

The Effect Of Product Innovation On The Performance Of Manufacturing Firms: A Literature Based Review

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Abstract: This study investigated the effect of product innovation on the performance of manufacturing firms by synthesizing the existing literature on product innovation and firm performance. It adopted Schumpeterian theory of Innovation to guide in explaining the influence of product innovation on firm performance. The paper used a desk study review methodology to identify main themes. A critical review of empirical literature was executed by the PRISMA article selection process linking product innovation and firm performance. The study reviewed the literature published in peer-reviewed journals from 2017 to 2025. The analytical review of the literature shows mixed results. Most empirical studies reviewed (77 out of 83 articles) found that product innovation has a positive and significant effect on the performance of manufacturing firms. Few studies, however, found an insignificant effect of product innovation on firm performance in short term, especially if the innovation systems in the firms are not effective. Nevertheless, based on most literature reviewed, product innovation has a positive impact on firm performance. This study concludes that product innovation positively affects the performance of manufacturing firms by improving the quality of the products which attract more customers and hence more sales. Product innovation also helps the manufacturing firms to gain competitive advantage. The study recommends that manufacturing firms should constantly endeavor to invest in different new product designs and improve on the existing products to gain a competitive advantage.

Keywords: Product innovation, firm performance, manufacturing firms

I. INTRODUCTION

Most developed countries have achieved their high level of economic prosperity and development through manufacturing (World Bank, 2024). These countries embarked on manufacturing export-led strategies to transform their economies. Manufacturing boosts economic activity along value chains, from raw materials to finished products (African Development Bank, 2019). According to United Nations Industrial Development Organization (UNIDO),

manufacturing plays a critical role in driving economic prosperity by creating jobs, incomes, innovations and multiplier effects which in turn ignite other parts of the economy (UNIDO, 2024). It also improves the balance of trade by processing goods for export and replacing imports. In other words, manufacturing is a driving force of economic growth.

However, according to United Nations Industrial Organization (2024), world manufacturing has been facing a steady decline in growth. Global manufacturing output growth

has been decelerating since 2018 thereby posing serious challenges in terms of an overall economic slowdown, reduction of jobs and living standards (UNIDO, 2024). In fact, most developing countries have experienced a marked decrease and fluctuating growth rates in their manufacturing output since 2005 (World Bank, 2021).

Thus, despite the contribution manufacturing firms make to the economic growth through exports, GDP and employment, their output is on the decline. This is attributed to the challenges they face in their business environment. According to Kawira (2021) business firms experience increasing levels of uncertainty due to rapid changes in operating environment, fluctuations in the economy and technological disruptions; hence the advertent need for more innovative approaches. Thus, manufacturing firms need to innovate to enhance their performance and competitiveness and overcome some of the challenges they face in the uncertain dynamic environment.

In today's global, dynamic, turbulent and competitive environment, manufacturing firms must innovate for them to survive and gain competitive advantage (Saka, 2021). Indeed, innovation is an important and essential component for an organization to achieve a dominant market position and higher profits. Innovation refers to the transformation of creative ideas in a business (Saka, 2021). A firm's survival in a highly competitive market depends on how well it can incarnate its creative ideas in products and services that meet customers' changing demands, needs and expectations (Saka, 2021).

Schumpeter (1934), extensively regarded as the father of innovation, defines innovation as the introduction of a product which is new to consumers or one of higher quality than existing products, new methods of production, the opening of new markets, the use of new sources of supply and new forms of competition, that lead to the restructuring of an industry (Langroodi, 2021). In other words, innovation entails any practices that are new to organizations, including equipment, products, services, processes and policies.

A change in design of the product that brings a significant change in the intended use or characteristics of the product is what constitutes product innovation. Product innovation is the process of developing new goods and services. According to Organization for Economic Co-operation and Development (OECD), product innovation entails the usage of a good or service that has had its features significantly improved, such as considerable advances in elements and materials, integrated software, user friendliness, or other functional characteristics (OECD, 2018). Product innovation deals with the creation of new products from new materials or the alteration of existing products to meet customer satisfaction (OECD, 2018). It focuses on increasing efficiency or reducing costs so as to attract customers to buy these products (Al-Sa'di, Abdallah and Dahiyat, 2017).

Most manufacturing firms face the shortened product life cycles and therefore their ability to generate innovations may be more important than ever if they are to improve performance and maintain competitive advantage (Kawira, 2021). If not nurtured through continuous improvements the products decline and die naturally like any living being. At some point modifications or product innovations have, therefore, to be done to avoid product obsolescence and

irrelevance (Kulkarni, 2019). This implies that manufacturing firms must invest highly in product innovations and market research programmes in order to identify changes in consumer needs as the product advances through its productive life.

Product innovation helps firms to improve their performance and retain and grow competitive position in a market (Nakato, Ngigi & Andemariam, 2021; Hongbo & Koffi, 2020). Thus, product innovation is a critical source of firm performance and competitiveness.

Firm's performance reflects an organizational ability to effectively implement its strategies in order to achieve its goals and objectives. According to Gerba and Viswanadham, (2017), firm performance denotes the results obtained by a business in pursuing its internal and external goals. Firm performance can be measured through non-financial and financial means. Several firms often prefer to use financial means to measure their performance. Firms use measures such as Net profit after tax, Return on Assets (ROA), Return on Investment (ROI), profitability and sales volume to assess their performance (Gerba et al., 2017). However, profitability and sales growth are the most generally used measures.

During the last few years, researchers have investigated the effect of product innovation on firm performance in different contexts. However, the findings of the previous research show contrasting results. Many researchers found that product innovation has a positive significant effect on firm performance. Other researchers found that product innovation does not have any significant effect on firm performance. Still more, others found that product innovation has a negative effect on firm performance. Due to these mixed results, more investigations on product innovation and firm performance are needed.

Literature reviews have been conducted on the effect of innovation on the performance of the firms in different sectors. For example, Nduati (2020) used a literature based critical review to investigate the influence of strategic innovation on the performance of manufacturing firms. The study found that product innovation strategies had a positive and significant impact on performance of manufacturing firms. However, such literature reviews are few and limited. They are limited as they have not comprehensively synthesized the literature on the effect of product innovation on firm performance. In other words, they do not provide a broad overview of the existing body of literature on the effect of product innovation on firm performance. Thus, there is a need to comprehensively review the existing body of knowledge to synthesize the literature on the effect of product innovation on firm performance; hence the need for this literature based study.

The main objective of this study was, therefore, to investigate the effect of product innovation on the performance of manufacturing firms by synthesizing the existing literature on product innovation and firm performance. Accordingly, the study provides an original contribution to the literature on product innovation by comprehensively synthesizing the current body of knowledge on product innovation and firm performance while providing unique insights into how product innovation affects firm performance. This literature review based study also serves as a roadmap of literature for both academicians and practitioners

to make decisions on product innovation and firm performance relationship.

II. LITERATURE REVIEW

A. SCHUMPETERIAN THEORY OF INNOVATION

This theory was put forward by Joseph Schumpeter (1934), a renowned economist of the twentieth century. The theory emphasizes the role that Innovation and Entrepreneurship play in economic growth and development. Schumpeter's theory posits that innovation occurs when the entrepreneur introduces a new product or a new production system, open a new market, discover a new source of raw materials or introduce a new organization into the industry (Bailey, Kleinhans and Lindbergh, 2018; Langroodi, 2021). He further stated that entrepreneurship is about combining resources in a new way such as introducing new products, new methods of production, identify new source of raw materials or inputs and setting a new standard either in the market or the industry (Sledzik, 2020). This implies that innovators carry out new combinations of factors of production and introduce new technological products.

In other words, innovation, according to Schumpeter includes the launch of a new product or modification of an already existing product; the application of new methods of production, opening of a new market; use of new sources of supply or raw material and the creation of a new industry structure (Henrekson, Karna & Sanandaji, 2022). He views innovation as a "process of industrial transformation, responsible for the transformation of the economic structure through the process he terms as 'creative destruction' (Henrekson et al., 2022).

According to Schumpeter, the process of "creative destruction" creates wealth through the disruption of existing firms by the introduction of new products or services (Langroodi, 2021). The sum total of creative destruction is innovation where resources in a firm are put to create something new and innovative for the market/customers. This means that firms use innovation as a tool or mechanism to create opportunity for a different product or service. It is the creation of new products that enhances firm performance.

Firms achieve business growth by maximizing profits. Schumpeter argued that firms seeking profits need to innovate because innovation results in increased profits (Sledzik, 2020, Langroodi, 2021). Profits are conceived as a function of innovations (Langroodi, 2021). Schumpeter believed that innovation is the driver of competitiveness, profitability and firm growth. According to Schumpeter, innovation, however, does not necessarily mean inventing new products that have never existed but also entails new methods of doing things, combining methods or processes in order to make different products as well as making use of existing resources to make new products and adapting to new technology (Langroodi, 2021).

Schumpeterian theory of Innovation was used by several researchers such as Kawira (2021) and Kimathi, Mukulu, and Odhiambo (2019) in their studies to show how innovation enhances firm profitability. Schumpeter's theory of innovation

informs the current study of the fundamental role of innovation in firm performance. It highlights how manufacturing firms can use innovation to enhance firm competitiveness, profitability and firm growth. The theory also informs the current study of the various types of innovation that manufacturing firms can use to create value. These types of innovation include product innovation which is the main independent variable of this study. Thus, manufacturing firms can embark on product innovation to enhance their performance. Manufacturing firms allocate existing resources to new uses and come up with new combinations in terms of new products.

B. EMPIRICAL REVIEW

Schumpeter (1934) defines product innovation as "the introduction of a new good; one which consumers are not yet familiar with; such a good has new or improved quality" (Langroodi, 2021). He highlights the role of product innovation in enhancing firm growth. He further notes that competition resulting from new products far outweigh marginal variations in the price of existing products. According to Sidek and Rosli (2013), product innovation is one of the sources of establishment competitiveness that can be applied to spur the quality of products leading to improved firm performance and competitiveness.

a. EMPIRICAL REVIEW AT THE GLOBAL LEVEL

Several empirical studies were done at global level to investigate the effect of product innovation on firm performance. Most studies found that product innovation has a positive significant effect on firm performance (Vukovic, Dukic, Urosevic & Ilic, 2025; Díaz, Guerrero and Heijs, 2024; Timotius, 2023; Faturachman, 2023; Nhung, Linh Tran & Dao, 2023; Hadi, 2023; Seclen-Luna, Fernandez & Cancino, 2023; Fatah & Amin, 2023; Canbul & Cemberci, 2023 Hrivnak, 2022; Xiao, Hajar, Hutahayan, 2022; Vijaya, Moeljadi & Rahayu, 2021; Aydin, 2020; Wahab et al., 2020; Alkhwadeh, 2020).

Product innovation helps to increase firm's sales growth. Modification of the product design and improvement of the existing product helps to improve the quality of the products which attract more customers and enhances customer loyalty (Vukovic et al., 2025; Saka, 2021). This is supported by Hisrich, Abazi-Alili, Dana, Panthi & Abazi-Bexheti, (2019) study which investigated the influence of product innovation on firm performance in Russia using a multi-stage estimation approach. The multistage model facilitated examining the innovative ventures of firms through multi-interrelated factors. The study found that product innovation has a positive influence on firm performance as it enhances the product quality and increases the sales growth. In the same vein, Castillo-Vergara & García-Pérez-de-Lema, (2020). investigated the relationship between product innovation and performance in Chilean industrial SMEs. Results revealed a positive influence of product innovation on the firm performance. This suggests that manufacturing firms can use product innovation to improve the quality of their products and increase sales growth.

Product innovation drives firm performance as it enhances firm profitability. Firms use product innovation to increase sales and reduce costs in the long run thereby enhancing profitability (Nandal, Kataria & Jora, 2021). In the same line, Herlinawati and Machmud (2020) examined the effect of innovation on increasing business performance in Indonesia and found that product innovation has positive and significant effect on the performance of firms in terms of their profitability. Product innovation leads to improvements in products; making continuous progress that helps firms survive and grow faster, more efficiently and more profitably than non-innovators (Herlinawati et al., 2020; Rajapathirana & Hui, 2018, Al-Sa'di et al., 2017). This implies that manufacturing firms can increase their investment in product innovation to enhance their profitability.

The positive relationship between product innovation and firm performance is also confirmed in Alkhawadeh (2020) study. Alkhawadeh (2020) investigated the impact of innovation on the profitability of Jordanian companies. The results of the research indicate that there is a statistically significant positive impact of product innovation on profitability of Jordanian companies. According to Alkhawadeh (2020) innovation improves organizational efficiency and effectiveness thereby maximizing the firm performance. All business innovations directly ameliorate product quality and increase the efficiency and effectiveness of business processes (Rajapathirana et. al., 2018). This suggests that investment in product innovation is a crucial pillar for high productivity and profitability of enterprises.

According to Desrir (2020), product innovation plays an important role in creating value, enhancing firm's core competencies, maintaining existing market share and increasing firm's competitive advantage. This is also confirmed in Al-Battaineh (2018) study on the effect of innovation strategies on the functional performance of SMEs in Hassan Industrial city in India. The study observed that product innovation has a significant positive influence on increasing firm performance and competitiveness. Product innovation enables firms to offer products in line with their core competencies, customer needs and market realities (Al-Battaineh, 2018). Firms can use product innovation to open up new market spaces and create new demand for their products. Thus, product innovation can be a new source of demand which generates economies of scale in the firm's production; thus giving a firm competitive edge (Guevara, Quijia, Ramirez & Acero, 2022; Rajapathirana et al., 2018).

This implies that managers of manufacturing firms should foster innovative ways in their organizations to enhance firm performance. Al-Battaineh (2018) findings are supported by Aydin (2020) study which focused on manufacturing firms in Turkey to ascertain the effect of product innovation on performance. The research data were obtained from manufacturing firms that are widely considered to be innovative. The findings indicated that product innovation positively impacts performance and competitiveness of manufacturing firms. Product innovation drives firm performance as it enhances firm profitability. Firms use product innovation strategy to increase sales and reduce costs in the long run thereby enhancing profitability (Diaz et al., 2024; Nandal, Kataria & Jora, 2021).

Product innovation helps to increase firm's sales growth. Modification of the product design and improvement of the existing product helps to improve the quality of the products which attract more customers (Saleh & Azmin, 2022, Xiao, Hajar & Hutahayan, 2022). Xiao et al. (2022) observed that product innovation is positively and significantly related to firm performance as it helps to improve product quality. In ensuring product innovation, the firm enhances the quality of manufacturing in the elements of the existing products as well as develop fresh items with components that vary completely from the existing ones (Xiao et al., 2022). This means that innovation provides a framework for developing new products or improving existing items' performance and quality.

According to Zand & Rezaei (2020), product innovation strategies have a positive and significant effect on business performance as they enhance customer satisfaction. Product innovation is so visible that the customers can easily feel its presence and this kind of innovation creates a situation where the organization can create a new market for its business; thereby increasing demand and firm performance (Zand et al., 2020). This is supported by Seclen-Luna et al. (2023) study which observed that product innovation positively affects the performance of manufacturing firms as it increases the firms' market share through addressing the customer needs. Similarly, Hadi (2023) observed that product innovation positively influences the performance of SMEs, and this effect is stronger when SMEs have high market orientation.

Product innovation is the key instrument of growth strategies for entering new markets and enhancing firm's competitive edge (Aziz & Bedraou, 2021, Al Mamun, Ali Fazal & SalemeH 2022). This observation is echoed by Wahab, Yusuff, Musa & Hashim (2020) whose study on the influence of innovation on the performance of the manufacturing firms in Malaysia revealed that product innovation positively and significantly influences firm performance. According to Wahab et al. (2020), introducing a new product line-up in an organization helps not only to increase firm's business performance but also its competitiveness (Wahab et al., 2020). Thus, product innovation adds value to the products and consequently helps firms to increase demand for their products and eventually gain competitive advantage. This implies that product innovation can be a new source of demand which generates economies of scale in the firm's production; hence giving a firm competitive edge (Timotius, 2023).

Similarly, Faturachman (2023) observed that product innovation positively affects firm performance (ROA) as it helps to enhance firm competitiveness. Faturachman (2023) observed that product innovation activities help firms to improve their performance by creating products different from competitors. Product innovation also enables companies to survive and succeed in environmental uncertainty (Faturaman, 2023). As firms apply innovation to their products, they will have the opportunity to achieve optimal performance and hence be able to compete with competitors (Hadi, 2023).

Likewise, Hrivnak (2022) found that product innovativeness in terms of new and significantly improved products positively influences firm competitiveness and performance. Hrivnak (2022) observed that firms can use product innovation as a marketing strategy tool to improve the

sales growth and competitiveness through a bypass attack strategy in which the competitor is simply passed, thus improving performance for sustainable business growth.

In contrast, some previous studies found that product innovation does not have a positive impact on the firm performance. For example, Mahmutaj and Krasniqi (2020) investigated the impact of different forms of innovation on firm growth in Kosovo. The study found that product innovation is negatively associated with firm growth. Thus, product innovation had negative effect on the growth of firms that introduced new products. Innovations require huge investment and in the short term a firm may incur considerable increase in costs which negatively affect firm profitability (Mahmutaj et al., 2020). Furthermore, Canh, Liem, Thu & Khuong (2019) observed that although product innovation is beneficial to the firm performance in terms of market share, it does not positively and significantly affect the return on assets (ROA).

b. EMPIRICAL REVIEW AT THE REGIONAL LEVEL

At the regional level, empirical studies on product innovation and firm performance relationship were also carried out in countries such as Nigeria, Ghana, Uganda, Cote d'ivoire, Ethiopia, Somalia, Kenya and South Africa. Findings in most of these studies indicate that product innovation has a positive and significant effect on firm performance (Wanyoike & Kinyua, 2025; Gyadu, 2025; Ehiaguina, Sijibomi, Yakubu, & Ediuku, 2025; Ojenike, 2024; Kumera, Amentie & Bali, 2024; Agu & Obi, 2024; Abereola & Ogundele, 2024; Adhaya, Wainana & Odock, 2024; Kanire, Ngereza & Mdoe, 2024; Mboga, Datche & Kising'u, 2023; Jummai & Ande, 2023; Kimani & Simon, 2023; Ayinaddis, 2023; Benjo & Mwasijaji, 2023; Yator & Kipchumba, 2023; Nyamao & Tari, 2023; Kiprotich, Gachunga & Bonke, 2023; Kanyi & Kihara, 2022; Kithinji & Mitsuko, 2022; Saka, 2021; Ikpe et al., 2021; Nakato, Ngigi & Andemariam., 2021; Kawira, 2021). Few studies such as Kiveu (2017) and Mensah & Aquah (2017), however, found that product innovation does not significantly affect firm performance.

Product innovation, as noted by Fidelia and Ogor (2022), helps firms to increase customer satisfaction; thus increasing firm sales and profitability. New or significantly improved products contribute to customer satisfaction or protect the firm against market threats, which in turn lead to an increase in sales (Fidelia et al., 2022). This observation is supported by Saka (2021) study which investigated the influence of innovation strategy on organizational performance of Fintech firms in Nigeria. The study found that product innovation has a positive and significant effect on the profitability of Fintech enterprises. This means that product innovation is a significant and important way of achieving organizational performance. Innovation improves the quality of products and this in turn increases customers' satisfaction and demand for the product (Abereola et al., 2024; Ojenike, 2024; Saka, 2021). Product innovation enhances the product value and this in turn enables the firm not only to build strong customer loyalty, thereby retaining its customers but also attracting new customers; thus increasing market share (Gyadu, 2025; Nyamao et al. 2023;

Nasimiyu, 2021). This results in more sales and higher firm performance.

Similar observations were noted in Oduro (2019) study which investigated the effect of types of innovation on performance of SMEs in the Cape Coast Metropolis of Ghana. Results of the study demonstrated that product innovation positively impacts SMEs' performance. Product innovation positively relates to performance in reference to customer satisfaction, market share, sales and competitiveness (Oduro, 2019). The customers drive the firms' business, and firms are obliged to follow customer needs and demands and this is achieved through product innovations (Nasimiyu, 2021). Product innovation, as observed by Ayinaddis (2023) helps firms to take advantage of being the first to satisfy customers' needs. This means that quality products enhance the firms' competitive advantage. In other words, manufacturing firms can use product innovation to enhance customer satisfaction, competitiveness and improve their profitability. Similarly, as observed by Yator et al. (2023) and Ehiaguina et al. (2025), firms gain an edge over the competitors when they produce new products with technical specifications.

In the same vein, Benjo and Mwasijaji (2023) study in Kenya observed that product innovation positively influences the performance of women-led small and medium enterprises through increasing customer satisfaction. According to Benjo et al. (2023), new products have beneficial effects not only on customer attraction but also operational efficiency in micro and small enterprises. This implies that product innovation practices have a considerable positive impact on the performance of women-owned enterprises.

Likewise, Agu and Obi (2024) found that product innovation helps firms to create quality products and hence increase their market share, profitability and competitiveness. Product innovation, according to Agu et al. (2024) helps manufacturing firms to build up customer product satisfaction, attractiveness and hence customer loyalty.

Similarly, Adhaya, Wainana and Odock (2024) found that product innovation has a positive effect on the performance of manufacturing firms in Kenya through enhancing customer satisfaction. Product innovation positively influences the performance of most manufacturing firms in Kenya through the frequent remodelling of the products, interacting with consumers cleverly, reviewing operational processes and redesigning products (Adhaya et al., 2024). Product innovation in terms of new product development, product improvement and product line extension has significant and positive impact on firm performance in terms of sales growth, customer satisfaction, profitability and return on equity (Kanire et al., 2024).

Firms that introduce new products do not only increase their profitability in the long term but also productivity or efficiency as observed by Hu, Danso, Mensah and Addai (2020) and Adom, Boateng, & Gnankob (2019). Hu et al. (2020), for example, explored the influence of innovation type on the firm performance in Ghana. The findings of Hu et al. (2020), for example, revealed that product innovation has statistically significant impact on the performance of hotel firms in terms of productivity. According to Hu et al. (2020), product innovation is, in particular, a vital tool for efficiency and therefore managers of the firms need to pay attention to

enhancing innovation ability as it is the most significant successful element for innovation achievement.

The positive product innovation and firm performance relationship is also confirmed by Hongbo and Kofffi (2020) study in Cote d'ivoire which investigated the effect of innovation on the firm performance and competitiveness of small and medium enterprises. Findings revealed that product innovation positively and significantly contributes to SME performance. The findings suggest that SMEs operating in developing countries must embrace innovation and continuously seek ways to be innovative to remain competitive and profitable (Hongbo et al., 2020). This implies that product innovation is the critical driver for firm performance. Product innovation leads to the achievement of a competitive advantage, which enables firms to outperform their rivals due to the advantage they possess (Hongbo et al., 2020; Fidelia et al., 2022).

Likewise, investment in new products enables firms to venture into new markets and gain competitive advantage as noted by Nakato et al. (2020) and Nasimiyu (2021). Nakato et al. (2021), for example, examined the effect of product innovation on firm performance in Uganda and found that product innovation positively affects the firm performance. According to Nakato et al. (2021), firms, which constantly endeavor to invest in different new product designs and improve on the existing products, gain a competitive advantage. Similarly, Ikpe et al. (2021) investigated the role of innovation strategy on the performance of Femine Flour Mill Calabar in Nigeria and the findings revealed that product innovation strategies have a significant and positive relationship with firm performance and competitiveness.

Although product innovation is extremely costly in the short run as it requires huge amount of resources, its long term benefits for the firm in terms of cost reduction are enormous (Young, Ediri & Daniel, 2017; Issau, Acqua & Hamidu, 2021). This means that product innovation helps firms to reduce cost of production and increase returns in the long run. Young et al. (2017), for example, examined the impact of strategic innovations on organizational performance of oil and gas firms in Delta and River state in Nigeria. The study found that product innovation has a significant and positive relationship with organizational performance. According to Young et al. (2017), product innovation reduces the costs and increase the returns. Product innovation helps to improve the firm's production capacity and this in turn enables the firm to exploit economies of scale (Young et al., 2017). This implies that manufacturing firms which embark on product innovation are able to reduce their production costs in the long run.

According to Namisiyu (2021), product innovation helps firms to increase customer satisfaction and gain competitive advantage. New unique products increase the demand for the products and improve the customer experience. This observation is supported by Mbogori, Gichohi and Moguche (2018) study which examined the effect of product innovation on performance of the cement-manufacturing firms in Kenya and findings indicated that product innovation has a positive and significant effect on performance of the cement-manufacturing firms as it helps these firms to achieve differentiation and increase customer satisfaction (Mbogori et al., 2018). This means that product innovation helps the firms

to achieve product differentiation which distinguishes the firm's products from those of the competitors.

These findings are supported by other researchers such as Machuki and Wasike (2018), Abdilahi and Hassan (2017) and Kimathi et al. (2019). Machuki et al. (2018), for example, carried out a study on Haco Tiger Brands in Kenya to ascertain the effect of product innovation on firm performance. The results revealed that product innovation is positively and significantly related with the firm performance. Product innovation is fundamental to the firm as it contributes significantly to their sales growth and helps to accelerate the total company sales revenue (Machuki et al., 2017). Likewise, Abdilahi et al. (2017) carried out a study in Hargeisa, Somaliland to establish the effect of innovation on SME performance and the findings indicated that product innovation significantly impacts SME performance.

Furthermore, firms can use innovation to create extra value in their products and enhance quality (Saka, 2021; Kawira, 2021). Similarly, Matekanya and Moyo (2022), in their study on the innovation as a driver for firm performance in South Africa found that product innovation has a positive and significant effect on performance for firms. Matekanya et al. (2022) observed that the introduction of new products improves quality and promotes firm performance.

This observation is supported by Kiilu and Kithae (2020) study which investigated innovation processes in SMEs in Nairobi and the results of the study ascertained a significant positive effect of product innovation on the firm performance through enhancing quality. This implies that product innovation achieved through introduction of new or improved product enhances product quality which is fundamental for long term firm success and profitability.

Customers always look for improved brands, and with innovation, a firm is able to find out better ways of manufacturing high quality products which in turn result in higher sales and profits (Fidelia et al., 2022; Aziz, 2021). Thus, product innovation positively contributes to firm growth. This positive product innovation and firm relationship is also confirmed in Majimbo et al. (2020) study which investigated the effect of strategic innovation on the performance of the oil marketing firms in Nairobi City. Findings indicated that product innovation has a positive and significant impact on the performance of oil marketing firms in Kenya. When the firms use innovation to introduce new products or improve the existing products, this attracts more customers and hence increase in sales (Majimbo et al., 2020).

In the same vein, Kawira (2021) investigated the effect of product innovation on the performance of micro, small and medium enterprises in Kenya. The results of the study ascertained a significant positive effect of product innovation on the performance of MSMEs. Similarly, Kimathi et al. (2019) investigated the effect of innovation on the performance of enterprises in Kenya. The regression results indicated that innovation had positive and significant effect on the performance of small and medium sized enterprises in Kenya. Findings further showed that SMEs in Kenya had applied product innovations to improve products and services in order to boost their performance. This implies that the firms that adopt latest innovations in product production perform better than those that do not.

In contrast, some previous studies found that product innovation does not significantly affect firm performance. Mensah et al. (2017), for example, carried out a study to examine the influence of types of innovation on firm performance in the Sekondi-Takoradi Metropolis, Ghana. The findings revealed that the effect of product innovation on firm performance was not significant. This is probably due to high cost associated with product innovation that lowers the firm profitability (Mensah et al., 2017). Similar findings were observed by Masero, Sang and Kilu (2023). In the short run, product innovation investments might cause possible losses at first.

Likewise, Kiveu (2017) examined the effect of innovation on firm competitiveness. The study specifically investigated the effect of different types of innovation on firm competitiveness in Kenya and the findings indicated that product innovation does not have significant effect on firm competitiveness. In the same vein, Kenea (2020) carried out a study in Ethiopia to establish the role of innovation strategy in improving organizational performance and productivity with specific reference to Heineken beverage industry. The findings revealed that the innovation strategy systems in Heineken beverage industry were not effective and that product innovation strategy is not contributing to the organizational productivity and performance.

In brief, the review of the related literature on the relationship between product innovation and firm performance shows mixed results. Several previous studies at both global and regional level found that product innovation has a positive and significant influence on the firm performance. Product innovation positively influences firm performance as it enhances quality, customer satisfaction, value creation, productivity and competitiveness thereby increasing market share, sales growth and profitability. In contrast, few studies found that product innovation does not significantly affect firm performance as it is disruptive and the high cost associated with such innovations erode the firm profits.

III. RESEARCH METHODOLOGY

The paper used a desk study review methodology where relevant empirical literature was reviewed to identify main themes.

It is necessary to follow a precise and reproducible set of procedures to improve the quality of the literature review process (Natalicchio, Ardito, Savino, & Albino, 2017). As such, this study followed PRISMA (Preferred Reporting Items for Systematic Review and Meta-Analysis) method. PRISMA method of critical literature review has been used by other studies (Sikandar & Abdul Kohar, 2021). The PRISMA consists of four steps namely identification, screening, eligibility, and inclusion. This study, therefore, followed these steps to select the articles for review.

In the first stage (identification stage), the authors identified the databases, search terms and search criteria. The study mainly utilized Elsevier, Emerald Insight, and Sage databases for searching the articles. These databases consist of rich, highly relevant and quality articles. These databases were applied by several researchers to ensure and enhance the

completeness of the publications (Marasco, Martino, Magnotti & Morvillo (2018). The authors focused to search articles on product innovation and firm performance simultaneously. Thus, the search terms were identified as ‘product innovation’ and ‘firm performance’. The search criteria were developed by combining the main terms with AND operative and similar words combined with OR operative. Accordingly, search terms were constructed into the first search string as [“product innovation” AND “firm performance”]. Based on the articles collected from databases, the authors prepared a worksheet including title, keywords, authors’ names, journal name, etc. The duplicates were searched and accordingly removed from the worksheet.

In the second stage (screening stage), selected articles were matched with the inclusion and exclusion criteria. The inclusion criteria for the current study were the “empirical studies”, published in “peer-reviewed journals” in “English” on “product innovation and firm performance” during the “2017-2025” period. The authors specifically focused on peer-reviewed journal articles as the use of peer-reviewed journal articles validates the knowledge with the highest scientific impact and reduces the risks of analyzing articles with limited internal validity. In terms of time framework, many reviewed papers on product innovation analyzed the articles up to 2017 (Nduati, 2020), and to the best of our knowledge, limited attention has been paid to the review of the articles after 2017. Hence, the current study focused on the articles in the 2017-2025 period. The authors went through the title and abstract of each article and excluded the articles that did not reach the inclusion criteria.

In the third stage (eligibility stage), the remaining articles were analyzed based on the full text of each article. In this stage, the authors evaluated the methodological reporting of each article as the focus of this study was on empirical studies. The current study evaluated the population, sample, methodology, methods, design and context of each previous empirical study. Accordingly, the authors identified some studies based on qualitative reviews, perspectives, and ambiguous methods and were discarded.

This methodological process generated 83 articles. In the final stage, the authors included these articles for the critical empirical review and analyzed each article using the categories such as the published journal, context, unit of analysis and the findings. The methodological process is summarized in Figure 1.

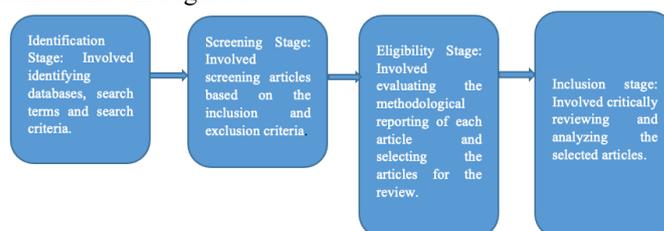


Figure 1: PRISMA Methodological Process

IV. RESULTS AND DISCUSSION

The aim of this study was to investigate the effect of product innovation on the performance of manufacturing firms

by analyzing and synthesizing the existing empirical literature. From the review of the empirical studies, the findings at both global level and regional level show mixed results. The findings of most studies, however, indicate that product innovation positively and significantly affects the performance of manufacturing firms (Wanyoike et al. 2025; Gyadu, 2025; Ehiaguina, 2025; Ojenike 2024; Kumera et al., 2024; Agu et al., 2024; Adhaya et al., 2024; Kanire et al., 2024; Diaz et al., 2024; Mboga et al., 2023; Jummai et al., 2023; Kimani et al., 2023; Ayinaddis, 2023; Benjo et al., 2023; Kiprotich et al., 2023, Timotius, 2023; Faturachman, 2023; Nhung et al., 2023; Hadi, 2023). The findings show that the manufacturing firms which embark on product innovation register a better performance than non-innovative firms. Based on the findings from several previous empirical studies, product innovation has a positive effect on firm performance as the modification of the product design and improvement of the existing product helps to improve the quality of the products which attract more customers and hence more sales. The findings indicate that product innovation positively influences the performance of manufacturing firms through cost reduction. This implies that product innovation helps firms to reduce cost of production and increase returns or profitability in the long run.

According to the findings of the empirical studies, product innovation has a positive effect on the performance of manufacturing firms as it enables these enterprises to offer products in line with their core competencies, client needs and market realities. Firms can use product innovation to open up new market spaces and create new demand for their products. This means that product innovation can be a new source of demand which generates economies of scale in the firm's production; thereby giving a firm competitive edge. In other words, new unique products increase the demand for the products and improve the customer experience.

Thus, product innovation helps firms to increase customer satisfaction which in turn leads to increase in firm sales and profitability. Product innovation, similarly, positively impacts firm performance as it leads to improvements in products; making continuous progress that helps firms survive and grow faster, more efficiently and more profitably than non-innovators. This means that manufacturing firms can increase their investment in product innovation to enhance their efficiency and profitability. In other words, investment in product innovation is a key pillar for high productivity and profitability of firms.

The findings from the empirical review also indicate that product innovation plays an important role in creating value, enhancing firm's core competencies, maintaining existing market share and increasing firm's competitive advantage. This suggests that manufacturing firms can embark on product innovation strategy to enhance their competitiveness.

On the contrary, however, findings of other few empirical studies indicate that product innovation does not have a positive impact on the firm performance (Masero et al., 2023; Kim-Soon et al., 2017; Kenea, 2020). The findings show that the effect of product innovation on firm performance is insignificant. The studies observed that product innovation is negatively associated with firm growth. This is due to high cost associated with product innovation that lowers the firm profitability (Masero et al., 2023). In the short run, product

innovation investments might cause possible losses which negatively affect the firm profitability. Innovations require huge investment and in the short term a firm may incur considerable increase in costs which lower firm profitability.

V. CONCLUSION

This study sought to investigate the effect of product innovation on the performance of manufacturing firms by synthesizing the existing literature in the 2017-2025 period. According to the research findings, most studies have revealed that product innovation has a significant positive effect on the performance of manufacturing firms. Product innovation has a positive effect on firm performance as it helps to improve the quality of the products which attract more customers and hence more sales. Product innovation also positively affects the performance of manufacturing firms as it helps the firms to gain competitive advantage. It enables the manufacturing firms to offer products in line with their core competencies, customer needs and market realities. Thus, product innovation helps the manufacturing firms to increase customer satisfaction which in turn implies more sales.

Few studies, however, found that the effect of product innovation on firm performance is not significant. Few studies, further, found that product innovation is negatively associated with firm growth especially in the short term due to high cost associated with product innovation that lowers the firm profitability. Due to the contradictory or inconsistent findings, further research on the effect of product innovation on firm performance needs to be done. Future research can also investigate the effect of other dimensions of innovation such as marketing innovation on firm performance.

VI. RECOMMENDATIONS

In line with the findings, the study recommends that manufacturing firms should constantly endeavor to invest in different new product designs and improve on the existing products to gain a competitive advantage. They should embark on product innovation to improve the quality of their products which will in turn help to boost their performance. Manufacturing firms need to increase their investment in product innovation to enhance the product value. This will, in turn, enable the firms not only to build strong customer loyalty, thereby retaining their customers but also to penetrate into new markets; thus increasing market share and profitability.

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