

INNOVATION PRACTICES IN WOMEN OWNED SMALL AND MEDIUM BUSINESS ENTERPRISES IN BOMET COUNTY, KENYA

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ABSTRACT

Female entrepreneurs within the context of small and medium enterprises have been acknowledged for their significant contribution to household incomes, poverty reduction and growth of national economies around the world. Given the unique challenges encountered by women owned enterprises, some studies have concluded that there is need for contextualized data based promotion programmes geared towards addressing the needs and constraints faced by female owned enterprises. Numerous studies have also recommended that innovation is critical in enabling women owned small and medium enterprises adapt to the changes in the market place in line with consumer preferences, so as to achieve a competitive advantage and increase their financial performance. Other studies have however returned varied results indicating that even the best-formulated business model innovation may fail to result in enhanced organizational performance. This study therefore sought to examine innovation practices and performance of women owned enterprises in Bomet County, Kenya. The study was anchored on the Dynamic capacity theory, the Schumpeterian theory of innovation, and theory of innovative firm. The unit of analysis was female-owned enterprises in Bomet County, while the unit of observation identified using a combination

of stratified and purposive sampling was 316 female business owners. Data generated using a structured questionnaire was analyzed using descriptive statistics, while linear regression analysis was utilized in seeking to establish the nature of relationship between the study variables. This study with a response rate of 79.1%, established a positive relationship between process innovation, product innovation, business model innovation, management innovation and performance of women owned small and medium enterprises in Bomet County, Kenya. The position taken by this study therefore is that effective operationalization of the four innovations resulted in better performance using financial and non-financial measurement parameters. The study therefore recommends that there is need for women owned small and medium enterprises to adopt undertake stakeholder management to anchor the operationalization of innovation for continuous performance improvement based on the client preferences. There is also need for policy makers to put in place a more favorable legal framework to support and protect innovations. The expected study output is improved performance of female owned small and medium enterprises for social and economic development in the study locale.

Key words: Innovations practices, Performance, Women Owned Small and Medium Enterprises.

INTRODUCTION

Small and Medium Enterprises (SMEs) which make up for about ninety percent of businesses globally, have been acknowledged across the world as a key driving force behind sustainable development, due to their potential to transform communities by improving the social and economic wellbeing of the most vulnerable people at the grassroots level (Gatukui & Gatuse,

2014; United Nations, 2015; Bizri, 2017; Munjeji, 2017; Pradhan, Costa, Rybski, Lucht & Kropp, 2017). This is more so in less developed countries where successful small and medium businesses are the primary engines of income growth and poverty reduction through their job creation phenomenon, accounting for about fifty percent of employment globally (Mwasiaji, Kombo & Gravenir, 2022; Neck & Corbett, 2018; Rahdari, Sepasi & Moradi, 2016). SMEs are also important because they allow entrepreneurs to bring creativity into the marketplace, and creating firms with the potential to hire millions of people while simultaneously bringing new products to the market place (Mwasiaji, Mambo, Mse & Okumu, 2021; Uduma, Wali & Wright, 2015). Entrepreneurs including those operating within the SME sector mobilize their own and borrowed idle funds, which leads to capital formation, resulting in creation of wealth that is very essential for national and global economic development (Amran & Mwasiaji, 2019; Gatukui & Gatusa, 2014). This is even more pronounced in female owned enterprises due to their significant contribution to household incomes, poverty reduction, growth of local and national economies (Barbier & Burgess, 2017; Bizri, 2017; Mikušová, 2017; Elegwa & Romanus, 2019; Amran & Mwasiaji, 2019). Despite this, many female owned SMEs in many countries around the world continue to face numerous challenges on their path towards achieving the entrepreneurs' desired level of organizational performance (Mwasiaji, 2020; Amran & Mwasiaji, 2019; Ayyagari, Demirgüç-Kunt & Maksimovic, 2012). Within this context, organizational performance is not only used to refer to enhanced financial results over the long run, but also related non-financial metrics such as increased market share, process improvement, learning and growth, with the justification that an organization's success is not solely based on the entrepreneur's ability to manage money (Kiraka, 2013; Anwar, 2018; Azeem, Ahmed, Haider & Sajjad, 2021).

Considering the unique challenges that female owned enterprises encounter, some studies have recommended that SMEs should embrace innovation as a strategy towards adapting to changes in the market place in line with consumer tastes and service preferences, resulting in increased financial performance (Azeem, Ahmed, Haider & Sajjad, 2021; Amran & Mwasiaji, 2019; Anwar, 2018; Hauser, Tellis & Griffin, 2015; Martin & Namusonge, 2014). According to Dharmadasa (2019), innovation entails putting new concepts into practice to produce tangible and unique changes in the relevant domain, while Azeem, Ahmed, Haider & Sajjad (2021) describes process innovation as the adoption of a new production process or a considerably better delivery mechanism. Habidin, Khaidir, Shazali, Ali and Jamaludin (2015) distinguished forms of process innovation, including service innovation which describes the process of making significant modifications that have a visible impact on client demand and engagement. Incremental process innovation is any modification or improvement to an organization's internal processes that does not significantly alter. Radical process innovation, according to Kim, Kumar and Kumar (2012), requires several layers of change, regardless of whether the innovations or adjustments are industry-related. This implies that effective innovation in female owned SMEs sector may require imaginative approaches to understand and influence future circumstances, such as adoption of new technology and knowledge management relating to products, thus enabling businesses to grow (Martin & Namusonge, 2014; Kiraka, 2013). In the current study, innovation practices were operationalized to mean the reengineering and implementation of an enhanced process, product, management, business model and an

assessment of their influence on the performance of women owned small and medium enterprises in Bomet County, Kenya.

Problem Statement

Women owned enterprises within the SME sector have been reported to have the potential to make a significant contribution towards transforming communities, thus improving the social and economic wellbeing of the most vulnerable people around the world (Amran & Mwasiagi, 2019). Many female owned small and medium enterprises around the world however continue to face challenges in achieving the desired level of performance, despite having implemented various measures for the purpose of appropriate market positioning in order to gain competitiveness (Mwasiagi, 2020; Amran & Mwasiagi, 2019). Numerous studies have therefore recommended that there is need for data based promotion programmes geared towards addressing the needs and constraints faced by female owned enterprises especially those operating within the SME sector (Gatukui & Gatuse, 2014; Bizri, 2017; Munjeyi, 2017; Mwasiagi, Kombo & Gravenir, 2022). Given the unique market challenges and at the same time the importance of women owned enterprises, some studies have concluded that innovation is critical in enabling firms including those in the small and medium enterprise sector to adapt to changes in the market place in line with consumer tastes and service preferences, so as to achieve a competitive advantage and increase their financial performance (Azeem, Ahmed, Haider & Sajjad, 2021; Amran & Mwasiagi, 2019; Anwar, 2018; Young & Seong, 2016; Whittaker, Fath & Fiedler, 2016; Abraham, Shao, William & Solomon, 2016; Uduma, Wali & Wright, 2015; Hauser, Tellis & Griffin, 2015; Martin & Namusonge, 2014). Other studies while seeking to establish a link between various forms of innovations and firm performance, have returned varied results. For instance, Knab and Rohrbeck (2014) study reported that if not managed appropriately, even the best-formulated business model innovation may fail to result in enhanced organizational performance, while Christensen, Bartman, and Van Bever's (2016) study indicated that more than 60% of efforts failed to result in the expected performance gain. In the same vein, Latifi and Bouwman (2017) study reported that not all Business Model Innovation deliver the expected outcomes. In Kenya, most of the studies conducted have methodological or contextual gaps (Amran & Mwasiagi, 2019; Elegwa & Romanus, 2019; Muli, 2015; Martin & Namusonge, 2014; Kiraka, 2013) in addition to lack of empirical unanimity on the influence of innovations on the performance of female owned small and medium enterprises, with specific reference to Bomet County, hence the need for the current study.

REVIEW OF RELEVANT LITERATURE

Theoretical Foundation

This study considered relevant theories in the context of innovation, entrepreneurship and performance of business enterprises. Schumpeter's (1934) Theory of Innovation is one such proposition which proposes that businesses can generate prospect for new returns with their innovations to fill the gaps in the market place. Schumpeter (1934) theory postulates that

creative destruction occurs when the introduction of novel commodities and/or services causes a redistribution of resources away from incumbent firms and into upstart ones, thereby generating wealth. Therefore, Schumpeter considers innovation to be the unique tool of the entrepreneur, the means by which company owners seize the opportunities presented by shifts in the marketplace. Therefore, entrepreneurs are the primary drivers of creative destruction, and as such, they must actively seek out new ideas, identify the conditions that are favorable to innovation, and understand the rules by which to play the innovation game Schumpeter (1934). This Schumpeterian growth proposition therefore implies that discoveries made by for-profit businesses for instance are what ultimately lead to technological progress. Therefore, the purpose of every innovation is to give the inventor a leg up on the competition in the marketplace, even though each successive innovation inevitably makes the one before it outdated (Olson, Walker & Ruekert 2015). The relevance of this Schumpeter's (1934) proposition to the current study is its linkage to innovation and new product development since it addresses crucial questions about how female owned small and medium enterprises can take advantage of innovation practices to gain sustainable competitive advantage in the ever changing market place (Sweezy, 1943).

Another proposition that was found useful for this study is Teece and Pisano (1994) Dynamic Capability theory which proposes that business enterprises achieve and keep competitiveness by adapting their internal processes to the changing, dynamic external environment. This implies that the attainment of an organization's performance objectives is not really determined by its internal characteristics alone, but also more on how it reconfigures these characteristics to be in sync with the factors within the environment in which it operates (Mwasiaji, 2020). Thus, an organization's ability to adapt to market challenges and forge a distinctive and creative kind of competitive advantage depends on its dynamic skills (Teece, 2010). The dynamic capabilities paradigm includes knowledge and change management, organizational learning, entrepreneurship and innovation (Teece, 2010). A company's capacity to develop novel products and procedures in response to shifting market circumstances is referred to as dynamic capability (Teece, 2010). Small and medium enterprises can employ dynamic capabilities including skills, procedures, organizational structures and decision rules to create and capture value. The competencies may be influenced by change processes, product development and creative managing abilities. Competencies are especially important in today's fast-paced, ever-changing work environments (Teece, 2010). Business enterprises may get an advantage in the market by finding novel applications for existing assets and using existing assets in novel ways (Teece, 2010). This proposition therefore places an emphasis on a company's capacity to update its knowledge and integrate and reorganize its resources to respond to and drive innovation in the marketplace (Teece, 2010). It is possible to increase one's capacity for innovation via education, training, and research and development, procedures, the structure of the business, and alliances with other participants like clients, suppliers, public and academic institutions, and trade associations. The relevance of this Dynamic Capability theory to the current study is its linkage to innovation by emphasizing that shifting character of the business environment requires which requires female owned small and medium enterprises to adapt, integrate and reconfigure their internal and external organizational skills, resources and functional competencies in order to remain relevant in view of the changing environment.

Lazonick (2005) propositions on the innovative firm was also judged to be relevant to the current study because it emphasizes the need for innovative businesses to formulate new production processes to competitively manufacture higher-quality goods at reduced prices in line with the identified gaps in the market in order to enhance financial performance (Lazonick, 2005). The goal of innovations inside an organization according to Lazonick (2005) is to boost and sustain the business' competitive edge in the marketplace. These businesses including those in the SME sector must therefore constantly innovate in order to survive otherwise they risk obsolescence (Martin & Namusonge, 2014; Mwasiaji, 2020). Innovative enterprises may obtain an advantage in the market place by investing in both high-quality and large quantities of productive resources. This makes it possible for businesses to create better goods, services, and manufacturing, management, and marketing processes (Lazonick & O'Sullivan, 2000). A creative organization is driven in the short term by high-quality products rather than cost increases since they result in reduced unit costs and a larger market share (Lazonick & O'Sullivan, 2000). Depending on the purchasing power of its target audience, a company may innovate its way into previously untapped market sectors. This paves the way for enterprises to build up the required skills and competencies to break into untapped markets (Lazonic, 2006; Mwasiaji, 2020). In the current study, Lazonick (2005) propositions on the innovative firm was judged to be useful analyzing the independent variable because it was established that it has been successfully been employed in similar studies seeking to establish the linkage between innovation practices and performance of Small and Medium Enterprises within the Kenyan context (Mwasiaji, 2020; Amran & Mwasiaji, 2019).

Empirical Review

Innovation And Performance of SMEs

Several studies have been undertaken seeking to examine the nature of relationship between innovation practices and performance of SMEs. Some of these studies have concluded that innovation is crucial in today's business climate because of the high level of competition (Colombo, Pivo, & Rosi-Lamastra, 2014). If a firm doesn't adapt to its market, it would eventually collapse (Adelowo, Akinwale, & Olaopa, 2017). That's why new ideas are like anarrow that boost output in every sector (Kim, 2011). Some studies have also observed that many women business owners compete in low-value sectors with low entry barriers, which are already highly competitive and provide limited room for growth (Foster, 2016). This implies that small and medium-sized enterprises (SMEs) have almost no chance of success unless they innovate by creating new products and breaking into higher-value markets. According to Casadesus and Zhu (2013), there are five types of innovations: new goods, new production processes, new supply sources, the exploration of new markets, and new ways to organize the organization. As observed by Sidek and Rosli (2013), process innovation entails the redesign and enhancement of an organization's internal business processes. These processes include a wide range of activities, including production, engineering, management, and sales. Changes in customer tastes and requirements, as well as the introduction of new goods, distribution methods, and software, are all instances of this trend (Sidek & Rosli, 2013). Process innovation

has an immediate and obvious impact on the productivity of SMEs because of how easily it can be applied. Varis and Littunen (2010) looked at Finnish SMEs and found that process innovation had a positive correlation with company performance. Sidek and Rosli (2013) examined the connection between innovation and the success of small and medium-sized enterprises (SMEs) in the Malaysian manufacturing sector, and they concluded that marketing innovation did not significantly affect SMEs' financial outcomes.

Andreja, Gregor, Mirjana, Doroteja, and Marjeta (2019) looked at business model innovation from the perspective of SMEs and found that it is one of the most important things that businesses must do on a regular basis to compete in the modern digital economy. The findings demonstrated that the innovativeness of the company and the business environment significantly affected the degree of BMI activities inside a corporation. The fast evolution and transition of information technology, however, meant that this was not the case. The results also demonstrated a favorable correlation between BMI and BMI outcomes and, by extension, business achievement. Twaliwi and Isaac (2017) looked at the effect that innovation has on SMEs' productivity in Gwagwalada-Abuja, Nigeria, and discovered a favorable link. There were statistically significant gains from both product and process innovations, as well as from marketing innovations. However, the research showed that only a small percentage of SMEs in Gwagwalada-Abuja routinely used new approaches. Charles and Gilbert (2015) examined the impact of innovation on the growth of SMEs in Zimbabwe. According to the results, SMEs have a somewhat innovative reputation. When small and medium-sized enterprises (SMEs) were most engaged in innovation, their productivity increased. There is data suggesting an association between innovativeness and the prosperity of SMEs. Management and product innovation may be more indicative of a company's future success than marketing and process innovation when it comes to SMEs. Mohamed, Abdikarim, and Muhumed (2017) investigated the impact of innovation on the growth of SMEs in Hargeisa, Somaliland. Success of SMEs in Hargeisa was shown to be highly influenced by innovation using regression analysis. The study indicated that the SMEs benefited significantly from product innovation, marketing innovation, and organizational innovation. Makanyeza and Dzvuke investigated the impact of innovation on the growth of Zimbabwean SMEs in 2015. Based on the results of the survey, SMEs are generally seen as innovative. During the time when SMEs were most actively innovating, there was a detectable uptick in their performance. Njenga (2015) looked on the managerial creativity and operational effectiveness of medium and small businesses in Nairobi City County. The research found that small and medium-sized enterprises (SMEs) seldom engaged in innovative management practices. Management innovation adoption has been shown to be significantly influenced by factors like as employee training programs, competitive issues, and the market sectors serviced. Organizations that embraced managerial innovation also fared higher in the study's measures of operational success. Elegwa and Romanus (2019) looked at how management innovation affected the success of women-owned businesses in Kenya and found that it had a positive and statistically significant influence on the bottom line.

In order to boost competitiveness, Kenya has not fully integrated innovation into its business system (Ministry of Science and Technology, as stated by Mwangi, 2014). The number of businesses run by women has therefore dropped, even in crucial sectors like manufacturing.

For the last 15 years, manufacturing's percentage of GDP has remained unchanged at 11%. Moreover, most manufacturing enterprises controlled by women have not developed the technical competencies necessary to effectively absorb and use knowledge from multinational corporations. Women-owned small and medium-sized enterprise (SME) development in Kenya and the effect of organizational innovation is little understood (Mwangi, 2014). Innovation and business success were shown to be positively correlated by Muluku and Odhiambo (2013). Innovation and the success of small and medium-sized enterprises (SMEs) were shown to have a substantial correlation by Rosli (2013). He found that businesses with more innovations did better than their rivals in the market. This was because they had a distinct offering and a substantial market edge. This study aims to contribute to this body of knowledge by investigating the link between innovation performance of women-owned small and medium-sized firms (SMEs) in Bomet County, Kenya.

Process Innovation Practices and Performance of Women Owned SMEs

Process innovation substantially improved financial performance, according to a study of Finnish SMEs conducted by Varis and Littunen (2010). Rosli and Sidek (2013) found that process innovation favorably influences corporate performance, and SMEs in Finland concurred. Process innovation is a critical determinant in market and financial success, as shown by Olughor's (2015) research. According to Ar and Baki (2011), process innovation has a substantial and positive effect on business outcomes. Customer results and innovation outcomes are significantly affected by process innovation, as stated by Raja and Wei (2014). Lisboa and Yasin (2014) using factor and regression analysis to investigate the connections between organizational success and various forms of innovation. Some forms of innovation, such as process innovation, were shown to be more successful at improving organizational performance than others. Higher company performance is connected with appropriate innovation inputs and productive innovation processes, as shown by Valmohammadi (2012), who studied the innovation management practices employed by Iranian enterprises. Mohamad and Sidek (2013) used hierarchical regression analysis to look at 284 SMEs in Malaysia's food and beverage, textile and apparel, and wood-based subindustries to see how innovation affected their success. The goal of this research was to determine whether process innovation had a substantial effect on company success. Atalay, Anafarta, and Sarvan (2013) reported that there is a positive and substantial impact on a company's performance due to the introduction of new business processes. A similar finding was established by Ar and Baki (2011), who used structural equation modeling to analyze data from 270 managers of SMEs in Turkish research and technology parks and found that process improvements were significantly correlated with improved company performance. Their results were supported by the fact that process innovations led to higher levels of organizational performance.

Reengineering and improving the company's internal processes is what process innovation is all about, say Rosli and Sidek (2013). Adding a new research and development department is necessary, as are adjustments to the organization's responsibilities, technical frameworks, and production methods (Rosli & Sidek, 2013). Oke, Burke, and Myers (2007) argue that for process innovation to be successful, an organization's practices and procedures for generating

products and services must be improved. Although SMEs found this exceedingly challenging and expensive to deal with, 75% of Kenyan enterprises made a large investment in modern equipment of production as a process innovation method, according to research by Martin and Namusonge (2014). 56% of those surveyed in the research agreed that implementing process innovations led to cost savings. Organizational performance is correlated with the level of process innovation, as shown by Augusto et al. (2014). Soi (2016) looked at how different types of innovation affected the success of Kenyan telecoms firms and found that process innovation was particularly influential.

Product Innovation Practices and Performance of Women Owned SMEs

Samara, Georgiadis, and Bakouros (2012) define product innovation as the process of generating, distributing, and applying knowledge of consumers, rivals, and technology to the development of new and improved goods with more value. Product innovation, according to Musa (2015), is a kind of organizational renewal achieved via the synthesis of in-house and external expertise. New product development is a knowledge-intensive organizational process that relies heavily on both individual and group education, as stated by Wang and Wang (2012). Due to increased competition and rapid changes in customer preference, manufacturers are under pressure to reduce the time and resources spent on developing new goods. Kok and Beimans (2009) argue that product innovation is a crucial business function since it increases customer satisfaction and boosts productivity. Tung (2012) emphasized the need of both innovation leadership and constant product innovation in guaranteeing a company's competitiveness, customer loyalty, and long-term success. Similarly, Comison and Lopez's (2010) study concluded that in order to maintain a competitive advantage in a dynamic market, product innovation is essential. Comison and Lopez (2010) state that a firm may gain an edge over its competitors in the same sector via product innovation, which allows for the launch of new items and improves the quality of current ones. Product innovation was shown to positively affect the company's performance in an industry research done by Espallardo and Ballester (2009). More customers are attracted to a business that is seen to be continually innovating by releasing novel items, as stated by Varis and Littunen (2010). Kiraka (2013) claims that stumbling onto novel concepts is essential to the creation of novel goods. One of the most crucial ways that small companies may compete in today's market is via product innovation. Innovation raises product standards, which benefits business operations and expansion (Hafeez, 2013). A company's capacity to reinvent its goods may serve as a buffer against competition and market shifts. Atalay et al. (2013) found that senior executives from 113 companies operating in the Turkish automotive industry agreed that Product innovation had a positive and significant impact on the company's success. The effect of innovation on the production of Malaysia's small and medium-sized enterprises was studied by Rosli and Sidek (2013). According to the findings, a winery's prosperity depends on the regularity and originality of its product releases, which is not possible without investing in process innovation. Abraham, Shao, William, and Solomon (2016) study investigated the state of small and medium-sized enterprises (SMEs) and product innovation in Ghana's industrial sector. By collecting data at the company level and using the structural equation model, we were able to classify R&D, PI, and OP into distinct buckets, with headcount and revenue acting as

performance indicators. All three factors were shown to have a positive relationship with the firm's success, with the launch of new products having the most impact. This indicates that businesses may improve their performance by emphasizing the launch of new products and adopting other product-innovation initiatives. Mohamed et al. (2017) investigated the effect of innovation on the development of SMEs in Hargeisa, Somaliland. Around 6,930 small and medium-sized enterprises (SMEs) call Hargeisa home, as reported by the city's governing body and the Somaliland Ministry of Trade and Investment. From this group, 378 M&E pros were picked at random. Both a descriptive study and a regression analysis were used to calculate the effects of innovation. Ngirigacha and Bwisa (2013) examined how creative entrepreneurship affected the competitiveness of SMEs in Thika town's market. The study concluded that Product innovation was shown to have a positive and significant correlation with business success.

Business Model Innovation and Performance of Women Owned SMEs

The business environment is dynamic because to rapid changes in technology, legislation, and customer and rivalry behavior. To keep growing, increase profits, or even stay in business, companies need to rethink their core strategies (Foroudi, Jin, Gupta, Melewar, & Foroudi, 2016). The success of business models is greatly influenced by the company's capacity for innovation. The capacity for innovation may be broken down into technical and non-technical skills. Examples of technical ability include the creation of novel services and technologies. Among the non-technical abilities listed by Foroudi et al. (2016) are management, marketing, and sales. Business model (BM) and business model innovation (BMI) have received a lot of attention ever since the advent of the Internet. (Teece, 2010) BMs illustrate the reasoning behind how a company generates, distributes, and captures revenue. Business model innovation may be used to achieve an edge over the competition, boost value creation, and identify untapped market niches that can be used to strengthen competitiveness (Hartmann, Oriani, & Bateman, 2013). Year: 2017 (Guo, Tang, Su, & Katz). Due to the centrality of performance enhancement to any organization, the effect of BMI on performance has garnered considerable study (Karimi & Walter, 2016). Business model innovation (BMI) necessitates substantial BM changes for the firm, in contrast to product/service/process innovation (Nair, Paulose, Palacios, & Tafur, 2013). As a result, BMI is linked to a great deal of danger, uncertainty, and the possibility for internal strife and dissension (Yannopoulos, 2013). If not utilized correctly, even the well-formulated BM will have no effect on performance (Knab & Rohrbeck, 2014). Christensen, Bartman, and Van Bever (2016) found that more than 60% of BMI programs failed to provide the anticipated benefits in terms of enhanced performance. There is no guarantee that lowering your body mass index would improve your performance noticeably (Haggège, Gauthier, & Ruling, 2017).⁵

According to Bock, Opsahl, George, and Gann (2012), businesses that want to remain sustainable and resilient must constantly improve their business model (BM). Additionally, sometimes a new BM is the only way to fully realize the possibilities of technology. Growth, establishing a competitive edge, enhancing long-term performance, and allowing greater innovation are all goals that scholars and practitioners think the BM is crucial for (Terrenghi,

Schwarz, Legner, & Eisert, 2017). Using business market intelligence (BMI), a corporation might potentially enter a previously untapped market. However, BMI requires experimentation, conflict resolution, engagement with individuals of varying levels of ability, change of the existing BM process, and a unique leadership style, and its outcome is uncertain. This makes it challenging to know when and how to implement BM innovation (Latifi & Bouwman, 2017; Waldner, Poetz, Grimpe, & Eurich, 2015). Another study by Anwar (2018) explored the relationship between business model innovation and the success of SMEs in today's competitive and changing global marketplace (SME). Businesses, particularly those operating in fast-paced industries, have been demonstrated to benefit from Business Model Innovation.

Study Methods

This study adopted for descriptive research design that was chosen in line with the general objective of the study (Kothari, 2004; Orodho, 2005; Collis & Hussey, 2014). The unit of analysis was 1500 female-owned small and medium business enterprises in Bomet County, while the unit of observation identified using a combination of stratified and purposive sampling was female business owners. Stratified sampling method was used to ensure that respondents were obtained from all of the sub-counties in Bomet County, while the business owners were considered because they were judged to be appropriate for this study as they had a better understanding of operations in their enterprises and had the final say on which innovations were to be adopted by their businesses (Kombo & Tromp, 2013). A stratified sample size of about 316 female business owners were identified with reference to Yamane (1967) formula as follows: $n = \frac{N}{1 + N(e)^2}$. Thus: $1500 / (1 + 1500(0.05)^2) = 315.78$ which is approximately 316 to the nearest whole number. A trial test was undertaken using 10% of the sample size for the purpose of establishing the reliability of the data collection instrument. While evaluating the dependability of data collection questionnaire, Cronbach's Alpha was utilized (Mugenda & Mugenda, 2003; Burns & Grove, 2003; Kothari, 2005). Data generated using a structured questionnaire with a 5 point Likert Scale was analyzed using descriptive statistics, while linear regression analysis was utilized in seeking to establish the nature of relationship between the study variables (Burns & Grove, 2003; Ogula, 2005).

RESULTS OF THE STUDY

Response Rate

The questionnaires handed out for this study were 316 in total and 250 of them were fully completed, indicating a response rate of 79.1%, while the remaining 20.9% that were non responsive. A response rate of 70% or higher, in accordance with Mugenda and Mugenda (2003). The findings reveal that 47.5% of respondents worked in agricultural goods, 9.5% of the respondents were involved in second hand clothes, 8.2 % of the respondents were involved in hotel, 7.9% were involved in food, 6.3% were involved in information and communication and 20.6% of the respondents were involved in other form of SME business.

Descriptive Statistics

Measures of variance or dispersion and measurements of central trends (means) were used to display the results (standard deviations). Results of the data analysis generated using a five-point Likert scale in capturing their agreement level; (SA - "Strongly Agree," A - "Agree," U - "Undecided," SD - "Strongly Disagree," D - "Disagree," M - "Mean," – SD - "Standard Deviation"), have been presented in Tables 5.3.1, 5.3.2, 5.3.3, 5.3.4 and 5.3.5 as follows:

Table 5.3.1: Process Innovation Practice

Item Description	SA ₇ % ₇	A ₇ % ₇	U ₇ % ₇	D ₇ % ₇	SD ₇ % ₇	M ₇	SD ₇
New customer service practices have improved SMEs performance	63.0	34.2	0.0	2.1	0.7	3.3	0.593
Cashless payment methods have improved SMEs performance	69.9	29.5	0.0	0.7	0.0	4.2	0.774
Introducing online purchasing platform has improved SMEs performance	57.5	39.7	0.7	2.1	0.0	3.0	0.826
Introducing new product delivery services has improved SMEs performance	50.7	45.7	1.13	1.4	1.13	3.0	0.459
Changing production equipment has improved SMEs performance	63.5	34.5	0.23	1.63	0.23	3.5	0.731
Introducing financial management systems has improved SMEs performance	60.9	36.7	0.412	2.846	0.412	3.4	0.677
Aggregate	60.9	36.7	0.412	1.796	0.412	3.4	0.677

Table 5.3.1 shows that majority of respondents (63.1%) agreed that innovative approaches to customer service had increased the efficiency of SMEs, with a mean score of 3.3 and a standard deviation of 0.593. Only 2.1% of respondents didn't agree, while 0.7% strongly disagreed. The majority of respondents (69.9%) agreed that electronic payment systems had improved small and medium-sized enterprises' efficiency. Other respondents were almost evenly divided between those who agreed (29.5%) and those who disagreed (0.7%) on the same issue, with a mean score of 4.2 and a standard deviation of 0.774. Most respondents scored between 3 and 3.5 out of a possible 4.0, with a mean of 3.0 and a standard deviation of 0.826 (57.5%) were in agreement that the advent of an online marketplace has enhanced the performance of SMEs, while the remainder respondents (39.7%) were either agreeing or somewhat agreeing. Fifty-one percent of respondents gave a rating of 4.5 or higher, with a standard deviation of 0.774, agreeing that the introduction of new product delivery services had enhanced SMEs' performance. Consistent with Kiraka (2013), this study found a positive correlation between process innovation and firm performance, which is also the same as the finding by Martin and Namusonge (2014) study.

Table 5.3.2: Product Innovation Practices

Item Description	SA ₇ % ₇	A ₇ % ₇	U ₇ % ₇	D ₇ % ₇	SD ₇ % ₇	M ₇	SD ₇
Innovative new product development improved SMEs performance	50.7	43.2	2.7	3.4	0.0	4.4	0.161

Innovative product launch improved SMEs performance	60.9	38.4	0.7	0.0	0.0	1.1	0.431
Innovative product positioning improved SMEs performance	40.4	55.5	0.0	0.7	3.4	3.5	0.785
New service innovation improved SMEs performance	40.7	45.7	1.13	1.25	1.03	2.0	0.256
Aggregate	48.2	45.7	1.13	1.33	1.108	2.75	0.408

Table 5.3.2 shows that fifty-one percent of those polled strongly agreed that the launch of unique and imaginative items improves the operational effectiveness of small and medium-sized businesses. Descriptive statistics were used to examine the level of participation. A mean of 4.4 and a standard deviation of 0.161 were found. Out of those who responded, 43.2% were in favor, 2.7% were undecided, and 3.4% were against. A large majority of respondents (60.9%, based on a sample with a mean of 5.1 and a standard deviation of 0.431) agreed that new goods had a beneficial effect on the operational efficiency of small and medium-sized businesses. Furthermore, 38% of respondents agreed with this statement. This shows that product innovation practices has a substantial impact on performance of female owned enterprises. These results are align with the conclusions drawn by Saeed, Yousafzai, Paladino, and De Luca (2015), who assert that the acquisition of internal and external knowledge leads to organizational renewal processes, including product innovation. Consequently, there exists a direct correlation between product innovation and a firm's performance. The results of this study are also consistent with Kok and Biemans (2009) study which concluded that product innovation is a crucial organizational function that promotes superior consumer benefits and improves overall organizational effectiveness.

Table 5.3.3: Business Model Innovation Practices

Item Description	SA %	A %	U %	D %	SD %	M	SD
Affiliation as business innovation improved SMEs performance	47.5	28.8	10.2	10.2	3.4	4.1	1.134
Drop shipping as business innovation improved SMEs performance	5.6	49.2	5.1	4.1	5.1	4.0	1.401
E-commerce as business innovation improved SMEs performance	42.4	49.2	3.4	3.4	1.7	4.3	0.287
Long tail business innovation improved SMEs performance	39.0	47.5	10.2	3.4	0.0	4.2	0.767
Multi-sided business innovation improved SMEs performance	36.1	43.4	5.78	5.24	3.4	4.02	0.943
Peer to peer as business innovation improved SMEs performance	60.3	37.7	0.7	1.4	0.0	3.5	0.655
Franchising as business innovation improved SMEs performance	43.2	48.6	1.4	2.1	4.8	3.9	0.706
Aggregate	39.2	50.7	4.6	4.9	3.1	4.7	0.982

Table 5.3.3 shows that the respondents concurred those female owned small and medium businesses may be positively affected by adopting innovative business methods. The statistical analysis shows that there is a substantial amount of variance in the data, with a mean score of 4.7 and a standard deviation of 0.982. Over half of respondents (47.5%) strongly believe that

business innovation as a form of affiliation positively affects the success of small and medium enterprises. In the study, 28.8% of respondents gave positive responses, 10.2% gave neutral or negative responses, and 3.4% gave very negative responses. With a mean score of 4.1 and a standard deviation of 1.134, the results were quite consistent. In terms of participants' confidence in their capacity to accomplish duties at or beyond their employer's standards, almost half (49.2%) strongly agreed. Only 5.1% of the sample disagreed, while the rest had no stance either way. According to the numbers, the average result was a score of 4 and the standard deviation was 1.401. The poll found that almost half of respondents (49.2%) said that SMEs' bottom lines improved as a consequence of the introduction of drop shipping as a business innovation. Forty-two percent of respondents gave a positive affirmation, while three percent each gave a negative and indifferent response. The results are consistent with those of by Foroudi, Jin, Gupta, Melewar, and Foroudi (2016) that the business world is experiencing rapid change in several areas, including technology, regulation, consumer behavior, and competition. To sustain growth, increase profitability or even just to survive, enterprises must adapt their business models.

Table 5.3.4: Management Innovation Practices

Item Description	SA %	A %	U %	D %	SD %	M	SD
Coupled process innovation improved SMEs performance	50.7	43.2	2.7	3.4	0.0	4.4	0.161
Inside-out process innovation improved SMEs performance	60.9	38.4	0.7	0.0	0.0	1.1	0.431
Outside-in process innovation improved SMEs performance	40.4	55.5	0.0	0.7	3.4	3.5	0.785
Broad and intensive engagement improved SMEs performance	28.1	67.8	0.0	3.4	0.7	2.9	0.823
Cooperation with external partners improved SMEs performance	45.03	51.23	0.85	1.5	0.82	2.98	0.55
Technology innovation improved SMEs performance	57.5	39.7	0.7	2.1	0.0	3.0	0.826
Market-oriented innovation improved SMEs performance	45.2	25.3	0.0	13.0	16.4	3.8	0.45
User involvement innovation improved SMEs performance	43.2	48.6	1.4	2.1	4.8	3.9	0.706
Open sourcing innovation improved SMEs performance	46.38	46.2	0.79	3.3	3.2	2.7	0.59
Involving relatively low level of changes improved SMEs performance	48.6	33.6	10.9	4.8	2.1	4.2	0.715
Aggregate	46.6	44.95	1.46	3.43	3.14	3.25	0.10

Table 5.3.4 shows that the respondents indicated that technology advances had a good influence on SMEs (57.5%, mean = 3.0, standard deviation = 0.826), with 39.7% strongly agreeing. The results showed that 45.2% of respondents strongly agreed, 25.3% agreed, 0% were unsure, and 13.0% strongly disagreed that market-oriented innovation improved the performance of SMEs (mean = 3.8, standard deviation = 0.456). Nearly half (48.6%) of respondents strongly agreed that user involvement innovation improved the performance of SMEs, whereas nearly a third (33.2%) strongly disagreed. Respondents also indicated with a mean of 2.7 and a standard

deviation of 0.59, 46.4%, were in agreement that open sourcing innovation enhanced the performance of SMEs, while 3.3% were in disagreement and 3.2% were strongly in disagreement. Respondents at 48.6% believed that even small improvements in SME performance were noticeable. 33.6% of respondents agreed, 10.9% were not sure, 4.8% disagreed, and 2.1% strongly disagreed, according to a mean score of 4.2 and a standard deviation of 0.715. The findings were in line with Halim, Ahmad and Ramayah (2014) study which concluded that the creation of anything original, odd, and different has a major effect on innovation and competitive advantage, thus the need for business leaders to implement novel procedures that increase enterprise efficiency and profitability.

Table 5.3.5: Performance of female owned SMEs

Item Description	Very Improved %	Improved %	Moderate %	No improve %	Reduced %	M	Std.D
New branches/expansion	5.40%	2.70%	8.10%	51.40%	32.40%	4.03	1.013
Customer satisfaction	0.00%	0.00%	0.00%	48.60%	51.40%	4.51	0.507
Volume of sales	0.00%	0.00%	8.10%	40.50%	51.40%	4.43	0.647
Profitability	0.00%	0.00%	5.40%	43.20%	51.40%	4.46	0.605
Business assets	37.6	33.8	21.05	6.65	2.48	4.33	0.585
Number of customers	55.5	40.4	0.6	0.0	3.5	3.7	0.797
SME position in the market	53	42.2	0.9	1.2	2.8	3.7	0.719
Aggregate	5.3	41.9	48.2	5.74	3.1	4.8	0.740

Table 5.3.5 shows that SME performance improved due to the implementation of innovation practices. The average score was 4.33 (standard deviation = 0.585), with 37.6% of respondents reporting a large increase in the value of their company's assets, 33.8% reporting an increase, 21.5% reporting a moderate increase, and 2.48 percent reporting a fall. Mean score was 3.7 (SD = 0.797), with 55.5% of respondents reporting an increase in client volume, followed by 40.4% who agreed, 0.6% who were doubtful, and 3.5% who strongly disagreed. The majority of respondents (53%) said that the position of SMEs in the market has greatly improved, with a mean score of 3.7 and a standard deviation of 0.719. This finding is consistent with Kok and Biemans (2009) study which concluded that innovation is an important driver of enhanced organisational performance.

Inferential Analysis

Regression analysis was applied in modelling and investigation of the associations among the four independent variables (process innovation practices, product innovation practices, business model innovation practices and management innovation practices) and the dependent variable (SMEs' performance) of the study. This was judged necessary so as to establish how changes in one or more variables interacted with changes in other variables. A regression coefficient for each independent variable was to indicate the strength and direction of the relationship between that independent variable and the dependent variable of the study. Using SPSS version 25.0, the model summary, analysis of variance, ANOVA and regression coefficients were created.

Results of the multiple Regression

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate ^a
1	.868 ^a	.754	.719	.23437

Table 5.4.1 shows that the corrected R square showed that these factors explained 71.9% of the variation in SMEs' performance.

Analysis of Variance (ANOVA)

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	88.574	4	29.525	112.365	.000 ^b
	Residual	54.128	26	.263		
	Total	142.702	30			

The table shows that the sum of squares arising from regression is 88.574. Additionally, the mean sum of squares, which has 4 degrees of freedom, is calculated to be 29.525. The residual mean square is 0.263 with 26 degrees of freedom, and the residual sum of squares is 54.128. The obtained F value is 112.365, and the significance level is 0.000. The value of P is equivalent to 0.000. The statistical model holds significance for both analysis and prediction purposes, as indicated by the p value being below 0.05. This signifies that the relationship between the variables is statistically significant at a 95% level of confidence.

Correlation Analysis

		PER	PROCES INN	PRODUCT INN	BM INN	MGT INN
PER	Pearson Correlation	1	.533**	.317**	.344**	.397**
	Sig. (2-tailed)		.000	.010	.005	.001
	N	65	65	65	65	65
PROCESS INN	Pearson Correlation	.533**	1	.372**	.273*	.486**
	Sig. (2-tailed)	.000		.002	.028	.000
	N	65	65	65	65	65
PRODUC T INN	Pearson Correlation	.317**	.372**	1	.107	.145
	Sig. (2-tailed)	.010	.002		.396	.250
	N	65	65	65	65	65
BM INN	Pearson Correlation	.344**	.273*	.107	1	.150
	Sig. (2-tailed)	.005	.028	.396		.233
	N	65	65	65	65	65
MGT INN	Pearson Correlation	.397**	.486**	.145	.150	1
	Sig. (2-tailed)	.001	.000	.250	.233	
	N	65	65	65	65	65

The table shows that performance and process innovation practices have a very strong positive correlation ($r=0.533$), as shown in table 4.11 above. Product innovation practices and performance have a weak but positive correlation ($r=0.317$). Performance and business model innovation practices have a weak but positive correlation ($r=0.344$) with one another. Performance and management innovation practices have a moderately strong but positive correlation ($r=0.397$).

Correlation of Determination

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.088	.229		.386	.001
Process innovation practices	.365	.073	.291	5.008	.000
Product innovation practices	.094	.048	.113	1.950	.032
Business model innovation practices	.522	.061	.494	8.532	.000
Management innovation practices	.622	0.074	.589	8.426	.000

a. Dependent Variable: performance

The table $Y = 0.542 + 0.701 X_1 + 0.835 X_2 + 0.792 X_3$ as the established regression equation. Where $Y =$ Performance, $X_1 =$ practices for process innovation, and $X_2 =$ practices for product innovation Practices for business model innovation, X_3 . Management innovation techniques X_4

Summary, Conclusion and Recommendations

This study sought to establish a link if any between innovation practices and their influence on the performance of female owned small and medium business enterprises in Bomet County, Kenya. This study established a positive relationship between process innovation, product innovation, business model innovation, management innovation and performance of women owned small and medium enterprises in Bomet County, Kenya. The position taken by this study therefore is that effective operationalization of the four innovations resulted in better performance using financial and non-financial measurement parameters. The study therefore recommends that there is need for women owned small and medium enterprises to adopt undertake stakeholder management to anchor the operationalization of innovation for continuous performance improvement based on the client preferences. There is also need for policy makers to put in place a more favorable legal framework to support and protect innovations. The expected study output is improved performance of female owned small and medium enterprises for social and economic development in the study locale, with a cascading positive effect on national economic growth.

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