significant influence on the performance of small and medium-sized enterprises ($\beta_1 = 0.458$; $t = 10.277$; $p \leq 0.05$) in Mombasa County, Kenya. Therefore, the decision was to reject the H₀₁, and then conclude that value capture innovation has a significant influence on performance of small and medium-sized enterprises in Mombasa County, Kenya.

Hypothesis Two Test Results

The H₀₂ predicted that value proposition innovation has no significant influence on performance of small and medium-sized enterprises in Mombasa County, Kenya. The decision rule was to reject the H₀₂ if the $\beta_2 \neq 0$, $t \geq 1.960$, $P \leq 0.05$, and otherwise fail to reject the H₀₂ if the $\beta_2 = 0$, $t < 1.960$, $P > 0.05$. The regression results indicated that value proposition innovation had a positive and significant influence on the performance of small and medium-sized enterprises ($\beta_2 = 0.434$; $t = 9.736$; $p \leq 0.05$) in Mombasa County, Kenya. Therefore, the decision was to reject the H₀₂, and then conclude that value proposition innovation has a significant influence on performance of small and medium-sized enterprises in Mombasa County, Kenya. Table 9 presents the hypotheses test results.

Table 9: Hypotheses Test Results

Hypothesis	β	t	Sig.	Decision
H ₀₁ : Value capture innovation has no significant influence on performance of small and medium-sized enterprises in Mombasa County, Kenya.	.458	10.277	.000	Reject the H ₀₁
H ₀₂ : Value proposition innovation has no significant influence on performance of small and medium-sized enterprises in Mombasa County, Kenya.	.434	9.736	.000	Reject the H ₀₂

Discussions

The purpose of this quantitative correlational research was to examine the influence of business model innovation on the performance of small and medium-sized enterprises in Mombasa County, Kenya. Specifically, the research sought to examine the influence of value capture innovation and value proposition innovation on the performance of small and medium-sized enterprises in Mombasa County, Kenya. The Pearson's product moment correlation analysis was performed to confirm or deny the relationship between the study variables. The correlation results indicated that the business model innovation had positive and significant relationship with performance of small and medium-sized enterprises in Mombasa County, Kenya. A standard multiple linear analysis was performed with performance of small and medium-sized enterprises as the dependent variable and value capture innovation and value proposition innovation as the predictor variables. The regression results showed that the business model innovation had positive and significant influence on the performance of small and medium-sized enterprises in Mombasa County, Kenya. The findings were consistent with the results of prior studies (Latifi *et al.*, 2021; Molina-Castillo *et al.*, 2025; Ogbunuju *et al.*, 2025; Salfore *et al.*, 2023; Salmerón *et al.*, 2025).

The first specific objective was to determine the influence of value capture innovation on the performance of small and medium-sized enterprises in Mombasa County, Kenya. The H₀₁ predicted that value capture innovation has no significant influence on performance of small and medium-sized enterprises in Mombasa County, Kenya. The Pearson's correlation results indicated that value capture innovation had a strong positive and significant relationship with the performance of small and medium-sized enterprises in Mombasa County, Kenya. The regression results showed that value capture innovation had a positive and significant influence on performance of small and medium-sized enterprises in Mombasa County, Kenya. Therefore, the decision was to reject the H₀₁, and then conclude that value capture innovation has a significant influence on performance of small and medium-sized enterprises in Mombasa County, Kenya. The findings were consistent with the results of previous studies (Kalu & Onuoha, 2023; Kafetzopoulos *et al.*, 2024; Khaddam *et al.*, 2021; Salfore *et al.*, 2023; White *et al.*, 2022).

The second specific objective was to assess the influence of value proposition innovation on performance of small and medium-sized enterprises in Mombasa County, Kenya. The H₀₂ predicted that value proposition innovation has no significant influence on performance of small and medium-sized enterprises in Mombasa County, Kenya. The Pearson's correlation results indicated that value proposition innovation had a strong positive and significant relationship with performance of small and medium-sized enterprises in Mombasa County, Kenya. The regression results showed that value proposition innovation had a positive and significant influence on performance of small and medium-sized enterprises in Mombasa County, Kenya. Therefore, the decision was to reject the H₀₂, and then conclude that value proposition innovation has a significant influence on performance of small and medium-sized enterprises in Mombasa County, Kenya. The results were consistent with the results of prior studies (Molina-Castillo *et al.*, 2025; Ogbunuju *et al.*, 2025; Salfore *et al.*, 2023).

CONCLUSIONS AND RECOMMENDATIONS

The purpose of this quantitative correlational research was to examine the influence of business model innovation on performance of small and medium-sized enterprises in Mombasa County, Kenya. The Pearson's product moment correlation analysis was performed to confirm or deny the relationship between the study variables. The correlation results indicated that the business model innovation had positive and significant relationship with performance of small and medium-sized enterprises in Mombasa County, Kenya. A standard multiple linear analysis was performed with performance of small and medium-sized enterprises as the dependent variable and value capture innovation and value proposition innovation as the predictor variables. The regression results showed that the business model innovation had positive and significant influence on the performance of small and medium-sized enterprises in Mombasa County, Kenya.

The first specific objective was to determine the influence of value capture innovation on the performance of small and medium-sized enterprises in Mombasa County, Kenya. The H_{01} predicted that value capture innovation has no significant influence on performance of small and medium-sized enterprises in Mombasa County, Kenya. The correlation results indicated that value capture innovation had a strong positive and significant relationship with the performance of small and medium-sized enterprises in Mombasa County, Kenya. The regression results showed that value capture innovation had a positive and significant influence on performance of small and medium-sized enterprises in Mombasa County, Kenya. Therefore, the decision was to reject the H_{01} , and then conclude that value capture innovation has a significant influence on performance of small and medium-sized enterprises in Mombasa County, Kenya.

The second specific objective was to assess the influence of value proposition innovation on performance of small and medium-sized enterprises in Mombasa County, Kenya. The H_{02} predicted that value proposition innovation has no significant influence on performance of small and medium-sized enterprises in Mombasa County, Kenya. The correlation results indicated that value proposition innovation had a strong positive and significant relationship with performance of small and medium-sized enterprises in Mombasa County, Kenya. The regression results showed that value proposition innovation had a positive and significant influence on performance of small and medium-sized enterprises in Mombasa County, Kenya. Therefore, the decision was to reject the H_{02} , and then conclude that value proposition innovation has a significant influence on performance of small and medium-sized enterprises in Mombasa County, Kenya.

The purpose of this quantitative correlational research was to examine the influence of business model innovation on performance of small and medium-sized enterprises in Mombasa County, Kenya. The Pearson's product moment correlation analysis was performed to confirm or deny the relationship between the study variables. The correlation results indicated that the business model innovation had positive and significant relationship with performance of small and medium-sized enterprises in Mombasa County, Kenya. A standard multiple linear analysis was performed with performance of small and medium-sized enterprises as the dependent variable and value capture innovation and value proposition innovation as the predictor variables. The regression results showed that the business model innovation had positive and significant influence on the performance of small and medium-sized enterprises in Mombasa County, Kenya. Therefore, the conclusion was that business model innovation significantly influence the performance of small and medium-sized enterprises in Mombasa County, Kenya.

The first specific objective was to determine the influence of value capture innovation on the performance of small and medium-sized enterprises in Mombasa County, Kenya. The H_{01} predicted that value capture innovation has no significant influence on performance of small and medium-sized enterprises in Mombasa County, Kenya. The Pearson's correlation results indicated that value capture innovation had a strong positive and significant relationship with the performance of small and medium-sized enterprises in Mombasa County, Kenya. The regression results showed that value capture innovation had a positive and

significant influence on performance of small and medium-sized enterprises in Mombasa County, Kenya. The H_01 was rejected, providing the empirical support for H_11 . Therefore, the first conclusion was that value capture innovation has a significant influence on performance of small and medium-sized enterprises in Mombasa County, Kenya.

The second specific objective was to assess the influence of value proposition innovation on performance of small and medium-sized enterprises in Mombasa County, Kenya. The H_02 predicted that value proposition innovation has no significant influence on performance of small and medium-sized enterprises in Mombasa County, Kenya. The Pearson's correlation results indicated that value proposition innovation had a strong positive and significant relationship with performance of small and medium-sized enterprises in Mombasa County, Kenya. The regression results showed that value proposition innovation had a positive and significant influence on performance of small and medium-sized enterprises in Mombasa County, Kenya. The H_02 was rejected, providing the empirical support for H_12 . Therefore, the second conclusion was that value proposition innovation has a significant influence on performance of small and medium-sized enterprises in Mombasa County, Kenya.

The research recommends that the managers and practitioners should consider a holistic reassessment and implementation of the business model innovation to foster the performance of small and medium-sized enterprises. First, the managers and practitioners should consider a holistic reassessment and implementation of value capture innovation to foster the performance of small and medium-sized enterprises. Second, the managers and practitioners should consider a holistic reassessment and implementation of value proposition innovation to foster the performance of small and medium-sized enterprises.

The research recommends that the policy makers should initiate policy review to motivate the managers and practitioners to consider a holistic reassessment and implementation of the business model innovation to foster the performance of small and medium-sized enterprises. First, the policy makers should initiate policy review to motivate the managers and practitioners to consider a holistic reassessment and implementation of value capture innovation to foster the performance of small and medium-sized enterprises. Second, the policy makers should initiate policy review to motivate the managers and practitioners to consider a holistic reassessment and implementation of value proposition innovation to foster the performance of small and medium-sized enterprises.

Limitations and Future Research

The research suggests interesting areas for further research. First, future research should examine the influence of other business model innovation on the performance of small and medium-sized enterprises in other regions or contexts. Second, future research should examine the influence of business model innovation on firm performance in other industries, sectors or contexts. Third, future research should examine the moderating influence of environmental turbulence on the relationship between business model innovation and firm performance in other sectors, regions or contexts.

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