Influence of Organizational Resources on Performance of Small and Medium Enterprises in Manufacturing Sector Post-Covid-19 in Kenya

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Abstract: **Many developing and developed countries recognize the great role played by SMEs in manufacturing sector, which includes economic development, and job creation. Despite the role SMEs has played, it has been experiencing challenges. The study sought to find out the influence of organizational resources on performance of small and medium enterprises in manufacturing sector post-Covid-19 in Kenya. The study adopted a cross-sectional research design where both quantitative and qualitative data were collected, analyzed, and conclusions drawn. The target population was 716 organizations in manufacturing sector. The sample size of 250 manufacturing organizations was selected using stratified and simple random sampling techniques. The tool used to collect data was semi-structured questionnaires. The data was analyzed using the Statistical Package for Social Sciences (SPSS) version 26. The study results revealed a relationship between organizational resources and performance of small and medium enterprises in manufacturing sector post-Covid-19 in Kenya. The analysis of the regression model and correlation showed that there was a statistically positive and significant correlation between the organizational resources and performance of SMEs in manufacturing sector post-Covid-19 in Kenya. The Descriptive statistics analysis on organizational resources revealed they were well entrenched in the operations of the manufacturing sector in Kenya. The study therefore concludes that organizational resources influence performance of small and medium enterprises in manufacturing sector post-Covid-19 in Kenya. The finding of the study further supports the Resource-based Entrepreneurship Theory.**

Keywords: **Organizational resources, Performance, SMEs, Manufacturing sector.**

1. INTRODUCTION

The manufacturing sector has played a major role in the economic development of developing countries. The share proportion of manufacturing to Gross Domestic Product (GDP) has been identified to be positively related to economic growth for both developing and underdeveloped economies (Attiah, 2019). Emerging and developing countries have put manufacturing sector at the forefront in their journey of economic growth. They further consider the share proportion of manufacturing in GDP as a basic indicator of the significance of the sector in a country's economy (Banerjee, 2020). The manufacturing sector has been recognized as a potential contributor to the economy of the EAC region by creating jobs and stimulating the development of other sectors (The East African Community (EAC) Strategy (2012-2032). In 2020, the world was gripped by the Covid-19 pandemic, which emanated from China and seriously devastated economies all over the world (Gache, 2021).

On the impact of Covid-19 on light manufacturing in the East African Community, the EAC economies of Kenya, Rwanda, and Uganda contracted in the second and third quarters of 2020. The containment measures implemented in the second quarter of 2020, as well as the restriction of movements, suppressed aggregate demand for light manufacturing in the early stages of the lockdown. The negative effects experienced by light manufacturing in the second quarter of 2020 in all the EAC countries were mainly a reduction in production output for manufacturers. In Kenya, the manufacturing sector contracted in two consecutive quarters of 2020. The manufacturing sector output contracted by 3.9% and 3.2% in the second and third quarters of 2020, respectively (Walakira, 2021). Manufacturing firms worldwide are faced with high competition, which necessitates them to explore new ways of re-configuring their resources to gain superior firm performance (Mutsembi, 2019).

The Covid-19 pandemic not only changed and affected many lives but also shocked global manufacturing in many ways that were likely to have serious effects in the future (Global Manufacturing Outlook, 2020). The manufacturing companies during this unique moment in modern history had to strive as quickly as possible to become resilient, by adapting to drastic changes in value chains, many of which were unforeseen at the end of 2019. Human resources practices play an important role in the success of organizational performance, and companies may have capital and technology, but it is human resource management that help companies face the challenges of globalization of businesses (Yilmaz & Bulut, 2015).

Imported machines and equipment for production in manufacturing have proved to be beneficial by increasing manufacturing productivity (Habiyaremye, 2013). Small and medium enterprises (SMEs) in manufacturing are known to be breeding grounds for human capital competencies, creativity, and innovation, which are important inputs for manufacturing competitiveness (Mkala et al., 2018). The poor inventory management practices have negatively affected the quality, speed, and flexibility of operations in manufacturing, also inefficient raw material management severely affects the manufacturing firm's overall performance (Ogah et al., 2022). When the human resource preparation is poor, it leads to hiring unqualified personnel, which leads to high inefficiency in the manufacturing company (Ellinger & Svendsen, 2021). Wellmer (2019) observed that the supply and demand sides influence the availability of raw materials.

Many authors suggest that market forces are inadequate to successfully manage the problems of resource availability and use (Alonso et al., 2007). Raw material management is critical to the overall performance of any manufacturing concern and raw material delivery systems give firms a competitive edge. The raw material situation in terms of efficient management and effective planning determines the activity level, the turnover, and the ultimate profit in a given company (Odhiambo, 2015). There exists a direct effect of human capital composition on productivity, and the higher the workers' educational level, the higher the productivity (Seclen-Luna et al., 2020). Entrepreneurs are recognized to use resources such as prior experience/knowledge as one of the determinants of enterprise performance and entrepreneurial intangible resources such as entrepreneurial capital are known to be important in driving the growth of enterprises. (Ndururi et al., 2019).

Financing decisions have been found to affect the capital output of manufacturing companies significantly, and investment decisions have been found to have a partial effect on manufacturing firms' economic work (Khalid & Muturi, 2021). The sectors that are financially more dependent on external finance in the manufacturing industry are known to grow more and faster (Fatima et al., 2020). According to Kyalo and Njoora (2014), financing of SMEs contributes to the growth of business among SMEs and leads to employment creation. Cash processing practices also play an essential role in the growth of small manufacturing industries, in that cash budgeting practice ensures that there is enough liquidity in the firm to meet the daily expenses (Omboga & Okibo, 2016). Resources such as capital, network affiliation, education, training, and usage of ICT are important in determining the performance of SMEs (Omwenga et al., 2013).

1.1 Problem Statement

The performance of the small and medium enterprises in the manufacturing sector in Kenya has been declining as revealed in various documents. There has been a low contribution of SMEs in the manufacturing sector to the Kenyan GDP (KNBS, 2020). The manufacturing sector's contribution to GDP reduced to 7.5% in 2019 from 7.8 % in 2018 % as revealed by the KNBS Economic Survey (2020). Kenya's manufacturing industry experienced sluggish growth, with a decrease from 7.3% to 2.7% in 2022 against the target of 15% as envisaged by the 'Big Four Agenda ', (KNBS 2022). High production costs and fierce competition from low-cost imports pose significant challenges for Kenya's manufacturing sector (KNBS, 2022). Kenyan manufacturing firms were reporting losses and low earnings in their performance (Malimu et al., 2023). Manufacturing was also facing competition in the regional and international markets and Kenya was ranked 108 out of 153 in 2021 (UNIDO Report, 2021) in the global ranking.

In Kenya, the manufacturing sector contracted in two consecutive quarters of 2020. The manufacturing sector output contracted by 3.9% and 3.2% in the second and third quarters of 2020, respectively. The value added by the sector dropped to Ksh 183 billion in quarter three from Ksh191 billion in quarter one (KMA, 2021). Waweru and Kariuki (2022) noted that manufacturing enterprises in Kenya were experiencing challenging times, posing a significant threat to their profitability. Njue and Kiiru (2018) noted that Performance of manufacturing firms in Kenya was low compared to other countries.

1.2 Hypothesis Testing

H_{01}: Organizational resources do not influence performance of small and medium enterprises in manufacturing sector post-Covid-19 in Kenya.

H_{02}: Regulatory framework has no moderating influence on the relationship between organizational resources and performance in SMEs in manufacturing post-Covid-19 in Kenya.

2. LITERATURE REVIEW

2.1 Resource-based Entrepreneurship Theory

The resource-based view of the firm, which was a strategic management theory, was designed to explain why some firms perform better even when they have very similar business environments. The resource-based theory states that entrepreneurs need resources to start and carry out their businesses. Money and time alone are not sufficient for a startup; therefore, entrepreneurs require resources to make their efforts productive. The theory's focus is on showing the importance of financial, social, and human resources and in the process enhancing an individual's abilities (Barney, 2018).

The resource-based theories, emphasize that entrepreneurs require resources to go about their businesses and their efforts must be combined with resources such as time, money, and labour and, further argued that failure to access resources could cause their efforts to become futile (Zindzy, 2021). Capital, for instance, enables an entrepreneur to grow their business. Other aspects that are considered essential resources include access to information, education, and leadership. However, getting sufficient resources could be quite hectic at times, and that is why entrepreneurs are considered to be people who are required to work hard and smart (Zindzy, 2021).

Small businesses could leverage their internal resources to gain a competitive advantage, known as the resource-based view, or RBV, this approach is based on the idea that a company's assets, organizational processes, expertise, and capabilities can strengthen its position in the market. The resource-based theory highlights the need for a fit between a company's strategic resources and the external market rather than focusing solely on its external competitive environment. The resource-based view theory revolves around a company's strategic resources, which are the building blocks of business growth. These types of resources create value for an organization and give it a more sustainable competitive advantage (Picincu, 2020).

The resource-based theory suggests that resources that are valuable, rare, difficult to imitate, and non-substitutable are important in the success of firms and resources can create the foundation to develop firm capabilities that lead to superior performance over some time. Capabilities are needed to bundle, manage, and otherwise exploit resources in a manner that provides value-added to customers and creates advantages over competitors (Edwards, 2019). The Resource-based theory of entrepreneurship argues that access to resources by founders was an important predictor of opportunity-based entrepreneurship and new venture growth. This theory stresses the importance of financial, social, and human. Thus, access to resources enhances the individual's ability to detect and act upon discovered opportunities. Financial, social, and human capital represented three classes of theories under the resource–based entrepreneurship theories.

2.2 Empirical Review

A study to determine the influence of strategic physical resources on the performance of small and medium manufacturing enterprises revealed that physical resources had a significant influence on the performance of small and medium manufacturing enterprises (Murimi et al., 2019). On the effects of IT capability on firm performance, there tends to be a positive significant effect of IT infrastructure capability on performance, which also provides a framework for improving firm performance (Gitau et al., 2022). The effect of intellectual capital and its components covering value-added capital employed; value-added human capital, and structural capital value-added on the firm performance, revealed that intellectual capital had a significant positive effect on return on asset, return on equity, and market-to-book intellectual capital on the firm performance in the manufacturing sector. The value-added capital component of intellectual capital had the highest

influence on the firm performance. It also revealed that a firm with great and well-managed capital employed, allows a firm to improve its performance (Setiawan & Prawira (2018).

It is not possible to ensure sustainable business development without solving the maintenance of labor resources issues that are included in the manufacturing process, as well as involving new employees to increase labor potential and the organization can always confront new challenges by attracting highly qualified employees (Danova et al, 2020). Manufacturing firms in Sub-Saharan Africa were not optimally managed which substantially lowered their productivity and the informal approach to human resource management was attributed to poor management practices with a consequent effect on performance (Kering, 2020). The influences of formal training practices on the performance of pharmaceutical firms revealed that formal training was significant in the performance of firms (Musambayi et al., 2020).

There existed a direct effect between human capital and performance of automotive companies and human capital and significantly related to social capital and there was a significant relationship between social capital and firm performance, indicating the ability of social capital to improve firm performance (Samad, 2020). A study by Kim et al. (2018) investigated factors influencing the innovation capability of small and medium-sized enterprises in the Korean manufacturing sector considering facilitators, barriers, and moderators. The survey data collected from Korean SMEs in the manufacturing sector showed that innovation capability was a fundamental determinant of firm performance. Top management leadership and external networking serve as facilitators, while organizational rigidity and insufficient resources act as barriers to firm performance.

Seclen-Luna et al. (2020) investigated the effects of human capital composition, innovation portfolio, and size on manufacturing firms' performance. The study also sought to identify the levels of education that were significant in labor productivity. The resource-based view (RBV) theory was applied using data gathered from the National Innovation Survey in the Manufacturing Industries of Peru. The OLS method on a sample of 584 Peruvian manufacturing firms was applied and the effects on firm performance of two subsamples according to innovation portfolio and firm size were determined. The findings of the results revealed that there was a direct effect of human capital composition on productivity that showed that the higher the workers' educational level, the higher the productivity.

Samad (2020) conducted a study to examine the effect of social capital on the relationship between human capital and firm performance. It examined the relationship between human capital and social capital and between human capital and firm performance. 294 questionnaires were obtained from managerial staff in automotive companies in Malaysia and the data was analyzed using the Partial Least Squares (PLS) test. The results indicated a direct effect between human capital and performance. It was also found that human capital was significantly related to social capital and that there was a significant relationship between social capital and firm performance, indicating the ability of social capital to improve firm performance. It also revealed that firm performance could be achieved by human capital through the role of valuable social capital and that good firm performance leads to more prudent and sustainable organizations.

Nguyen and Nguyen (2018) conducted a study to examine resource misallocation among Vietnam's small- and medium-sized enterprises (SMEs) in the manufacturing sector. The study also aimed to consider selective factors in reducing the level of resource misallocation in SMEs. Resource misallocation and efficiency gains in total factor productivity (TFP) were assessed using Vietnam's annual enterprise survey data and an appropriate productivity decomposition framework. The Findings revealed that resource misallocation was found to be higher among SMEs than large-scale enterprises. TFP was found to be 116.3 percent greater if there were no resource misallocation among SMEs. Smaller scale, lower market concentration, trade liberalization, and corruption control were found to be associated with lower levels of resource misallocation in SMEs.

2.3 Conceptual Framework

According to Swaen (2021), a conceptual framework is a written or visual representation of an expected relationship between independent variables and dependent variables.A conceptual framework illustrates what is expected to be investigated through research. It defines the variables for the study and shows how they relate to each other. In this study, the dependent variable is the performance of SMEs in manufacturing sector and the independent variable is organizational resources.
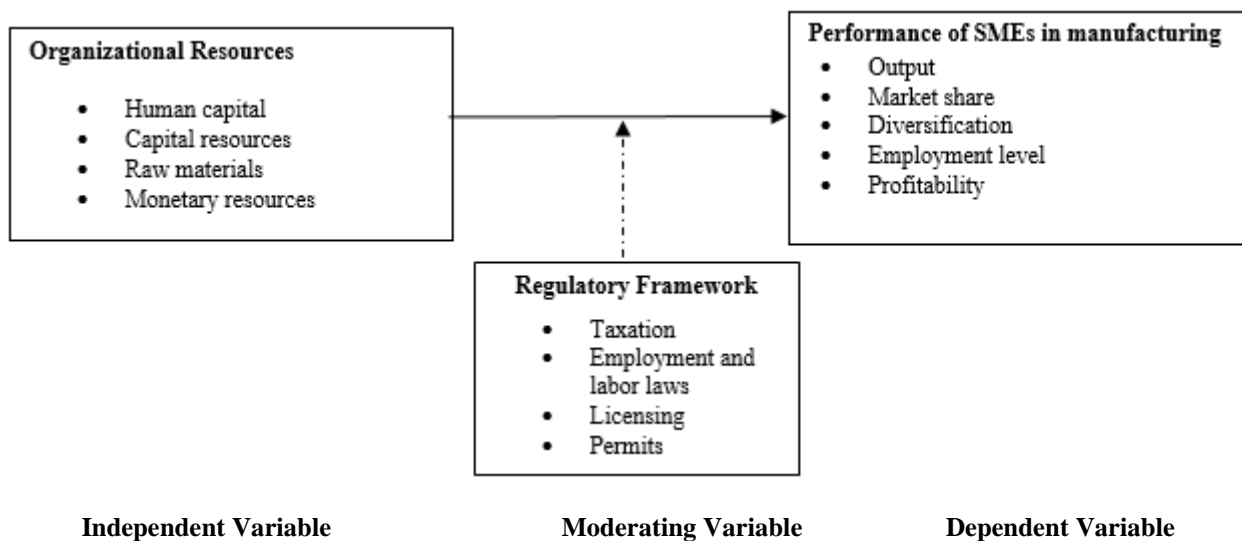
| Independent Variable | Moderating Variable | Dependent Variable |

Figure 1: Conceptual Framework

3. METHODOLOGY

The study adopted a cross-sectional research design, with the target population comprising 716 manufacturing organizations registered by KMA and contained in the Kenya Manufacturers & exporters directory (2021-2022 edition). The target population was composed of 13 subsectors in the manufacturing sector. In the sample size determination, the study applied the formula by Dillman et al. (2014), and 250 manufacturing organizations were arrived at. The 250 organizations were distributed to the 13 subsectors based on their proportion in the population. From each subsector, sample was selected by using simple random sampling technique. A total of 750 respondents from the 13 subsectors were selected and used in the analysis. The study used questionnaires to collect primary data which had both open and closed-ended questions. The researcher used SPSS version 26 software to analyse the data. The descriptive and inferential analyses were performed, where descriptive statistics considered means, mode, median, standard deviations, and frequencies. Inferential statistics considered regression and correlation analysis. Pearson's product-moment correlation was used to find the relationship between organizational resources and performance of SMEs in manufacturing sector post-Covid-19 in Kenya. Linear regression analysis was used to explain the extent organizational resources explained variations in performance of SMEs in manufacturing sector post-Covid-19 in Kenya.

The study results were fitted in the regression model:

$Y = \beta_0 + \beta_3 X_3 + e$

Where:

Y= Performance of small and medium enterprises (SMEs) in manufacturing sector post-Covid-19 in Kenya.

X_3=Organizational resources

β_0=Constant

β_3=Coefficient of the variable

e =Error term

4. RESULTS AND DISCUSSIONS

4.1 Descriptive Analysis

4.2 Descriptive Analysis for Organizational Resources

The study sought responses to examine the influence of organizational resources on performance of small and medium enterprises in manufacturing sector post-Covid-19 in Kenya.

TABLE 1: Descriptive Analysis for Organizational Resources

The responses to examine the influence of organizational resources on performance of small and medium enterprises in manufacturing sector post-Covid-19 in Kenya.

Statement	Percentage (%)								
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Median	Mode	Standard Deviation
a)Employees in the organization have the right working skills.	0.7	5.6	13.0	50.6	30.1	4.03	4.0	4	0.84
b)Training staff in the organization has contributed to improved organizational performance.	0.8	6.9	10.3	48.0	34.0	4.07	4.0	4	0.88
c)Employees' skills' in the organization are regularly improved through internal and external training.	1.1	6.7	18.9	43.0	30.2	3.94	4.0	4	0.92
d)The organization has very modern tools and machinery to undertake production.	1.2	10.9	16.9	40.5	30.5	3.88	4.0	4	1.00
e)The organization has adequate infrastructure well maintained for production purposes.	0.8	10.9	16.9	40.9	30.5	3.89	4.0	4	0.98
f)The organization has fully computerized its operations.	1.9	9.5	18.6	37.9	32.1	3.88	4.0	4	1.02
g)In the organization, raw materials for production are always procured through a well-structured procurement process.	1.3	10.8	16.9	37.7	33.3	3.91	4.0	4	1.01
h)The organization has a well-staffed procurement department to handle the raw material acquisition.	2.5	10.6	13.1	39.2	34.6	3.92	4.0	4	1.05
i)The organization always has an adequate budget for raw material acquisition.	2.1	9.7	22.1	38.1	28.0	3.80	4.0	4	1.01
j)The organization has a functional finance department with qualified personnel.	0.4	11.6	12.6	42.0	33.3	3.95	4.0	4	0.98
k)The organization always has readily available funds to finance operations.	1.1	4.6	10.7	51.1	32.5	4.09	4.0	4	0.84
l)The government does not support organizations in the form of grants.	5.4	5.8	7.6	9.3	71.9	4.36	5.0	5	1.17
Average level of Organizational Resources.	**1.6**	**8.6**	**14.8**	**39.9**	**35.1**	**3.98**	**4.0**	**4**	**0.98**

Strongly Disagree (1)-Disagree (2) -Neutral (3) - Agree (4)-Strongly Agree (5)

To get information about organizational resources variable, several statements were asked of the respondents, based on a Likert scale of one (1) to five (5), with "1" strongly disagree, "2" being disagree, "3" being neutral, "4" being agree and "5" being strongly agree. The study objective question items summarized in Table 1 above for descriptive analysis yielded an overall mean of 3.98, median=4.0, and mode = 4 at 0.98 standard deviations. The results in Table 1 further show that the average level of organizational resources for the rating of agree and strongly agree had a combined value of 75.0%. The average level of organizational resources for rating under disagree and strongly disagree had a combined value of 10.2%.

On the statement "Employees in the organization have the right working skills," 50.6% of the respondents agreed whereas 30.1% strongly agreed with a mean of 4.03 and a standard deviation of 0.84.

On the statement "Training staff in the organization has contributed to improved organizational performance," 48.0% agreed and 34.0% strongly agreed with a mean of 4.07 and a standard deviation of 0.88. Regarding the statement "Employees' skills' in the organization are regularly improved through internal and external training," 43.0% agreed whereas 30.2% strongly agreed with a mean of 3.94 and a standard deviation of 0.92. On the statement "The organization has very modern tools and machinery to undertake production," 40.5% of the respondents agreed and 30.5% strongly agreed with a mean of 3.88 and a standard deviation of 1.00.

On the statement "The organization has adequate infrastructure well maintained for production purposes," 40.9% of the respondents agreed and 30.5% strongly agreed with a mean of 3.89 and a standard deviation of 0.98. Regarding the statement "The organization has fully computerized its operations," 37.9% agreed and 32.1% strongly agreed with a mean of 3.88 and standard deviation 1.02. On the statement "In the organization, raw materials for production are always procured through a well-structured procurement process," 37.7% of the respondents agreed with the statement and 33.3% strongly agreed with a mean of 3.91 and a standard deviation of 1.01. On the statement "The organization has a well-staffed procurement department to handle the raw material acquisition," 39.2 % of the respondents agreed and 34.6% strongly agreed with a mean of 3.92 and a standard deviation of 1.05. On the statement "The organization always has an adequate budget for raw material acquisition," 38.1% of the respondents indicated agreed, and 28.0% strongly agreed with a mean of 3.80 at the standard deviation of 1.01.

On the statement, "The organization has a functional finance department with qualified personnel," 42.0% agreed and 33.3% strongly agreed with a mean of 3.95 and standard deviation of 0.98. On the statement "The organization always has readily available funds to finance operations," 51.1% of the respondents agreed and 32.5% strongly agreed with a mean of 4.09 and a standard deviation of 0.84. Regarding the statement "The government does not support organizations in the form of grants," 71.9% of the respondents strongly agreed and 9.3% agreed with a mean of 4.36 and a standard deviation of 1.17. The above statistical parameters results indicate that the majority of the respondents were in agreement that organizational resources contributed positively to performance of SMEs in manufacturing sector post-Covid-19 in Kenya.

4.3 Regression Analysis

Regression analysis was used to test for the linear relationship between organizational resources and performance of SMEs in manufacturing sector post-Covid-19 in Kenya. The data was subjected to the computation of the correlation coefficient.

TABLE 2: Bi-variate linear relationship between organizational resources and performance of SMEs in manufacturing sector.

		Organizational Resources	Performance of SMEs
Organizational Resources	Pearson Correlation	1	.440**
	Sig. (2-tailed)		.000
	N	634	634

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

The results of the correlation of the variables in Table 2 above show that organizational resources have a positive correlation with the performance of SMEs in manufacturing sector post-Covid-19 in Kenya (r=0.440, p-value=0.000). This implies that an increase in organizational resources leads to an increase in performance of SMEs in manufacturing sector post-Covid-19 in Kenya and vice versa.

4.4 Influence of Organizational resources on performance of SMEs in manufacturing sector

In examining the relationship in the research model, linear regression analysis was used. The linear regression analysis between organizational resources and performance of SMEs in manufacturing sector post-Covid-19 in Kenya was performed.

H_{01}: Organizational resources do not influence performance of small and medium enterprises in manufacturing sector post-Covid-19 in Kenya.

R^2 (Coefficient of determination) of Organizational Resources and performance of small and medium enterprises (SMEs) in manufacturing sector post-Covid-19 in Kenya.

TABLE 3: Summary of R^2 (Coefficient of determination)

R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Sig. F Change
.440ᵃ	.194	.193	.47904	.194	.000

a. Predictors: (Constant), Organizational Resources

Table 3 shows R^2 of 0.194 (i.e. 19.4%) with the standard error of estimate being 0.47904. This implied that organizational resources explained 19.4% of performance of SMEs in manufacturing sector post-Covid-19 holding other factors constant. The remaining percentage of performance of small and medium enterprises can be explained by other factors not included in the model.

TABLE 4: Summary of ANOVA

Analysis of value (ANOVA) of organizational resources and performance of small and medium enterprises (SMEs) in manufacturing sector post-Covid-19 in Kenya.

	Sum of Squares	df	Mean Square	F	Sig.
Regression	34.879	1	34.879	151.993	.000ᵇ
Residual	145.029	632	.229		
Total	179.908	633			

a. Dependent Variable: Performance of SMEs in manufacturing sector

b. Predictors: (Constant), Organizational Resource

Table 4 above, Shows-Calculated F-value (1,632) =151.993 which was greater than F-Critical value (1,632) =3.84 at 5% significance level and p-Value=0.000. Therefore, the null hypothesis was rejected and it concluded that organizational resources had an influence on performance of small and medium enterprises (SMEs) in manufacturing sector post-Covid-19 in Kenya

4.5 Hypotheses Testing

Hypotheses were tested using simple linear regression analysis as shown in Tables 2, 3, and 4 above.

H_{01}: Organizational resources do not influence performance of small and medium enterprises in manufacturing sector post-Covid-19 in Kenya.

The hypothesis was tested using simple linear regression and a decision was made using the p-value. The decision rule (acceptance/rejection) was that if the p-value is less than 0.05, we reject the H_0 (null hypothesis) but if more than 0.05, the H_0 is not rejected. The results in Tables 2,3 and 4 for organizational resources and performance of SMEs in manufacturing show that organizational resources had a positive and significant relationship with performance of SMEs in manufacturing. In Table 4 above, F-Calculated (1,632) =151.993 which was greater than F-Critical (1,632) = 3.84 at 5% level, and p-Value=0.000(p<0.05). Therefore, the null hypothesis was rejected, and concluded that organizational resources had an influence on the performance of small and medium enterprises (SMEs) in manufacturing sector post-Covid-19 in Kenya.

4.6 Model coefficients

Model Coefficients of Organizational Resources and Performance of small and medium enterprises (SMEs) in manufacturing sector post-Covid-19 in Kenya are shown in Table 5 below.

TABLE 5: Model coefficients

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	1.575	.200		7.871	.000
Organizational Resources	.590	.048	.440	12.329	.000

As indicated in Table 5 above, when the independent variable (organizational resources) is held constant, performance of small and medium enterprises (SMEs) in manufacturing sector post-Covid-19 in Kenya will remain at 1.575 units. At the same time, an increase in organizational resources by one unit would lead to an increase in performance of small and medium enterprises (SMEs) in manufacturing sector post-Covid-19 in Kenya by 0.590 units with a p-value of 0.000($p<0.05$). A positive beta coefficient means that organizational resources had a direct and positive influence on the dependent variable (performance of small and medium enterprises (SMEs) in manufacturing sector post-Covid-19 in Kenya) and also significant.

The model $Y = \beta_0 + \beta_3 X_3 + e$ can therefore be estimated as:

$Y = 1.575 + 0.590 X_3$

Where:

Y= Performance of small and medium enterprises (SMEs) in manufacturing sector post-Covid-19 in Kenya.

X_3 = Organizational resources.

4.7 Discussion of the findings on the relationship between Organizational Resources and performance of SMEs in manufacturing

The results in Table 1 for descriptive analysis show that the statistical parameters indicate that the majority of the respondents were in agreement that organizational resources contributed positively to the performance of SMEs in the manufacturing sector post-Covid-19 in Kenya. The R-value (Correlation coefficient =0.440) indicated that there was a moderate positive correlation between organizational resources and performance of SMEs in manufacturing sector post-Covid-19 in Kenya. The p-value<0.05 indicated that organizational resources were statistically significant at a 5% level of significance. The study rejected the null hypothesis, **H_{01}**: Organizational resources do not influence performance of small and medium enterprises in manufacturing sector post-Covid-19 in Kenya.

The findings of the study highly support resource-based entrepreneurship theory, which states that entrepreneurs need resources to start and carry out their businesses, and entrepreneurs require resources to make their efforts productive (Tiwari 2022). The results in Table 1 were consistent with the results of studies conducted by (Njue & Kiiru, 2018; Hee & Jing, 2018; Kering et al., 2020; Nyaga & Aluoch, 2022; Fatima et al., 2020; Luna et al., 2020; Yilmaz & Bulut,2015; Muchiri et al., 2018; Gitau et al., 2022; Danova et al., 2020; Aminu et al., 2019; Musambayi et al., 2020; Habiyaremye, 2013; Odhiambo, 2015; Khalid & Muturi, 2021; Ellinger & Svendsen, 2021; Omboga & Okibo, 2016; Leonard, 2020; Zulfiqar, 2012; Gathogo & Ragui, 2014; Yuliarmi et al.,) which showed that various type of resources contributed positively to performance of manufacturing. Xu & Li (2022) identified that human capital, physical capital, and structural capital influenced the productivity and profitability of manufacturing firms.

The results in Tables 2, 3, 4, and 5 show a positive and significant relationship between organizational resources and performance of SMEs in manufacturing sector post-Covid-19 in Kenya. The results were consistent with the results of studies conducted by (Setiawan &Prawira, 2018; Bempong & Munemo, 2017; Nguyen, 2022; Bironga, 2021) which showed that various resources had a positive and significant relationship with performance in manufacturing. Grozdić et al. (2020) study revealed a contradictory result to the study since the results on the effects of capital investments on firm performance in manufacturing revealed that capital investments had a statistically significant negative effect on short-term performance, but a positive effect on the long-term performance of the manufacturing firms

4.8 Test of Moderating Variable

To test whether regulatory framework had any moderating effect on the relationship between organizational resources and performance of SMEs in manufacturing sector post-Covid-19 in Kenya. Regression analysis was performed as shown in Table 6 below. The study tested the hypothesis, H_{02}: Regulatory framework has no moderating influence on the relationship between organizational resources and performance of SMEs in manufacturing sector post-Covid-19 in Kenya.

The following regression models were formulated;

Model 1 : $Y = \beta_0 + \beta_3 X_3 + e$

Model 2 : $Y = \beta_0 + \beta_3 X_3 + \beta_T T + e$

Model 3 : $Y = \beta_0 + \beta_3 X_3 + \beta_T T + \beta_{3T} X_3 T + e$

Where:

Y = Performance of SMEs in manufacturing sector post-covid-19 in Kenya

β_0 =Constant

β_3, β_T=Coefficients of variables

T = Regulatory framework

X_3 = Organizational resources

$\beta_{3T}X_3$ = Interaction term

Model 3 above introduces the interaction term between organizational resources and regulatory framework (Organizational resources_ regulatory framework ($\beta_{3T}X_3$)).

TABLE 6: Summary of Regression Model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.440[a]	.194	.193	.47904	.194	151.993	1	632	.000
2	.455[b]	.207	.204	.47553	.207	82.295	2	631	.000
3	.466[c]	.217	.213	.47287	.217	58.196	3	630	.000

a. Predictors: (Constant), Organizational Resources

b. Predictors: (Constant), Regulatory Framework, Organizational Resources

c. Predictors:(Constant),RegulatoryFramework_OrganizationalResou,OrganizationalResour, RegulatoryFramework

Analysis results in Table 6 above suggest that organizational resources had a significant positive correlation with regulatory framework (r = 0.440, p < 0.0001). Organizational resources alone had a coefficient of determination (R^2) value of 0.194 implying that organizational resources explained 19.4 % of the variation in performance of SMEs in manufacturing sector post-Covid-19 in Kenya. With the moderator in place, the coefficient of determination (R^2) value went up to .217. This means that regulatory framework had a significant moderating effect on the relationship between organizational resources and performance of SMEs in manufacturing sector post-Covid-19 in Kenya. Jointly, organizational resources and regulatory framework explained 21.7% of the variation in performance of SMEs in manufacturing sector post-Covid-19 in Kenya. Based on these findings, the study's null hypothesis: **H$_{02}$**: Regulatory framework had no moderating influence on the relationship between organizational resources and performance in SMEs in manufacturing sector post-Covid-19 in Kenya was rejected. The study considered the corresponding alternative hypothesis.

H$_{03}$: Regulatory framework had a moderating influence on the relationship between organizational resources and performance of SMEs in manufacturing post-Covid-19 in Kenya.

TABLE 7: Regression coefficients

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	1.575	.200		7.871	.000
	Organizational Resources	.590	.048	.440	12.329	.000
2	(Constant)	1.907	.224		8.520	.000
	Organizational Resources	.612	.048	.457	12.757	.000
	Regulatory Framework	-.110	.034	-.115	-3,217	.001
3	(Constant)	-1.948	1.370		-1.422	.155
	Organizational Resources	1.519	.321	1.134	4.727	.000
	Regulatory Framework	.945	.371	.989	2.544	.011
	OrganResou_Regfram	.248	.087	1.381	2.853	.004

a. Dependent Variable: Performance in SMEs Manufacturing Sector Post-Covid-19 in Kenya.

The regression analysis shown in Table 7 above indicated that organizational resources had a statistically significant contribution in predicting performance of SMEs in manufacturing sector post-Covid-19 in Kenya. The analysis revealed that the interaction between organizational resources and regulatory framework was significant (p<0.05) (p=0.004). This suggested that regulatory framework had a statistically and positive significant moderating effect in moderation between organizational resources and performance of SMEs in manufacturing sector post-Covid-19 in Kenya.

The regression models were as follows:

Model 1 : Y= 1.575 + 0.590X_3

Model 2 : Y= 1.907 + 0.612X_3 – 0.110T

Model 3: Y= -1.948 + 1.519X_3 +0.945T +0.248X_3T

The above analysis results revealed that a unit increase in organizational resources would lead to a 1.519-unit increase in performance of SMEs in manufacturing sector post-Covid-19 in Kenya. These results were expected when there was an interaction term in place between organizational resources and regulatory framework.

4.9 Discussion on the moderating effect of regulatory framework on the relationship between organizational resources and performance of SMEs in manufacturing sector post-Covid-19 in Kenya

The results in Table 7, model 1 above, show an organizational resources beta of 0.590 (β =0.590, t =12.329, p-value< 0.001) indicating it was significant. For model 2 when regulatory framework was introduced and combined with organizational resources, the beta value increased to 0.612(β=0.612, t =12.757, p-value<0.001) hence statistically significant. When the interaction term $\beta_{3T}X_3$ was introduced, organizational resources revealed a significant effect on the performance of SMEs in manufacturing sector post-Covid-19 in Kenya, with a higher beta value of 1.519 (β=1.519, t= 4.727, p-value<0.001) hence statistically significant. From the results, regulatory framework moderated the relationship between organizational resources and the performance of SMEs in manufacturing sector post-Covid-19 in Kenya.

5. CONCLUSIONS

Organizational resources had a moderate positive and significant influence on performance of small and medium enterprises (SMEs) in manufacturing sector post-Covid-19 in Kenya. The results of analysis further revealed that regulatory framework had a statistically positive and significant moderating effect on the relationship between the organizational resources and the performance of SMEs in manufacturing sector post-Covid-19 in Kenya.

5.1 Recommendations

The study recommends that the government should always work towards supporting manufacturing organizations by giving grants to boost their financial position operations. The study further recommends that the manufacturing organization should always explore various sources of affordable loans/finances to fund its operations. The existing financial policies concerning manufacturing sector need to be reviewed to ensure the stakeholders' participation in decision-making policy matters. The study recommends the existing legal and regulatory framework be strengthened to fully support the manufacturing sector.

The study recommends that the government should always implement regulatory measures and observe compliance to realize better results in manufacturing sector.

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