

The Effects of Market Innovation on the Performance of Small and Medium Size Enterprises in Buea, Cameroon

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ABSTRACT

This study examined the effect of effects of innovation on the performance of SMEs in Buea. The specific objectives were; to determine the effect of product innovation, process innovation and market innovation on performance. A cross-sectional survey research design was adopted as an appropriate study design with a sample of 500 employees in SMEs in Buea was selected through stratified random sampling and a random sampling technique. The quantitative methods of data collection was used in this work were a self-administered questionnaire composed of closed ended, and likert scale questions were used to collect data from the respondents. Data obtained through a structured questionnaire were analysed using descriptive statistics and the Ordinary Least Square Regression Techniques with the help of Statistical Package for Social Sciences (SPSS) software. The findings showed that marketing innovation have a positive and significant effect on the performance of SMEs in Buea. The study concluded that innovation has a significant and positive effect on the performance of SMEs in Buea. The study therefore recommends that SMEs should invest in training programs to enhance their capabilities and are encouraged to adopt best practices in operational efficiency through targeted workshops and training sessions and should prioritize innovative marketing strategies such as digital marketing and social media engagement.

Keywords: Market Innovation and Performance.

BACKGROUND TO THE STUDY

Small and medium-sized enterprises (SMEs) are essential to a country's social and economic development. Due to their numerous contributions to the economy, SMEs are seen as important forces for socioeconomic development and competitiveness (Heru, & Sri, 2020). The industry provides chances for the development and use of relevant technology, creates a sizable amount of income and jobs, and is a significant source of inventions (Sulistyo, & Siyamtinah, 2016). Additionally, SMEs are essential for entering new markets and promoting an economy's expansion (Abbas et al., 2020). SMEs, which are at the forefront of innovation techniques, are seen as crucial to a country's performance, competitiveness and growth (Baierle, 2020).

The concept of innovation has evolved significantly over time. Joseph Schumpeter's theory of economic development in the early 20th century laid the groundwork for understanding innovation as a catalyst for economic change. He identified five types of innovation: the introduction of new products, new methods of production, new markets, new sources of supply, and new organisational forms (Schumpeter, 1934).

In USA, numerous SMEs that have successfully leveraged innovation for competitive advantage. For instance, companies like Apple Inc. exemplify how product innovation can lead to significant market dominance. Apple's commitment to continual product development has resulted in a loyal customer base and strong brand recognition, with revenues exceeding \$274 billion in 2020 (Apple Inc., 2021). Furthermore, the tech startup ecosystem in Silicon Valley demonstrates how process innovations such as agile methodologies can enhance operational efficiency and responsiveness. In Germany, SMEs known as "Mittelstand" are renowned for their focus on innovation and quality. According to a report by the European Commission (2019), these companies invest heavily in RD, leading to high levels of product and process innovation. The automotive sector, with firms like Bosch and Siemens, showcases how technology adoption enhances competitive advantage through improved production techniques and sustainable practices. Also, In Japan, SMEs contribute significantly to the economy through continuous innovation. Toyota's lean manufacturing system is a prime example of process innovation that not only reduces costs but also enhances product quality. The company reported over \$275 billion in revenue in 2020 (Toyota Motor Corporation, 2021), demonstrating how effective innovation strategies translate into substantial competitive advantages.

Furthermore, in order to improve the efficiency and competitive advantages of goods, operations, marketing, structure, human resources, and networking in both local and international markets, innovation is essential. Currently, innovation is the primary tool used to face competition. The key to businesses facing strong competition, according to Aksoy (2017), is to innovate so they may get a competitive edge. According to Yuleva, (2019), a company's capacity to develop a program superiority or strength that sets it apart from its rivals constitutes a competitive advantage. Any company must adapt to the increased competition in order to gain the advantages necessary to survive.

SMEs' innovation capabilities give them financial sustainability and resistance (Chaarani *et al.*, 2022). The innovative abilities of businesses enable them to transform their new ideas into new processes, procedures, and experiments to create new products and services. Moreover, SMEs' innovativeness and competitiveness allow them to have easier credit access (Lumpkin & Dess, 1996), reducing their financing problems. Furthermore, competitiveness helps firms to increase their productivity and fulfilling customers' demands by differing from their rivals (Markus & Rideg, 2020). Competitiveness is also a crucial ability for SMEs since it makes businesses lower their prices, improve and create new products and services, and increase the quality of their offerings (Le & Ikram, 2022), so their performance (Williams *et al.*, 2018; Stocker & Várkonyi, 2022).

Innovation is critical to competitive advantage in a highly volatile environment. The ability to innovate directly affects the ability to compete at the individual, company, regional, and national levels. The value created by innovation is often manifested in new ways of doing things or processes, resulting in new products. When we think of an organisation or company as a collection of resources, skills, and competencies, then the impact of innovation is to transform the company's internal capabilities and make it more adaptive, able to learn, and produce new ideas. This enhanced flexibility is essential in facing the changed market conditions (Setyawati *et al.*, 2017). Innovation is a crucial factor in a rapidly changing business environment. Organisations that effectively manage innovation can better adapt to market dynamics, seize new opportunities, and stay ahead of the competition. Innovation management enables organisations to respond to emerging trends, customer demands, and technological advances, ensuring sustainability and long-term growth (Melendes & Dávila, 2022).

Performance in SMEs can be assessed through various indicators, including financial performance (profitability, revenue growth), operational efficiency (cost reduction, productivity), and market performance (market share, customer satisfaction). Studies indicate that innovative practices positively correlate with these performance indicators. For instance, a meta-analysis by Damanpour and Gopalakrishnan (2001) reveals that firms engaging in product and process innovations experience enhanced performance metrics.

The relationship between innovation and performance has been extensively studied, particularly in developed countries. Research indicates that firms engaging in product innovation tend to experience increased sales, market share, and profitability (Bessant, 2018). Similarly, process innovations can lead to cost reductions and

improved operational efficiency (Gopalakrishnan, 2001). Marketing innovations have also been shown to enhance customer satisfaction and loyalty, which are crucial performance indicators.

Innovation (in business) means novelty, new things being done, or old things being done in new ways to increase the performance in terms of sales, profitability and market shares in an organisation. It is an application of technological, institutional, human resources and discoveries of productive processes, resulting in new practices, products, markets, institutions and organisations that need organisational improvement or performance in terms of sales, profitability and market shares. Innovation in SMEs can be a product, process or marketing innovation adopted in order to increase performance of enterprises in terms of sales volume or otherwise. Small and medium enterprises are considered as the machine of economic growth that drives and promotes equitable development of nations, which is achieved by adopting innovation principles. The role of Small and Medium Enterprises in the economic and social development of countries is well established when the concept of innovation is applied on the SMEs, and as a result, performance will be improving substantially. The sector is a nursery of entrepreneurship, often motivated by innovation (Twaliwi & Isaac, 2017)

In developing nations like Nigeria, SMEs face numerous challenges but are increasingly turning to innovation to gain competitive edge. A study by the World Bank (2018) highlighted that Nigerian SMEs adopting digital technologies saw a 20% increase in productivity. Companies like Paystack have revolutionised payment processing through technology adoption, securing a significant market share before being acquired by Stripe for \$200 million. In Kenya's vibrant tech scene has birthed successful innovations such as M-Pesa, a mobile money transfer service that has transformed financial transactions for millions. According to a report by McKinsey (2020), M-Pesa has contributed significantly to Kenya's GDP growth, showcasing how product and process innovations can drive competitive advantage even in challenging environments. In Ghana, SMEs are increasingly adopting innovative practices to enhance their competitiveness. The introduction of mobile banking has allowed businesses to streamline operations and improve customer engagement. A study by the African Development Bank (2021) found that SMEs utilising mobile technology experienced a 15% increase in customer retention rates

In developing countries, including Cameroon, the dynamics may differ due to unique challenges such as limited access to finance, inadequate infrastructure, and a lack of skilled labor. However, studies suggest that SMEs that adopt innovative practices can better navigate these challenges and improve their competitive edge (Ayyagari et al., 2011). Buea, the capital of the Southwest Region of Cameroon, is home to numerous SMEs operating in various sectors such as agriculture, trade, and services. The local economy faces challenges such as political instability, limited access to technology, and a lack of supportive infrastructure. Nevertheless, there is a growing recognition of the importance of innovation for driving performance in this context.

Studies conducted in Cameroon indicate that while many SMEs recognise the importance of innovation, they often struggle with implementation due to resource constraints (Nkuembe et al., 2020). As such, examining the specific effects of product, process, and marketing innovations on SME performance in Buea is essential for understanding how these enterprises can thrive.

Despite the acknowledged benefits of innovation, there are controversies regarding its effectiveness in different contexts. Critics argue that not all innovations lead to improved performance; factors such as market readiness, organisational culture, and resource availability play significant roles (Aravind, 2012). Additionally, while some studies highlight positive correlations between innovation and performance in developed nations, similar results are not always replicated in developing countries due to varying socio-economic conditions. Current literature emphasizes the need for tailored approaches to innovation that consider local contexts. For instance, a study by Ngwenya (2020) highlights that SMEs in Sub-Saharan Africa must adopt frugal innovation strategies that align with their unique constraints. This study aims to bridge the gap in understanding how various forms of innovation impact SME performance specifically in Buea, Cameroon. By examining product, process, and marketing innovations separately, we hope to provide insights that could inform policy decisions and entrepreneurial strategies in the region.

Statement of the Problem

The effective implementation of marketing innovations has the potential to significantly influence performance indicators such as revenue growth, market share, operational efficiency, and customer satisfaction. However, the actual impact of these innovation components on SME performance in Buea remains underexplored.

In an ideal scenario, SMEs in Buea would leverage innovations to enhance their competitiveness and overall performance. Product innovations would lead to the introduction of new and improved goods that meet consumer needs, resulting in increased sales and market share. Process innovations would enhance operational efficiency, reducing costs and improving service delivery. Marketing innovations would effectively engage customers, fostering loyalty and satisfaction. Collectively, these innovations would contribute to robust economic growth and sustainability for SMEs.

Marketing Innovation

Innovation in the market is described as a continual process which enhances the existing marketing capacity of organisational goods and services via the learning method (Mahmod, Ibrahim & Rodina, 2010). Thus, market innovation can be described as creating and applying new ideas, delivering value to customers, communicating as well as customer relation management. Market innovation is a process which initiates significant and ongoing market changes in order to increase consumer awareness of goods and services (Trott, 2017). The innovation within the market favours one player who is capable to keep up with market structure changes hence acquire competitive advantage (Palmer, Wright, and Powers, 2015).

Over the past fifteen years, a lot of talk has focused on the use of creative marketing techniques to gain a competitive edge. Due to the ability of competitors to quickly contact potential customers around the world thanks to cutting-edge marketing techniques, particularly the internet, a company must constantly innovate the market. Market innovation, according to Rodrigues Cano and his colleagues, is essential to meeting consumer demands and seizing market opportunities (Rathod et al., 2022). In addition, every market innovation must, therefore, be focused on satisfying customer needs and desires. As a result, customers can be seen as the source of innovation because their desire for unique qualities prompts producers to include them in finished goods (Bamfo, & Kraa, 2019). However, changes in product packaging, product placement and significant changes in product design that are a result of new marketing concepts are all examples of marketing innovations (Ganser et al., 2017).

Performance

Performance is the outcomes achieved in meeting internal and external goals of a firm (Lin, Peng & Kao, 2008). Performance has several names, including growth (Wolff & Pett, 2006). Owen (2006) believes that organisational performance encompasses three specific areas of firm outcome: (a) financial performance (profits, return on assets, return on investment), (b) product market performance (sales, market share) and (c) shareholders returns (total shareholders return, economic value added etc. Performance is either financial or non-financial. The financial performance are return on asset, return on investment, return on equity, return on capital employed, net profit margin, cross profit margin, profit after tax, profit before tax and market share.

Diffusion of Innovation Theory

The Diffusion of Innovation Theory, developed by Everett Rogers in 1962, explains how innovations spread within a social system over time (Rogers, 2003). The theory outlines the process by which an innovation is communicated through certain channels over time among the members of a social system. It identifies five categories of adopters: innovators, early adopters, early majority, late majority, and laggards. A key assumption of this theory is that the rate of adoption of an innovation depends on its perceived attributes such as relative advantage, compatibility, complexity, trialability, and observability (Rogers, 2003).

The Diffusion of Innovation Theory (DOI) approach has its primary focus on how potential adopters perceive an innovation in terms of relative advantage/disadvantage; hence some of the factors of the DOI approach help form a framework: innovativeness, complexity, compatibility and relative advantage. Furthermore, firms that intensely use a particular technology are often prime candidates for early adoption of the next generation of that technology. The diffusion of innovations approach in this study is important to understanding the dynamics at play in relation to adoption and use of innovations in SMEs. There are discourses focusing on adoption by organisations and also by individuals. These two types of adoption both play a role when investigating the diffusion and adoption of innovations by SMEs. After all, in SMEs many of the primary decisions are made by the owner-manager. The organisational decision to adopt technology becomes intertwined with personal perceptions and attitudes of the owner-manager towards that technology. Diffusion in SMEs is largely by way of interpersonal/inter-firm networks.

In the context of SMEs in Buea, the diffusion of innovation theory is particularly relevant as it provides insights into how these enterprises can effectively adopt new product and process innovations. Understanding the characteristics that influence adoption can help SMEs tailor their innovation strategies to better meet the needs of their target market. However, one limitation of this theory is its focus on individual decision-making processes without fully considering the organisational context in which SMEs operate (Greenhalgh et al., 2004). Despite this limitation, the theory remains a valuable framework for understanding how innovations can be successfully introduced and adopted within small businesses.

Resource-Based Theory

Resource-Based Theory (RBT), articulated by Jay Barney in 1991, asserts that a firm's competitive advantage stems from its unique resources and capabilities that are valuable, rare, inimitable, and non-substitutable (Barney, 1991). The theory emphasizes that organisations must leverage their internal strengths to achieve superior performance compared to competitors. RBT assumes that not all resources are equally effective in generating competitive advantage; thus, firms should focus on developing and protecting those resources that provide them with a distinct edge in the marketplace.

Barney (2011) argues that the resource-based theory approach has evolved from a nascent, upstart perspective to one of the most prominent and powerful theories for describing, explaining, and predicting organisational relationships. The resource-based view (RBV) of the firm as one of the research approaches has been widely used by a variety of researchers (Melville et al, 2004). In its original form, resource-based view emphasizes on the internal resources of the firm as the source of performance and competitive advantage, rather than the external environment. However, findings from our empirical study reveal that these capabilities 10 (innovations, expertise, firm networks, supply chain involvement etc.) could also be generated from the external context of the firm necessitated by the developments in technology. Hence, in view of this explanation, the following factors can be viewed as forming bundles of firm assets important to the firm and for inclusion in the framework: resources and capabilities, top management support, cost of innovation, human capital and networks and supply chain.

For SMEs in Buea, Resource-Based Theory provides a framework for understanding how internal capabilities such as skilled personnel, proprietary technologies, or strong brand equity can drive innovation performance. By identifying and nurturing these critical resources, SMEs can enhance their product offerings and optimise processes to meet market demands more effectively. However, one limitation of RBT is its tendency to overlook the role of external factors such as market dynamics and competitive pressures that can also influence performance outcomes (Butler, 2001). Despite these limitations, RBT remains highly relevant to the study as it encourages SMEs to focus on their unique strengths to foster innovation and improve overall performance.

Empirical Literature

Danjuma Tali et al. (2021) investigated the impact of two components of innovation competitive advantage, that is, customer preference and strategic business model, on product quality for sustainable growth among SMEs. It

also examined the mediating effect of technology adoption on the relationship between innovation competitive advantage and product quality. Survey data was collected from 245 manufacturing SMEs in Nigeria and analysed using partial least squares structural equation modelling. The results revealed that customer preference does not directly affect product quality; however, technology adoption mediates the relationship between customer preference and product quality. The strategic business model was found to have a significant positive effect on product quality, and this relationship was mediated by technology adoption as well. This research recommended that manufacturing SME managers recognise that improving product quality through innovation competitive advantage strategies and technology adoption is advantageous for the sustainable growth of SMEs.

METHODOLOGY

The study adopted an exploratory research design, with the use of cross sectional data collected across SMEs in Buea, Cameroon, a sample of 500 SMEs was selected using stratified random sampling, primary data was collected using a 5 likert scale questionnaire ranging from strongly agree to strongly disagree, data was analysed using percentages, mean, correlation and ordinary least square regression analysis was used to estimate the cause and effect relationship.

Variables of the study and their measurement

Variables	Measurement	Source
Marketing Innovation	- Effectiveness of promotional campaigns. - product design, packaging, and pricing strategies	Twaliwi & Isaac (2017)
Performance (dependent Variable)	- Profit margins - sales growth - Performance (market share, customer satisfaction).	Twaliwi & Isaac (2017)

Source: Researchers Conceptualisation (2025).

$$P = \beta_0 + \beta_1 MKTI + \beta_2 YearsWork + \beta_3 Gender + \beta_4 LEDU + \epsilon \dots\dots\dots ()$$

P= Performance

β_0 = the Regression Intercept (sets the analytical foundation)

β_1 = Régression coefficient

β_4 . β_6 = Control variables

MKTI= Marketing Innovation

ϵ - Error Term

The adjusted R-square, standard deviation, T-tests, and F-statistic were used as the different test parameters for degree of effects and overall significance. These statistical tests are out to show how accurate the estimated coefficients are. The adjusted R-square measures the extent to which change in the dependent variable is as a result of changes in the independent or explanatory variables. The standard error measures the dispersion of the sample estimates around the true parameters.

Table 7: Appropriation of Results for SMEs Performance

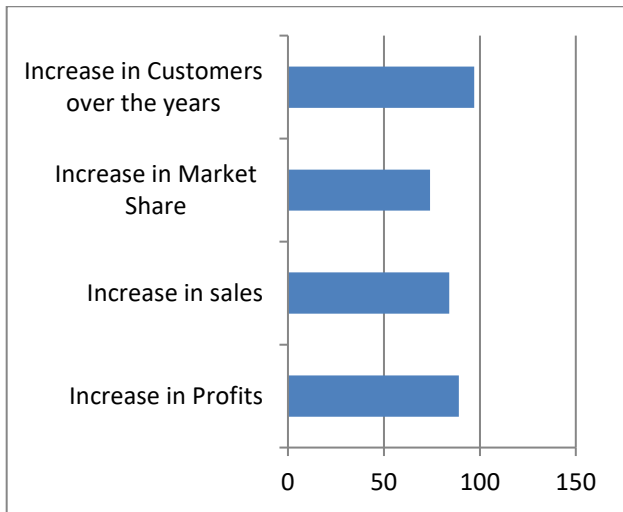
Test items	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean	Standard Deviation
There is an increase in sales and customers are satisfied	220(48.9%)	150(33.3%)	30(6.7%)	40(8.9%)	10(2.2%)	3.83	1.134
There is an increase in profits and market share	250(55.6%)	130(28.9%)	30(6.7%)	20(4.4%)	20(4.4%)	3.81	.744
The firms current assets is greater than current liabilities	230(51.1%)	150(33.3%)	20(4.4%)	40(8.8%)	10(2.2%)	3.77	.932
There is an increase in the number of customers over the years	180(40.0%)	200(44.4%)	20(4.4%)	30(6.7%)	20(4.4%)	3.89	.989
Multiple response set, average mean and standard deviation	880(48.9)	630(35%)	100(5.6%)	130(3.1%)	60(3.3%)	3.83	0.950

Source: Field Survey (2025)

Generally, findings show that majority of the respondents (82.2%) indicated that the performance is good in SMEs; this was also supported with an average mean of 3.83 above the cut of point of 2.5. To be specific, findings show that majority of the respondents with 22(48.9%) strongly agreed and 15(33.3%) agreed that there is an increase in sales in SMEs. While, 25(55.6%) of the respondents strongly agreed and 13(28.9%) agreed that, there is an increase in the profits in the form of Return on assets.

Findings also show that majority of the respondents with 23(51.1%) strongly agreed and 15 (33.3%) agreed that the profitability and market share of the SMEs has increased in terms of returns on assets. Majority of the respondents as well with 20(44.4%) agreed and 18(40.0%) strongly agreed that the firms current assets is higher than the current liability. The mean value for all the 3 items which range from 3.77to 3.89 above the cutoff point of 2.5 also indicated that majority of the respondents agreed/accepted with all the items. The standard deviation value with range from 0.744 to 1.134 with an average value of 0.950 implies that the respondents do not over differ in their responses in their appreciation of performance SMEs in Buea, Cameroon.

Figure 5: Ranking Performance Indicators



Source: Field Survey (2025)

Findings on figure 5 show that, ensuring customer satisfaction has led to an increase in sales was accepted by (97%) of the respondents , (89%) of the respondents indicated that there is an increase in profitability in terms of return on assets, 74% of the respondents talked of increase in market share. Finally (84%) of respondents indicated that there is an increase in the number of SMEs customers.

Descriptive Results of the Contributions of Market Innovation to Performance of SMEs in the Buea Municipality.

Table 8: Market Innovation Factors

Test item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean	Standard Deviation
The enterprise comes up with new ideas for market launch, the methods of promoting existing and/or new services provided.	270(60.0%)	130(29.9%)	200(4.4%)	100(2.2%)	200(4.4%)	3.83	.971
We continuously modify design of our products and rapidly enter new emerging markets.	220(48.9%)	170(37.8%)	30(6.7%)	20(4.4%)	10(2.2%)	3.73	.924
Our firm manages to deliver special products flexibly according to customers' orders.	230(51.1%)	170(37.8%)	20(4.4%)	30(6.7%)	00(00%)	3.60	.721
The enterprise introduces new better techniques for production of products to improve delivery time.	280(62.2%)	120(26.7%)	00(00%)	40(8.9%)	10(2.2%)	3.82	.890
The company finds non-value-added tasks in delivery process to be eliminated.	310(68.9%)	60(13.3%)	30(6.7%)	40(8.9%)	10(2.2%)	3.82	.883
Multiple response set, average mean and standard deviation	1310(60.1%)	650(29.8%)	70(3.2%)	100(4.6%)	50(2.3%)	3.87	.878

Source: Field Survey (2025)

Findings on table 8 show that majority of the respondents 270(60.0%) strongly agreed and 130(29.9%) agreed that the enterprise comes up with new ideas for market launch, a method of promoting existing and/or new products/services provided. Also, majority of the respondents with 220(48.9%) strongly agreed and 170(37.8%) agreed that we continuously modify design of our products and rapidly enter new emerging markets and employees respond promptly to customers request. Also, findings also showed our firm manages to deliver special products flexibly according to customers' orders. also, findings also showed that majority of the respondents with 280(62.2%) strongly agreed and 120(26.7%) agreed that The enterprise introduces new better techniques for production of products to improve delivery time to customers. Finally 310(68.9%) strongly agreed and 60(13.3%) agreed that the company finds non-value-added tasks in delivery process to be eliminated. The mean value for all the five items which range from 3.60 to 3.83 above the cutoff point of 2.5 also indicated that majority of the respondents agreed/accepted with all the five items. The standard deviation value with range from 0.771 to 0.971 with an average value of 0.878 which implies that, the respondents do not over differ in their responses to the five test items.

Overall, these results reflect a largely favorable perception of innovation services among respondents, with particular strength in product innovation and marketing services. However, the moderate neutrality observed in some areas, especially under process innovation, may suggest opportunities for further innovations; product and process innovation would be discussed in subsequent publications.

Table 4.4: Pairwise Correlation Matrix

Variables	(1)	(2)	(3)	(4)	(5)	(6)
(1) Performance	1.000					
(2) Marketing Innovation	0.331	0.045	0.095	1.000		
(3) Educational Qualification	-0.053	0.043	-0.449	-0.015	1.000	
(4) Duration of Work	0.034	0.511	-0.281	0.434	0.023	1.000

Source: Author (2025)

Marketing innovation have a weak positive correlation with performance ($r = 0.331$). This could indicate that SMEs with robust strategies for controlling marketing innovation tend to be more financially stable and profitable.

Turning to the control variables, the correlation between educational qualification and financial performance is also slightly negative ($r = -0.053$), which, though weak, might imply that more educated respondents hold more critical views of performance, perhaps due to a deeper understanding of financial systems, standards, or international benchmarks.

Interestingly, duration of work has a very weak positive correlation with performance ($r = 0.034$), but a much stronger positive correlation with product Innovation ($r = 0.511$). This may suggest that staff who have worked longer in SMEs are more aware of or involved in managing innovation strategies, and their experience contributes to efforts that ultimately support financial stability.

The correlation analysis reveals that product innovation and marketing innovation are closely linked to performance, while process innovation is not; highlighting that SMEs' success is tied more to how they manage product and marketing innovation. Additionally, education is associated with more critical perspectives on performance, while longer-serving staff appear more engaged in mitigating risks associated with innovation, indirectly supporting financial outcomes.

Test for Multicollinearity

Table 4.6: Test for Multicollinearity

	VIF	1/VIF
Duration of work	1.957	.511
Marketing Innovation	1.304	.767
Educational Qualification	1.284	.779
Mean VIF	1.485	.

Source: Author (2025)

The table provided shows the Variance Inflation Factor (VIF) for marketing innovation used in regression models to explain the performance of SMEs in Buea. The Variance Inflation Factor (VIF) is a diagnostic tool used to detect multicollinearity among independent variables in a regression model. Generally: VIF = 1: No correlation between this variable and the others. VIF between 1 and 5: Moderate correlation, usually acceptable. VIF > 5 or 10: Indicates high multicollinearity, which can distort regression estimates. The highest VIF is 1.957 (for *Duration of Work*), which is well below the common threshold of 5, indicating that there is no multicollinearity problem in this model. All other variables (Product innovation, process innovation, Marketing innovation, and Educational Qualification) also have low VIFs, ranging from 1.284 to 1.467, further confirming that each predictor contributes unique information to the model. There is no evidence of multicollinearity among the

independent variables used in your regression model. This means that the regression coefficients are stable and interpretable, and the model results (e.g., significance levels and direction of effects) can be trusted. We can proceed with confidence that the variables included in the analysis are not inflating each other's variances.

Test for Reliability

Table 4.7: Cronbach Test for Reliability

Variable	Alpha Level
Demographic characteristics	0.4903
Marketing Innovation	0.7230
Performance	0.6578

Source: Author 2025

Cronbach's Alpha is a measure of internal consistency or reliability of a set of items (e.g., questionnaire responses) that are intended to measure the same underlying construct. The alpha values range from 0 to 1, with higher values indicating greater reliability. Generally accepted thresholds are: ≥ 0.9 = Excellent reliability; $0.8 - 0.9$ = Good reliability; $0.7 - 0.8$ = Acceptable reliability; $0.6 - 0.7$ = Questionable reliability; < 0.6 = Poor reliability. Given that the alpha levels of the main interest variables fall between $0.7 - 0.9$, further indicates that the questions asked adequately measured the variables.

Demographic Characteristics ($\alpha = 0.4903$): The internal consistency of the demographic characteristics scale is poor, bordering on unacceptable. This is likely because demographic items (e.g., age, education, gender, work experience) are not conceptually designed to measure a single underlying construct, they are separate background descriptors. Therefore, a low alpha here is not necessarily problematic, as these variables are typically analysed individually rather than as a scale.

The reliability analysis report for the instrument was not violated for other innovation constructs, and performance with Cronbach's Alpha Coefficient values all above 0.6. The relatively high Cronbach alpha values implied that the participants were objective and consistent in their responses. Hence, the instrument was reliable for the study.

Table 4.5: The Effect of Innovation on the Performance of SMEs in Buea

Performance	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Marketing Innovation	0.176	0.078	2.26	0.029	0.334	0.019	**
Educational Qualification	-0.065	0.065	-0.99	0.326	-0.197	0.067	
Duration of work	-0.087	0.049	-1.79	0.08	-0.186	0.011	*
Constant	1.561	0.677	2.30	0.026	0.195	2.926	**
Mean dependent var	4.208		SD dependent var	0.323			
R-squared	0.543		Number of obs	50			
F-test	10.461		Prob > F	0.000			
Akaike crit. (AIC)	0.752		Bayesian crit. (BIC)	12.224			
*** $p < .01$, ** $p < .05$, * $p < .1$							

Source: Author (2025)

The regression results indicate that product innovation have a strong, positive, and statistically significant effect on the performance of SMEs.

Marketing innovation variable, also has a weak positive and statistically significant effect (coefficient = 0.176, $p = 0.029$) implying that marketing innovation significantly influence performance in this sample.

Educational qualification has a negative but insignificant effect (coefficient = -0.065, $p = 0.326$), suggesting that higher education levels are not significantly associated with changes in perceptions of performance, though the slight negative sign may hint at more critical views from more educated respondents.

Duration of work shows a negative and marginally significant effect (coefficient = -0.087, $p = 0.08$), significant at the 10% level. This may indicate that longer-serving staff, while knowledgeable, may be more aware of institutional inefficiencies or more cautious in their assessment of financial success, possibly due to prolonged exposure to the adoption of innovation strategies or organisational limitations.

The constant term is statistically significant ($p = 0.026$), with a value of 1.561, representing the baseline level of performance when all independent variables are zero.

The model has a moderate explanatory power, with an R-squared of 0.543, meaning that approximately 54.3% of the variance in performance is explained by the variables in the model. The F-statistic (10.461, $p < 0.01$) indicates that the overall model is statistically significant, and the low AIC and BIC values suggest good model fit.

The study found that marketing innovation has a moderate positive significant effect on the performance of SMEs in Buea. This finding is consistent with Distanont and Khongmalai (2018), who argued that innovative marketing strategies are essential for reaching new customers and enhancing brand visibility. Twaliwi and Isaac (2017) further supported this notion by demonstrating that effective marketing innovations lead to increased customer engagement and retention, which are vital for SME growth. Additionally, Abdilahi et al. (2017) emphasized that marketing innovation could serve as a differentiator for SMEs operating in competitive environments, allowing them to stand out. The moderate impact observed in this study suggests that while marketing innovations are beneficial, they may require complementary strategies such as product or process innovations to maximize their effectiveness.

CONCLUSION

In conclusion, the study highlights the critical role of various forms of innovation in enhancing the performance of SMEs in Buea. The strong positive effect of product innovation underscores its importance as a primary driver of growth and competitiveness within this sector. Conversely, while process innovation shows a weaker correlation with performance, it still plays a valuable role in improving operational efficiencies. Marketing innovation emerges as a significant factor as well, contributing moderately to overall performance, suggesting that SMEs should adopt a holistic approach to innovation encompassing products, processes, and marketing strategies. Collectively, these findings underscore the necessity for SMEs in Buea to embrace diverse forms of innovation to thrive in an ever-evolving market landscape.

RECOMMENDATIONS

Consequent on the critical evaluation of the findings made in this study, a number of recommendations are presented both with respect to policy and operational effects.

Given the strong impact of product innovation on SME performance, it is recommended that policymakers create an enabling environment through grants or subsidies for research and development initiatives aimed at new product development. Additionally, SMEs should invest in training programs to enhance their capabilities in product design and development.

To address the weak effect of process innovation, SMEs should be encouraged to adopt best practices in operational efficiency through targeted workshops and training sessions. Policymakers could also facilitate partnerships between SMEs and larger firms to foster knowledge transfer regarding efficient processes.

Given the moderate positive impact of marketing innovation, it is essential for SMEs to prioritize innovative marketing strategies such as digital marketing and social media engagement. Training programs focused on modern marketing techniques should be provided to help SMEs effectively reach their target audiences.

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