

The Effect of Organizational Innovation Strategies on the Performance of Manufacturing Firms in Malawi

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ABSTRACT

The purpose of this study was to examine the effect of organizational innovation strategies on the performance of manufacturing firms in Malawi. A descriptive-explanatory research design was used. The study used a stratified random sampling to draw a sample of 197 manufacturing firms from a population of 388 licensed and registered manufacturing firms. Structured questionnaires were used to collect primary data from the owners and managers of manufacturing firms. Data analysis was conducted using the SPSS software program version 28.0. The study used both descriptive and inferential statistical analyses. In the descriptive statistical analysis, frequencies, percentages, mean scores and standard deviation were used. In the inferential statistical analysis, the study used linear regression to examine the effect of organizational innovation strategies on the performance of manufacturing firms in Malawi. The study found that organizational innovation strategies had a positive and significant effect on the performance of manufacturing firms in Malawi. Manufacturing firms that implemented organizational innovation strategies registered a greater performance in terms of sales growth than the manufacturing firms that did not implement organizational innovation strategies. The study recommends that manufacturing firms should implement organizational innovation strategies to increase their performance. They should invest in new organizational methods or significantly improve the existing organizational methods. Manufacturing firms need to invest in new organizational innovations as such innovations help the firms not only to reduce costs but also to increase efficiency, flexibility, firm productivity and customer satisfaction.

KEYWORDS: Innovation, Organizational Innovation Strategies, Performance, Manufacturing Firms.

1. INTRODUCTION

Most developed countries transformed their economies through manufacturing. According to the United Nations Industrial Development Organization (UNIDO), manufacturing plays a pivotal role in driving the economies by creating jobs, incomes, innovations and multiplier effects, which in turn ignite other parts of the economy [1]. Manufacturing also contributes to the economic growth of many countries by improving the trade balance through the processing of goods for export and the replacement of imports [1].

The manufacturing sector contributes significantly to the gross domestic product (GDP) and exports of developed countries. For example, in 2023, the sector contributed 15% to the GDP of developed countries and 67% to the exports of developed countries [2]. Similarly, in Sub-Saharan Africa, the manufacturing sector positively contributes to the economic development of the region. In 2023, for example, manufacturing contributed 11% to the GDP and 22% to the exports of Sub-Saharan Africa [2]. Likewise, in Malawi, the manufacturing sector contributed 8% to the country's exports in 2023 and accounted for 9% to the GDP in the same year [2].

However, developing countries such as Malawi have experienced significant declines and fluctuating growth rates in manufacturing output since 2005 [3]. For example, Malawi's manufacturing sector's contribution to GDP in 2023 was 9%, and its highest value was recorded in 1992 at 19.05% [3]. This decline is attributed to the various challenges manufacturing firms face in their business environment. Business firms experience increasing levels of uncertainty due to rapid changes in the operating environment and hence the need for such firms to innovate to spur their performance and overcome some of the challenges they face [4].

According to the Organization for Economic Co-operation and Development (OECD), organizational innovation involves the implementation of new organizational methods in the firm's business practices, workplace organization or external relations [5]. Organizational innovation entails the implementation of new methods for organizing procedures and routines for the conduct of work, introduction of management systems, business re-engineering, lean production, and quality-management systems [4,5]. Organizational innovation includes ideas of work design, flow of work, hierarchy, functional lines, training and development of employees [5]. In manufacturing firms, organizational innovation entails technological improvements, new and better methods

of production, as well as new ways of doing things. Examples of organizational innovation would be the introduction of training programs for employee development and improved employee retention [4,5]. Thus, organizational innovations entail all the administrative efforts of renewing the organizational procedures and systems to promote teamwork and information sharing.

Firms implement organizational innovation strategies to improve organizational performance through cost reduction as well as improvement in employee satisfaction [4]. Thus, manufacturing firms can use organizational innovation strategies to increase efficiency, thereby reducing the firm's operational costs, such as transaction costs and administrative costs. Organizational innovation also enhances employee morale through the new organizational culture. In addition, organizational innovation strategies enable the firms to remain competitive in their industry [4].

Firm performance entails the organization's effective and efficient use of resources to develop capabilities in order to meet the objectives [6]. Firm performance can be measured in terms of return on investment, sales volume, profitability, total assets, employment size, capital employed and market share, among others [6]. Among the indicators of business performance, sales growth is usually easier compared to other indices [6].

Malawi's economy is characterized by low levels of industrialization. According to the Malawi Confederation of Chambers of Commerce and Industry [7], the manufacturing sector remains relatively small and underdeveloped. Many manufacturing firms in Malawi lack the financial resources to innovate. As such, they are less innovative and remain uncompetitive due to their low levels of investment in innovation systems and new technologies [3]. Manufacturing firms in Malawi face challenges such as access to finance, macroeconomic instability, lack of technological readiness, high cost of doing business and globalization [7].

Manufacturing firms in Malawi contribute to the economic development of the country through GDP, exports and employment generation. For example, the manufacturing sector contributed 8% to the country's exports in 2023 and accounted for 9% of Malawi's total GDP [3]. However, despite this contribution, manufacturing firms in Malawi are stagnant in terms of growth and have registered dismal and fluctuating performance over the years [7]. In fact, the manufacturing annual growth rate has declined from 7.6% in 2019 to 4.7% in 2022 and 0.8% in 2024 [8]. Manufacturing sector's contribution to GDP has also declined from 19.05% in 1992 to 9% in 2023 [2].

Manufacturing production in Malawi has markedly fallen, as evidenced by the closing down of several manufacturing firms in the last decade, citing lack of profitability on account of high costs of operations [9]. The decline in manufacturing production and the dismal performance of manufacturing firms are attributed to challenges these firms face, such as high cost of finance, high tax rates, volatile macroeconomic environment, limited technology and stiff competition [7]. As such, manufacturing firms should innovate not only to overcome some of the challenges they face but also to survive and compete in a dynamic business environment. They need to invest in various innovation systems, such as organizational innovation.

The relationship between organizational innovation and firm performance has been investigated in other countries, especially in developed countries [10-12]. Although previous studies were conducted in other countries on the relationship between organizational innovation and firm performance, little attention has been paid to the effect of organizational innovation strategies on the performance of manufacturing firms with firm size as a moderating variable; hence, the need for this study. The main objective of this study was, therefore, to investigate the effect of organizational innovation strategies on the financial performance of manufacturing firms in Malawi.

2.0 LITERATURE REVIEW

2.1 SCHUMPETERIAN THEORY OF INNOVATION

According to Schumpeterian theory, innovation occurs when the entrepreneur introduces a new organization into the industry, introduces a new product or a new production system or opens a new market [13]. The Schumpeterian theory of innovation posits that entrepreneurship entails combining resources in a new way, such as introducing new products, new methods of production, new organizations and new sources of raw materials or inputs [13]. Thus, innovators carry out new combinations of factors of production and introduce new organizations, new products, new processes and new markets.

According to Schumpeterian theory, innovation essentially involves the process of "creative destruction," which creates wealth through the disruption of existing firms by the introduction of new organizations, new products, new processes or new markets [13]. Creative destruction entails industrial mutation in which organizations revolutionize the economic structure from within, by destroying the old structure and creating a new one [13]. In 'creative destruction', firms innovate by using the resources and systems to create new organizations, new products and new markets. This means that firms use innovation as a tool to create new organizations and products for customers.

Schumpeterian theory of innovation stresses that innovation is the driver of firm growth, profitability and competitiveness. Organizations achieve growth by maximizing profits. Schumpeter argued that firms that need to maximize profits have to innovate their products and organizational systems because innovation results in increased profits [13]. Thus,

profits are regarded as a function of innovation. Schumpeter believed that only innovation can help the organization achieve better performance and keep the organization at a comfortable position [13].

Schumpeter's theory of innovation informs the current study of the various types of innovation that manufacturing firms can use to create value and achieve high performance. These types of innovation include organizational innovation, which is the main independent variable of this study. The theory also informs the current study of the critical role of innovation in firm performance. It highlights how manufacturing firms can use innovation to enhance profitability and firm growth.

2.2 ORGANIZATIONAL INNOVATION

Organizational innovation involves the implementation of new organizational methods in the firm's business practices, workplace organization or external relations [5]. Organizational innovation strategy entails the plan for implementing new methods for organizing procedures and routines for the conduct of work, introduction of management systems, business re-engineering, lean production, and quality-management systems [5]. It also refers to the plan for the implementation of new methods for allocating responsibilities or tasks. Organizational innovation includes ideas of work design, flow of work, hierarchy, functional lines, training and development of employees [5]. In manufacturing firms, organizational innovation entails technological improvements, new and improved methods of production, and new ways of doing things [4,5]. Examples of organizational innovation would be the introduction of training programs for employee development and improved employee retention [4,5]. Thus, organizational innovations entail all the administrative efforts of renewing the organizational procedures and systems to promote teamwork and information sharing.

Firms implement organizational innovation strategies to improve organizational performance through cost reduction as well as improvement in employee satisfaction [4]. Thus, manufacturing firms can use organizational innovation strategies to increase efficiency, thereby reducing the firm's operational costs, such as transaction costs and administrative costs. Organizational innovation also enhances employee morale through the new organizational culture [4].

2.3 EFFECT OF ORGANIZATIONAL INNOVATION ON FIRM PERFORMANCE

Previous empirical studies have investigated the relationship between organizational innovation strategies and firm performance. At the global level, studies such as Chen *et al.* [10], Suryano *et al.* [11], Fatah and Amin [14] and Seclen-Luna *et al.* [15] found that organizational innovation strategies positively and significantly influence firm performance, while other studies such as Mahmutaj and Krasniqi [16] and Rajapathirana and Hui [17] found that the effect of organizational innovation on firm performance is insignificant.

Organizational innovation helps firms to build their technological capabilities, which in turn enhance their performance [18]. It enhances flexibility and creativity, which in turn facilitates developments of technological innovation [18,19]. This observation is supported by Chen *et al.* [10], who found that organizational innovation strategies positively influence the firm's performance through strengthening technological abilities. Thus, firms that implement organizational innovation strategies register better performance than those that do not adopt organizational innovation strategies. Organizational innovation positively influences the performance of manufacturing firms by increasing their productivity through greater efficiency [15]. Similar observations were confirmed in Suryano *et al.* [11].

On the contrary, studies such as Kim-Soon *et al.* [20], Rajapathirana *et al.* [17] and Mahmutaj *et al.* [16] found that organizational innovation strategies do not have any significant impact on firm performance. Kim-Soon *et al.* [20], for example, investigated the relationships between different types of innovation and the financial and operational performance of firms in Malaysia. The study found that organizational innovation is positively but not significantly related to firm financial and operational performance. Likewise, Rajapathirana *et al.* [17] found that organizational innovation does not have a significant effect on firm performance. Mahmutaj *et al.* [16] also found in their study on the impact of different forms of innovation on sales growth of manufacturing firms in Kosovo that organizational innovation is not significantly related to sales growth of manufacturing firms. This is probably due to the intangible nature of organizational innovation and the high cost associated with the implementation of organizational innovation [16].

The relationship between organizational innovation and firm performance has also been given attention at the regional level. Studies such as Gyadu [21], Masero *et al.* [22], Ayinaddis [12], Iganatius *et al.* [23], Kwajaffa [24], Kugurue *et al.* [25], Odhiambo [26], Saka [4], Hu *et al.* [27], Majimbo and Namusonge [28], and Hongbo and Koffi [29] found that organizational innovation positively and significantly affects firm performance. In contrast, other studies, such as Yusheng and Ibrahim [30], found that organizational innovation does not significantly influence firm performance.

Organizational innovation strategies help to increase a firm's effectiveness, customer satisfaction, profitability and sustainable competitiveness as noted by Odhiambo [26] and Saka [4]. Saka [4], for example, investigated the influence of innovation strategy on organizational performance in Nigeria and found that organizational innovation strategies have a positive and significant effect on the profitability of firms. Thus, organizational innovation creates a competitive advantage for the firm,

and this makes consumers willing to pay for the improved quality product, thereby resulting in customer satisfaction and competitiveness [4]. This implies that manufacturing firms that adopt organizational innovation strategies are expected to be more competitive and profitable.

Similarly, Iganatius *et al.* [23] investigated the effect of organizational innovation strategy on organizational performance in Nigeria, and the results indicated that organizational innovation strategy has a positive and significant effect on organizational performance. Similarly, Odhiambo's [26] study on the relationship between organizational innovation and performance of nonprofit organizations in Kenya found that organizational innovation has a positive and significant effect on firm performance. In the same line, Hu *et al.* [27] examined the influence of innovation type on the performance of hotel firms in Ghana, and the results show that organizational innovation has a statistically significant impact on the performance of firms. Hu *et al.* [27] posit that the incorporation of knowledge management practices and workplace organization procedures is crucial to fostering firm performance.

According to Young *et al.* [31], organizational innovation strategies can help firms reduce their costs and improve returns. Young *et al.* [31], for example, examined the impact of strategic innovations on the organizational performance of oil and gas firms in Nigeria, and the findings revealed that organizational innovation has a positive relationship with organizational performance. Organizational innovation helps to improve work procedures, which in turn make the operations efficient, thereby lowering costs and increasing the returns [31]. Organizational innovation can also increase firm performance by decreasing the transaction cost and administrative cost [31]. Thus, manufacturing firms can use organizational innovation strategies to increase efficiency and lower costs.

Masero *et al.* [22] observed that organizational innovation is positively and significantly associated with performance due to the fact that new business practices, changes in organizational structure and improved external relations bring about additional benefits that enhance firm performance. The positive relationship between organizational innovation strategies and firm performance is also confirmed in other studies, such as Oduro [32] and Hongbo *et al.* [29]. Oduro [32], for example, investigated the effect of types of innovation on firm performance in Ghana, and the findings revealed that organizational innovation has the most considerable positive effect on firm performance. Similarly, Hongbo *et al.* [29] conducted a study to examine the effect of innovation on the performance and competitiveness of small and medium enterprises in Côte d'Ivoire. The results revealed that organizational innovation is positively and significantly related to SME performance. When organizations engage in new methods in terms of the way they carry out their activities, the result is that the firms would then be able to churn out better products and services, which leads to increased performance [29]. This implies that manufacturing firms that implement new ways of conducting business practices register higher performance.

According to Saka [4], firms that embark on organizational innovations by investing in research and development and flexible work systems, such as team working, achieve greater performance. Supporting this observation is Majimbo *et al.* [28] study, which investigated the effect of strategic innovation on the performance of oil marketing firms in Kenya and found that organizational innovation has a strong and positive effect on the firm's performance. Organizational innovation has a strong impact on firm performance since organizations are able to support teams working on different projects [28]. The study recommends that the teams working on various projects in the oil marketing firms should be supported by the management in terms of allocation of resources. This will motivate the employees in the teams to come up with commercially viable products. This implies that teamwork is essential for organizational innovations and hence greater firm performance. Findings of other previous studies, however, revealed contrasting results. For instance, Yusheng *et al.* [30] observed that organizational innovation does not have a significant effect on firm performance. This is so because the implementation of organizational innovation strategies may be costly, disruptive and may face employee resistance [30].

Based on the main objective of the study and the literature reviewed, the following null research hypothesis was, therefore, tested:

H1: Organizational innovation strategies do not have a positive and significant effect on the financial performance of manufacturing firms in Malawi.

In summary, the previous studies on the relationship between organizational innovation and firm performance show inconsistent results. Some previous studies at both global and regional levels found that organizational innovation strategies have a positive and significant effect on the firm's performance through enhancing technological capabilities, effectiveness, efficiency, productivity, cost reduction, customer satisfaction, competitiveness and organizational learning. On the other hand, other studies found that organizational innovation strategies do not significantly influence the firm's performance, as the implementation of such innovations is costly and disruptive.

Although some previous studies have examined the relationship between organizational innovation and firm performance in other countries, little attention has been paid to the effect of organizational innovation strategies on the

performance of manufacturing firms, with firm size as a moderating variable; hence, the need for this study. In other words, most previous studies simply investigated the effect of organizational innovation on firm performance without accounting for the interaction with firm size. This partly explains why previous studies on the relationship between organizational innovation and firm performance produced mixed results. The current study introduced firm size as a moderating variable influencing the effect of organizational innovation strategies on firm performance. Inclusion of firm size as a moderator improves the research framework on the relationship between organizational innovation strategies and the performance of manufacturing firms.

2.4 CONCEPTUAL FRAMEWORK

The conceptual framework, which shows how the dependent variable in this study is related to the independent variable, is depicted in Figure 1.

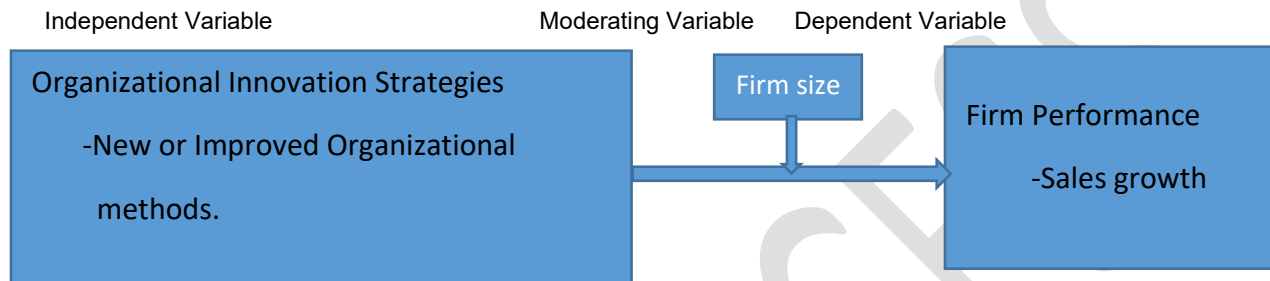


Figure 1: Conceptual framework.

The conceptual framework in Figure 1 entails organizational innovation strategies as the independent variable, firm performance (sales growth) as the dependent variable and firm size as the moderating variable. This conceptual framework is different from the previous frameworks as it includes firm size as the moderator. This conceptual framework is based on the theories adopted in this study as well as the empirical literature that has been reviewed. The Schumpeterian theory of Innovation informs this conceptual framework as it supports the organizational innovation strategies, which are the independent variable of this study.

Organizational innovation involves the implementation of new or significantly improved organizational methods in the firm's business practices, workplace organization or external relations [5]. In the current study, organizational innovation entails new or significantly improved organizational methods that manufacturing firms in Malawi implemented. Organizational innovation as a strategy was in this study measured as the number of new or significantly improved organizational methods (such as training, team-working and restructuring) a manufacturing firm has implemented in the five-year period (2019-2024). Such measurement is based on the OECD manual [5].

Firm performance (dependent variable) was measured in this study by sales growth. Sales growth was measured as a percentage change in sales in the five-year period during which organizational innovation strategies were implemented. Thus, data on actual sales were collected, and then the percentage change was calculated for each manufacturing firm. Firm size is a moderating variable in the framework. It affects both innovation and firm performance. In the current study, firm size was measured by the total number of permanent employees each manufacturing firm has. Accordingly, small firms have 5-20 employees; medium-sized firms have 21-99 employees, and large firms have 100 or more employees [33].

3.0 METHODOLOGY

In terms of research paradigm, this study adopted a positivist paradigm. In a positivism paradigm, the researchers follow rigorous scientific procedures to establish knowledge [34]. According to a positivism research paradigm, social phenomenon is observable and measurable, and it is based on quantitative data [34]. A positivistic approach was used in the current study because this study investigated organizational innovation and firm performance variables, which are observable and measurable. The study used quantitative methods.

The target population was 388 manufacturing firms. Yamane's (1967) formula, as cited in Adam [35], was used in this study to calculate the sample size at 95% confidence level.

$$n = \frac{N}{1 + N(e)^2}$$

Where n is the sample size,

N is the population size,

and e is the level of precision.

$$n = \frac{388}{1 + 388 (0.05 \times 0.05)}$$

$$n = 197$$

Thus, the sample size was 197 manufacturing firms. This sample was distributed among various manufacturing subsectors and was drawn from the cities of Mzuzu, Lilongwe and Blantyre. A stratified random sampling technique was used to select manufacturing firms from the three cities. Stratification was carried out because manufacturing firms are heterogeneous in terms of size and the industrial activities they are involved in. In other words, manufacturing firms were stratified according to size and the nature of their industrial activities. Thus, stratification was done to ensure that each sector had a chance of being represented in the study. Manufacturing firms were then selected randomly from each stratum to eliminate bias. The current study used stratified sampling as this technique helps to yield a more representative sample [34].

A structured questionnaire was used as the main instrument to collect primary data on the manufacturing firms in Malawi in terms of their bio-data, innovation strategies and firm performance. The questionnaire was self-administered. The choice of questionnaire in this study is in line with the positivism research paradigm. The study used the questionnaire as it helped to reduce the researcher's bias since there was no researcher's influence on how respondents filled in the responses.

The reliability of the questionnaire was calculated in this study using Cronbach's alpha [35]. The current study used 0.7 as a cut-off point of reliability since it is a recommended value [36]. The Cronbach's alpha value for the organizational innovation strategies variable items was 0.798, and that of the firm performance variable items was 0.760. They were all above 0.7. Similarly, the researcher got an expert opinion from the university supervisors to ensure content validity. The questionnaire was pilot tested on 20 manufacturing firms. A pilot test was necessary as it helped to refine the questionnaire and to obtain some assessment of the questions' validity and the reliability of the data collected. After pilot-testing, the questionnaires were hand-delivered to the managers and owners of the sampled manufacturing firms in the cities of Blantyre, Lilongwe and Mzuzu.

A total of 197 questionnaires were distributed to the respondents of the sampled manufacturing firms in Malawi. 158 questionnaires (out of 197 questionnaires) were returned, representing a response rate of 80.2%. The response rate of 80.2% in this study was considered very good and adequate for the statistical analysis. Any response rate above 75% is deemed the best and appropriate for any study [36].

Data analysis was conducted using descriptive statistics and inferential statistics. The study used descriptive statistics such as frequencies, percentages, sample means, standard deviation, and frequency tables. Inferential statistics were used to examine the effect of organizational innovation strategies on firm performance. Data were analyzed using the Statistical Package for Social Sciences (SPSS –Version 28.0). The study used linear regression to analyze the effect of organizational innovation strategies (independent variable) on firm performance (dependent variable). A two-stage hierarchical regression was also used to analyze the moderating effect of firm size on the relationship between organizational innovation strategies (independent variable) and firm performance (dependent variable). In stage one, the organizational innovation variable and the firm performance (sales growth) variable were entered. In stage two, the interaction variable (interaction between organizational innovation and firm size) was created and entered. In the regression model, firm performance, which is the dependent variable, is represented by 'Y' while the organizational innovation strategies (the independent variable) are represented by 'X' and firm size (moderating variable) is represented by Z1.

The regression model for the study is given by:

$$Y = \beta_0 + \beta_1 X_1 + \beta_1 X_1 * Z_1 + \epsilon$$

Where Y = Firm performance

β_0 = Constant of the equation

β_1 = Respective Regression Coefficient

X_1 = Organizational innovation strategies

Z_1 = Firm size

$X_1 * Z_1$ = Interaction variable (interaction between organizational innovation and firm size)

ϵ = Error term

The desired level of precision was +/- 5% and a confidence level of 95%. The decision level was 'reject null hypothesis if $P < 0.05$.'

4.0 RESULTS AND DISCUSSION

4.1 FIRM SIZE

The descriptive results for the firm size show that 41.8% (66 firms) of the manufacturing firms were small firms with 5-20 employees. 36.1% (57 firms) of the manufacturing firms were medium-sized with 21-99 employees, while 22.2% (35 firms) were large manufacturing firms (with 100 employees or more).

4.2 NATURE OF ORGANIZATIONAL INNOVATION

Respondents were asked to indicate the nature of organizational innovation in their manufacturing firm in terms of whether their firm embarked on new or significantly improved organizational methods in the five-year period (2019-2024). The descriptive results (Table 1) indicate that 77.2% (122 firms) of the manufacturing firms were not at all involved in any organizational innovation. This means that they did not significantly improve or introduce any new organizational method.

Table 1: Nature of organizational innovation.

Nature of Organizational Innovation	Frequency	Percentage
No organizational innovation	122	77.2
New or significantly improved organizational methods	36	22.8
Total	158	100.0

Respondents were equally asked to indicate whether the organizational innovation strategies they implemented were new to the firm, market, country or the world. The results show that the majority (80.6%) of the manufacturing firms that implemented organizational innovation strategies indicated that their organizational innovations were new to their firm only. Only 19.4% of the manufacturing firms indicated that the organizational innovation strategies that they implemented were new to the market. None of the manufacturing firms implemented any organizational innovation that was new to the country. Thus, most of the manufacturing firms implemented the organizational innovations that were new to the firm only.

4.3 INTENSITY OF ORGANIZATIONAL INNOVATION

Respondents were also asked to indicate the number of organizational innovations their manufacturing firm has implemented. The results (Table 2) indicate that the majority of the manufacturing firms (77.2%) did not implement any organizational innovation strategy, while only 13.3% of the manufacturing firms implemented only one new or significantly improved organizational method. Thus, a high percentage of manufacturing firms did not embark on any organizational innovation strategy. The finding also means that those firms that implemented organizational innovation strategies simply operate at a low level of organizational innovation.

Table 2: Intensity of organizational innovations.

Number of Organizational Innovations	Frequency	Percentage
No new or significantly improved organizational methods	122	77.2
One new or significantly improved organizational method	21	13.3
Two new or significantly improved organizational methods	4	2.5
Three new or significantly improved organizational methods	8	5.1
Four or more new or significantly improved organizational methods	3	1.9
Total	158	100.0

4.4 ORGANIZATIONAL INNOVATION STRATEGIES AND FIRM PERFORMANCE

According to Table 3, 13.9% of the manufacturing firms that did not implement organizational innovation strategies registered a decline in their sales growth in the five-year period (2019-2024) while 83.3% achieved a sales growth rate of more than 10%. This means that manufacturing firms that implemented organizational innovation strategies performed better than those that did not.

4.5 CONTRIBUTION OF ORGANIZATIONAL INNOVATION STRATEGIES TO SALES GROWTH

The respondents were asked to indicate whether they agree or not with the statement that 'organizational innovation strategies have helped to increase sales growth of their firms in the past five years.' The results (Table 4) show that a total of 58.3% of the respondents from manufacturing firms that implemented organizational innovation strategies indicated that organizational innovation strategies have helped to increase their sales growth in the five year period.

Table 3: Organizational innovation and sales growth.

Nature of Organizational Innovation	Sales Growth in the Five Year Period							Total
	Decline	stayed the same	1-10%	11-20%	21-30%	31-40%	Above 40%	
No any new or significantly improved organizational method	17 (13.9%)	23 (18.9%)	42 (34.4%)	25 (20.5%)	11 (9.0%)	4 (3.3%)	0	122 (100%)
New or significantly improved organizational method	0	1 (2.8%)	5(13.9%)	2(5.6%)	14 (38.9%)	8(22.2%)	6(16.6%)	36(100%)
Total	17 (10.8%)	24 (15.2%)	47 (29.7%)	27 (17.0%)	25 (15.8%)	12 (7.6%)	6 (3.8%)	158 (100%)

Table 4: Contribution of organizational innovation strategies to sales growth.

Organizational Innovation Strategies Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Organizational innovation strategies have helped to increase sales growth in the past five years	0%	6 (16.7%)	9 (25%)	19 (52.8%)	2(5.5%)

Furthermore, the respondents were asked to indicate whether they agree or disagree with various organizational innovation strategy statements regarding how organizational innovation strategies contribute to sales growth. The results are shown in Table 5.

Table 5: How organizational innovation strategies contribute to sales growth.

Organizational Innovation strategy Statement	Disagree	Neutral	Agree	Strongly Agree	Mean	Standard Deviation
Organizational innovation helps the firm to increase efficiency	11.1%	25.0%	61.1%	2.8%	3.55	0.735
Organizational innovation helps to reduce costs	16.6%	27.8%	52.8%	2.8%	3.42	0.806
Organizational innovation helps to increase labour productivity	13.9%	30.6%	47.2%	8.3%	3.33	0.828
Organizational innovation helps to increase customer satisfaction	11.1%	30.6%	52.8%	5.6%	3.52	0.774
Organizational innovation helps to achieve competitiveness	16.7%	25.0%	47.2%	11.1%	3.52	0.909

The first organizational innovation strategy statement was that 'organizational innovation helps the firm to increase efficiency.' According to Table 5, the majority (a total of 63.9%) of the respondents of manufacturing firms that implemented organizational innovation strategies indicated that organizational innovation has helped to increase efficiency. The second organizational innovation strategy statement was that 'organizational innovation helps to reduce costs. The majority (a total of 55.6%) of the respondents of manufacturing firms that implemented organizational innovation strategies indicated that organizational innovation helps to reduce costs.

The third organizational innovation strategy statement was that 'organizational innovation helps the firm to increase labor productivity.' A total of 55.5% of the respondents of manufacturing firms that implemented organizational innovation strategies indicated that organizational innovation has helped their firms to increase labor productivity. The fourth organizational innovation strategy statement was that 'organizational innovation helps to increase customer satisfaction.' The majority (a total of 58.4%) of the respondents of manufacturing firms that implemented organizational innovation strategies indicated that organizational innovation has helped to increase customer satisfaction.

4.6 INFERENTIAL ANALYSIS

4.6.1 COEFFICIENT OF DETERMINATION

Table 6 shows that R-square is 0.0634. This means that organizational innovation strategies accounted for 6.34% of the variation in the performance of manufacturing firms in Malawi. The model summary results, therefore, confirmed that organizational innovation strategies significantly affect the performance of manufacturing firms in Malawi. Although organizational innovation has a significant effect on sales growth, its explanatory power (6.34%) is low. The low explanatory power of organizational innovation means that organizational innovation is simply one of the factors that contribute to the performance of manufacturing firms. Other factors include firm size, firm resources and other innovation types.

Table 6: Model summary.

Model	R	R-Square	Adjusted R-Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.252 ^a	.0634	.0573	3.36320	.0634	10.571	1	156	.001

^aPredictors: (Constant), organizational innovation strategies.

4.6.2 REGRESSION RESULTS AND DISCUSSION

The study used linear regression to test the effect of organizational innovation strategies on the performance of manufacturing firms in Malawi. The null hypothesis was that organizational innovation strategies do not have a significantly positive effect on the performance of manufacturing firms in Malawi. The results (shown in Table 7) indicate that organizational innovation strategies have a statistically significant positive effect on sales growth of manufacturing firms at 5% significance level ($\beta = 0.252$, $p = 0.001 < 0.05$). In other words, an increase in one unit of organizational innovation will result in a 0.252 increase in sales growth. Thus, the null hypothesis is rejected at $\alpha = 0.05$ since the p-value (0.001) is less than 0.05 and the alternative hypothesis is supported.

Table 7: Regression Coefficients: Organizational innovation strategies variable and the firm's sales growth.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	2.353	.158		14.882	.000
	Organizational innovation strategies	1.162	.184	.252	6.314	.001

^aDependent Variable: Sales growth in the last five years.

This implies that manufacturing firms that invest in organizational innovations or embark on organizational innovation strategies perform better than the manufacturing firms that do not implement organizational innovations.

A two-stage hierarchical regression model was also used to test the moderating effect of firm size on the organizational innovation and firm performance relationship. The results on firm size as a moderator (Table 8) show that firm size has a statistically significant positive moderating effect on the relationship between organizational innovation and firm performance (sales growth) at the 5% significance level ($\beta = 0.432$, $p = 0.000 < 0.05$). The p-value (0.000) is less than 0.05, meaning that the effect of the interaction term (interaction between firm size and organizational innovation) on firm performance is statistically significant. The beta value ($\beta = 0.432$) is positive.

Table 8: Moderating effect of firm size on organizational innovation strategies and the firm performance relationship.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.768	.438		8.602	.000
1 Organizational innovation	.236	.122	.225	1.927	.001
interaction	.654	.243	.432	2.690	.000

^aDependent Variable: Sales growth in the last five years.

This suggests that the relationship between organizational innovation strategies and firm performance is stronger for larger manufacturing firms. It also implies that for every one-unit increase in firm size, the relationship between organizational innovation and firm performance increases by 0.432. The effect of the interaction term (interaction between firm size and organizational innovation) is greater than the effect of the organizational innovation strategies variable alone (0.252).

The results of the current study, which show the positive and significant effect of organizational innovation strategies on firm performance, support the findings of previous empirical studies such as Gyadu [21], Masero *et al.* [22], Ayinaddis [12], Saka [4], Hu *et al.* [27], Majimbo *et al.* [28], and Hongbo *et al.* [29]. These previous studies found that organizational innovation significantly and positively affects firm performance. According to the findings of the previous studies, organizational innovation strategies positively and significantly influence firm performance through enhancing technological capabilities, effectiveness, efficiency, productivity, cost reduction, customer satisfaction, competitiveness and organizational learning.

The current study observed that organizational innovation strategies positively influence the performance of manufacturing firms through increasing efficiency. This observation in the current study is in line with the findings of previous studies such as Ayinaddis [12], Saka [4] and Young *et al.* [21]. Young *et al.* [21], for example, examined the impact of strategic innovations on the organizational performance of oil and gas firms in Nigeria, and the findings revealed that organizational innovation has a significant and positive relationship with organizational performance as it helps to make the firms more efficient. Organizational innovation helps to improve work procedures, which in turn make the operations effective and efficient, thereby lowering costs and increasing the returns [22,31]. Similar observations were confirmed in Seclen-Luna [15] and Suryano *et al.* [11]. Seclen-Luna *et al.* [15], for example, observed that organizational innovation positively influences the performance of manufacturing firms by increasing their productivity through greater efficiency. This means that manufacturing firms that implement organizational innovation strategies are more efficient than those that do not embark on organizational innovation strategies.

Similarly, Hongbo *et al.* [29] studied the effect of innovation on the performance and competitiveness of small and medium enterprises, and found that organizational innovation is positively and significantly related to SME performance, as the organizational innovation enables the firms to embark on new methods of carrying out organizational activities in an efficient way. When organizations engage in new methods in terms of the way they carry out their activities, the result is that the firms would then be able to efficiently churn out better products and services, which leads to increased performance [29]. This implies that manufacturing firms that implement new ways of conducting business practices more efficiently are expected to register higher performance.

The current study also found that organizational innovation strategies positively and significantly influence the performance of manufacturing firms as they help to increase productivity and reduce costs of the firms. This finding is consistent with the findings of the previous studies, such as Saka [4]. Saka [4], for example, observed that organizational innovation strategies help firms to reduce their costs and improve returns. This suggests that manufacturing firms can use organizational innovation strategies to increase efficiency and lower costs. Firms that embark on organizational innovations by investing in

research and development and flexible work systems, such as team working, achieve greater performance through increasing productivity [4]. This implies that organizational innovation strategies help to promote teamwork, which enhances productivity.

Thus, organizational innovation promotes innovation capabilities, work procedures and quality management, which increase firm productivity and performance. This implies that organizational activities such as quality management, work procedures, knowledge management practices, employee skill acquisition and teamwork are fundamental in enhancing productivity and firm performance. In other words, firms with organizational innovations perform significantly better than those that do not implement organizational innovations.

The results of the current study, however, contradict the findings of other previous studies, such as Kim-Soon *et al.* [20], Rajapathirana *et al.* [17] and Mahmutaj *et al.* [16], which found that organizational innovation strategies do not have any significant impact on firm performance. Kim-Soon *et al.* [20], for example, investigated the relationships between different types of innovation and the financial and operational performance of firms in Malaysia and found that organizational innovation is positively, but not significantly, related to firms' financial and operational performance. Likewise, Rajapathirana *et al.* [17] examined the relationships among innovation capability, innovation type, and firm performance, with specific reference to insurance companies in Sri Lanka. Findings indicated that organizational innovation does not have a significant effect on firm performance. Mahmutaj *et al.* [16] also found in their study on the impact of different forms of innovation on sales growth of manufacturing firms in Kosovo that organizational innovation is not significantly related to sales growth of manufacturing firms. This is probably due to the intangible nature of organizational innovation and the high cost associated with the implementation of organizational innovation [16].

The results on the firm size as the moderating variable for the relationship between organizational innovation and firm performance help to reduce this inconsistency in the mixed results on the organizational innovation and firm performance relationship. The current study found that firm size has a statistically significant effect on the relationship between organizational innovation strategies and firm performance. The study observed that the effect of organizational innovation strategies on firm performance is stronger for larger manufacturing firms than for small firms. Firm size affects both innovation and firm performance. For example, large firms exploit greater economies of scale and large markets [37]. By exploiting economies of scale, large firms can increase productivity and performance compared to small firms. Thus, large firms often work more efficiently and register greater performance than small firms. Likewise, large firms have superior resources and capabilities in product development, technology development and the implementation of organizational innovation strategies. In other words, large firms have greater capacity to successfully implement organizational innovation strategies and operate more efficiently because they have more resources.

In brief, organizational innovation strategies enhance firm profitability as they help the manufacturing firms not only to reduce costs but also to increase efficiency, flexibility, firm productivity and customer satisfaction. The results of this study support the Schumpeterian theory of innovation. According to Schumpeterian theory, innovation drives firm profitability, competitiveness and firm growth [13]. Organizational innovation constitutes one of the dimensions of innovation.

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 CONCLUSION

The aim of the study was to investigate the effect of organizational innovation strategies on the performance of manufacturing firms in Malawi. The study found that organizational innovation strategies positively and significantly affect the performance of manufacturing firms in Malawi. Thus, manufacturing firms that implement organizational innovation strategies perform better than non-innovators. In other words, manufacturing firms that embark on new or significantly improved organizational methods register a greater firm performance than the manufacturing firms that do not invest in organizational innovations. Organizational innovations help manufacturing firms not only to reduce costs but also to increase efficiency, flexibility, firm productivity and customer satisfaction. The study also found that firm size has a significant moderating effect on the relationship between organizational innovation strategies and firm performance. Thus, although organizational innovations yield benefits for manufacturing firms, these benefits are greater for large manufacturing firms than for small firms.

5.2 THEORETICAL AND CONTEXTUAL CONTRIBUTIONS

The contribution this study makes to the existing literature or existing knowledge is that it provides a comprehensive framework on the relationship between organizational innovation strategies and firm performance, with firm size as the moderating variable. Many previous studies simply investigated the relationship between organizational innovation and firm performance. The current study, on the contrary, has included firm size as the moderator in this relationship. The study essentially paints the picture of how organizational innovation strategies positively affect the performance of manufacturing firms, with firm size as the moderating variable. It provides fresh insights for the Strategic Management field as it shows that the benefits of organizational innovation are greater in large manufacturing firms than in small firms. The study also provides valuable information that

managers and owners of manufacturing firms can use to formulate and implement organizational innovation strategies to enhance the performance of manufacturing firms in Malawi.

5.3 LIMITATIONS AND FUTURE RESEARCH

This study focused on small, medium and large manufacturing firms. Thus, micro businesses in the manufacturing sector were not covered in this study. Likewise, the study did not investigate the effect of organizational innovation strategies on the performance of firms in the other sectors, such as the service sector. So future research needs to investigate the effect of organizational innovation strategies on the performance of firms in the other sectors.

CONFLICT OF INTEREST

None.

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