Strategic Resources, A Driver of Perfomance in Small and Medium Manufacturing Enterprises in Kenya

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ARTICLE INFO	ABSTRACT
	Purpose: This study sought to establish the effect of strategic resources on performance of small and medium manufacturing enterprises. Specifically, the study sought to identify how financial resources, human resources, physical resources and intellectual capital affect performance of small and medium manufacturing enterprises in Kenya. **Methodology:** Positivism research philosophy was utilised. Cross-sectional descriptive survey as well as explanatory study design were used in the study. The target population for the study was 350 Kenyan SMEs in the manufacturing sector. A sample of 183 firms was selected using stratified random sampling. One respondent from each firm was selected being the managing director. Data was collected using a semi-structured questionnaire. Diagnostic tests for multicollinearity and normality were conducted before data analysis. The research questionnaire was tested for content validity and reliability after. Data was analysed using inferential and descriptive statistics. Data collected was analysed using SPSS V23. **Finding:** The study found that strategic resources have a significant influence on significant influence on performance of manufacturing SMEs in Kenya. Specifically, financial, human and physical resources all positively and significantly influenced the performance of Kenyan SMEs while intellectual resources as no effect on performance. The study therefore concluded that financial resources have a positive and significant influence on performance of manufacturing SMEs in Kenya, human resource was found to be significant in predicting performance. Physical resources have a significant influence on performance of manufacturing SMEs in Kenya while intellectual capital has no significant influence on performance of manufacturing SMEs in Kenya. **Study Implication**: The study recommended that Management of manufacturing SMEs should ensure that there are enough financial resources to meet their daily transactions and ensure that they are able to acquire the relevant strategic resources for efficient running of their firms; have adequate, committed and well-skilled personnel with the required expertise; should invest significantly in physical resources in order to maximise the performance of these firms; carry our cost benefit analysis before committing their resources to protect their intellectual capital in form of patents. **Value of the Study:** The study showcases the influence of strategic resources on performance of manufacturing SMEs in Kenya.

1. Introduction

Overtime, the business environment in which firms operate has significantly changed. According to Ahmad and Schroeder (2011), changes in the business environment have been observed in the 21st century due to factors such as globalisation, technological growth and changes in customers' wants and preferences. According to Ombaka, Machuki

and Mahasi (2015), Resource Based View (RBV) stresses that resources of a firm are the basic determinants of competitive advantage and performance. Organisations strategic resources include all financial, physical, human, intellectual, and other form of assets used by the firm to competitively create, produce, and offer products or services to its clients (Barney, 1991).

As Barney (2007) explains, there are both internal and external financial resources and some of the most popular ones include cash, cash equivalents, debt capital, retained earnings, and share capital. Physical resources include plant and machinery, manufacturing equipment and company buildings. Zarutskie (2010) opined that physical resources also include machines, fixtures and fittings, furniture and materials that provide essential service in the process of manufacturing. Other than human resources, physical resources are among the most significant resources of the organization (Barney, 2014). Human resources include all individuals' experience, expertise, judgement, risk-taking propensity and wisdom (Sirmon, Hitt, Ireland & Gilbert, 2011).

According to Kim and Mauborgne (2014), for the organisation to continue enjoying the benefits of strategic resources. The resources must be inimitable or difficult to imitate. At the same time resources must be rare, valuable, and imperfectly substitutable. The assumed heterogeneity and immobility though necessary are however not sufficient conditions for sustained competitive advantage. Interestingly, Kim and Mauborgne (2014) also observed that resources in themselves are not valuable. However, it is their capability to enable the firms to perform activities that create advantages that makes them strategic. This forces small and medium manufactures to identify such critical resources to gain competitive advantage.

Literature supports that SME's play a crucial role in achieving the industrial and economic development objectives of any economy in the world. This is mainly achieved through employment creation, especially for the unskilled and semi-skilled. In the views of Koontz and & Thomas (2012), the success of any SME depends on its performance levels and the ability to maintain its performance levels. They stated that manufacturing SME's performance is of great significance since it determines the survival or demise, prosperity or non-prosperity, expansion or decline and the rate of investments. However, even with the rich literature on the role of strategic resources on business performance in the global spectrum, their role in the performance of manufacturing SMEs still remain scanty which calls for the need to determine the effect of financial resources, human resources, physical resources and intellectual capital on performance of small and medium manufacturing enterprises in Kenya.

Objectives of the Study

The study pursued the following objectives;

i. To evaluate the influence of financial resources on performance of small and medium manufacturing enterprises in Kenya;
ii. To determine the influence of human resources on performance of small and medium manufacturing enterprises in Kenya;
iii. To examine the influence of physical resources on performance of small and medium manufacturing enterprises in Kenya;
iv. To investigate the influence of intellectual capital on performance of small and medium manufacturing enterprises in Kenya;

Research Hypotheses

The study was guided by the following hypotheses;

H_{01} Financial resources have no significant influence on performance of small and medium manufacturing enterprises in Kenya.

H_{02} Human resources have no significant influence on performance of small and medium manufacturing enterprises in Kenya.

H_{03} Physical resources have no significant influence on performance of small and medium manufacturing enterprises in Kenya.

H_{04} Intellectual capital has no significant influence on performance of small and medium manufacturing enterprises in Kenya.

2. Review of Literature

Resource Based View advanced by Penrose (1959) holds that a firm's superior performance is achieved through the resources, which are owned and controlled by the firm. The theory postulates that how the firm controls its key resources determines its performance (Wernerfelt, 1984). The focus of the RBV is on attributes of resources and capability from the source they are gained to clarify a firm's heterogeneity, performance and sustainability (Kraaijenbrink, Spender & Groen, 2010). Through the theory firm managers are able to check whether factors relevant to superior performance exist or not hence they can be in a position to exploit market imperfection to advance their performance. For a firm to have CA and superior performance, resources and capabilities have to qualify as exceedingly valuable, rare, inimitable, and non-substitutable. Resources that are valuable add to advancing the firm's performance. Rareness creates ideal competition in view of the fact that resources in that category are possessed by fewer firms. Inimitable resources are costly to duplicate and non-substitutable, meaning that there is no alternative to accomplishing an equal function instantly available to competitors (Barney & Hesterly, 2010). Through the theory, Resource the study is able to evaluate and explain financial and physical resources and capability of a firm that have the capability to create and maintain a competitive advantage and thus higher performance among small and medium manufacturing enterprises in Kenya.

The Balanced Score Card (BSC) (Kaplan and Norton, 1992, 1996) provides the enterprise with a view of organization's overall performance by integrating financial measures with other key performance indicators around customer perspectives, internal business processes, and organizational growth, learning and innovation (Biazzo & Garengo, 2012). The BSC model is based on the four pillars of performance measures of financial, customer, learning and growth, and internal processes (Kaplan & Norton, 1992). The financial perspective of the BSC tool provides for the firm to succeed financially it should meet the demands of the owners (shareholders) through delivery of measurable like the financial ratios, customer share and other measurable cash flow measures (Kaplan, Norton & Rugelsjoen, 2010). This perspective is what had been used widely to measure a firm's performance previously and therefore needed to be balanced with other perspectives. In line with the constructs of the theory, this study used it to anchor performance of small and medium manufacturing enterprises. As outlined in the model this study measured performance using both financial and non-financial measures through profitability, sales volume, market share, number of customers and efficiency of resource utilization.

Financial resources represent the money available to an enterprise for spending in the day to day running of the business and for investment purposes (Phillips, 2012). These resources are in the form of cash, liquid securities and credit lines that are at the disposal of the firm. Literature supports that financial resources significantly influence the performance of the firm. Zarutskie (2010) observed that financial resources constitute a vital factor in the functioning of any business enterprise. The importance of financing resources in a firm cannot be over emphasised since many of the factors that contribute to business failure can be addressed using strategies and financial resources that drive growth and the achievement of organizational objectives (Salazar, Soto & Mosqueda, 2012). As noted by Memba and Nyanumba (2013), the finance factor is the main cause of financial distress. The objective of all financing decisions is wealth maximisation and the immediate way of measuring the quality of any financing decision is to examine the effect of such a decision on the firm's performance.

Literature supports that human resource as a strategic resource has a positive relationship with superior organisation performance. This is because they are directly involved in the manufacture of goods and services. Superior performance of staff of a company, however, is created through social intricacy that makes it duplication difficult for competitors (Jiang, Lepak, Hu & Baer, 2012). According to Wernerfelt (2011), technology and human capital are among the most important attributes in generating superior performance. Additionally, Nyberg, Moliterno, Halo and Lepak (2014) human capital generates superior performance if it is definite to the original firm and changing cost to new environment avert immediate impound by rivals. Further, Lazear (2009) concluded that a firm must invest in its employees through education, training and development if its human capital was unique and ultimately generate greater performance than competitors. For this reason, this study concludes that strategic human resource is a great predictor of firm performance among small and medium manufacturing enterprises in Kenya.

In order to gain and sustain long-term competitive advantage firms must be in a position to gain access and control resources such as physical resources and deploy then in a coherent manner to the organization's competitive needs as well as profit appetite and institutional philosophies. Grant (1991) argued that lasting competitive advantage requires synergic coordination and configuration of resources and capabilities to positively influence firm performance. According to the resource-based view, physical resources of a firm include plant, machinery, equipment and finances (Barney, 1991). According to Benjamin and Orodho (2014), physical facilities represent one of the most important components of organizational resources that stimulate production and superior performance. Myeda and Pitt (2014) emphasized on the responsibility of FM in encouraging organizational performance, and in giving competitive advantage. On the other hand, examining the relationship between facility management, customer satisfaction and service relationship in the Bangkok healthcare system, Pitt, Chotipanich, Issarasak, Mulholland, and Panupattanapong (2016) identified customer satisfaction and service delivery as measures of firm performance. In addition, the study concluded that there is a strong relationship between facility management, customer satisfaction and service relationship.

Moreover, intellectual capital has been defined by several scholars to mean different things but is generally used to refer to the possession of knowledge, applied experience, organizational technology, customer relationships and professional skills that provide a firm with a competitive advantage in the market (Dumay & Garanina, 2013). According to Chu, Chan,Yu, Ng and Wong (2011) intellectual capital represents the relationships with customers and partners, innovations, the infrastructure of the firm and the knowledge and skill of the members of the organisation. Similarly, Vafaei, Taylor and Ahmed (2011) indicated that intellectual capital is that knowledge that can be converted into future profits and comprises resources such as ideas, inventions, technologies, designs, processes and informatics programs. On the other hand, Kianto, Andreeva and Pavlov (2013) postulated that the term intellectual capital and intellectual property are used interchangeably even when they mean different things. In the Turkish automotive supplier industry, human capital, structural capital and customer capital had significant positive relationships with innovation performance. This was established in a study carried out by Zerenler, Hasiloglu and Mete (2008) to investigate the influence of intellectual capital and its components, employee capital, structural capital and customer capital, upon their innovation performance. However, the study covered intellectual capital only ignoring other strategic resources such as physical resources, human resources and financial resources. Additionally, the study was carried out in the Turkish automotive industry while the current study was conducted on small and medium manufacturing enterprises in Kenya.

In Kenya, Magutu, Kipchumba, Chepkuto and Nyaoga (2010) studied knowledge management as source of sustainable competitive advantage. The study established that the private farms were more profitable than Egerton University farms. Private Farms were more productive in both crops and milk productivity. Conversely, evaluating

strategic capabilities for competitive advantage in British broadcasting corporation Africa, Ngugi (2011) adopted a case study research design and established that strategic capabilities range from a strong human resource pool that is well trained, strong brand, credibility, technologically advanced equipment, wide audience coverage.

3. Research Methodology

Positivism paradigm which states that real knowledge exists and can be obtained by collecting data and subjecting it to analysis and tests was adopted. The paradigm also allows for theory and hypotheses to be tested and validated. Furthermore, the philosophical basis is based on objectivity, neutrality, results validity, measurement and actual facts (Saunders, 2011). The philosophy of positivism was also used because its emphasis on studying facts through experimentation and critical analysis of findings based on observable trends. Finally, since the study was based on statistical analysis of the variables through the explanatory design aimed at establishing the influence of strategic resources on performance of manufacturing SMEs, the philosophy was found appropriate.

A cross-sectional descriptive survey as well as explanatory study design were the designs of choice for this study. As noted by Marshall and Rossman (2014), a descriptive survey involves the method adopted in gathering information to test hypotheses and answer questions about the current status of the phenomenon. Besides, in order to conclusively address the question of what, when, where, how and by who, Lewis (2015) advises that a descriptive study is more appropriate. The explanatory study design as supported by Sekaran and Bougie (2010), Ali (2016) and Gitia (2017) sought to establish how changes in the explanatory variable influenced the predicted variable.

This study targeted all SMEs in the manufacturing sector in Kenya. According to (KAM, 2017), Kenya has approximately 350 SMEs in 14 industries (Building, Mining & Construction, Chemical & Allied, Energy, Electrical & Electronics, Food & Beverages, Leather & Footwear, Metal & Allied, Automotive, Paper & Board, Pharmaceutical & Medical Equipment, Plastics & Rubber, Services & Consultancy, Textiles & Apparel, Timber, Wood & Furniture, Agriculture/Fresh Produce). The study adopted stratified sampling technique in selecting 183 respondents from Kenya's manufacturing SMEs representing 52% of all Kenya's small and medium manufacturing enterprises (Kothari, 2004). Primary data was collected through semi-structured questionnaire having both closed and open-ended questions.

Collected data was analysed via descriptive statistics as well inferential analysis. Inferential analysis was conducted through correlation analysis and ordinary least squares regression analysis. Reliability of the research instrument was tested via Cronbach's alpha where a coefficient greater than 0.7 was considered acceptable. The predictive power of the model was tested following the recommendations of Blumberg, Cooper and Schindler (2014) via coefficient of determination (r^2) at 95% confidence level. F-statistic was conducted at 5% significance level to test the fitness of the model. The significance of the study variables was tested at 0.05 significance level.

4. Results and Discussions

This section presents the results of the study and the discussions thereof. First the reliability of the research instrument followed by descriptive results, regression analysis results and correlation analysis results.

4.1 Reliability of Research Instrument

Reliability of the research instrument in this study was tested using internal consistency test. Cronbach's alpha coefficient (α) was used as the most appropriate measure of internal consistency as advised by Lampard and Pole (2015). As rule of the thumb, reliability value of 0.7 or more was considered adequate to conclude that an instrument is reliable.

Table 1: Variable Reliability Statistics

Variable	Cronbach's Alpha		
	Pilot	Main Study	Remarks
Financial resources	.673	.734	Reliable
Human resources	.934	.857	Reliable
Physical resources	.872	.883	Reliable
Intellectual capital	.953	.905	Reliable
Performance	.904	.904	Reliable

Source: Survey Data (2018)

It was observed that all the variables had coefficients ranging between 0.905 (intellectual capital) and 0.734 (financial resources). Based on these results, it was noted that all the variables had coefficients that were higher than 0.7 and therefore it was concluded that the questionnaire was reliable.

4.2 Descriptive Results

Descriptive statistics provide a summary of study variables characteristics through measures of central tendency (mean and standard deviation). The respondents were asked to indicate the extent to which they agreed to statements in a 5-point Likert scale on each of the study variable where 1 did not represent an extent while 5 represented a very big extent. Financial resources were operationalized using short-term investments, financial securities, owners' equity and debt capital in this study. Barney (2007) observed that financial resources includes both internal and external

income sources such as debt, equity, retained earnings and others cash and cash equivalents. Table 2 shows the mean score and standard deviations of the attributes of financial resources.

Table 2: Descriptive Statistics for Financial Resources

	N	Mean	Std. Deviation	Coefficient of Variation	t-Statistic	Sig. (2-tailed)
We endeavour to retain much of our profits for our operations	131	3.84	1.156	0.301	38.027	.000
The share capital provided by the owners of this business form the major source of our equity.	131	3.63	1.210	0.333	34.363	.001
Our short-term investments are key in ensuring steady cash flows	131	3.53	.995	0.282	40.575	.000
Owners of this business always provide capital when called upon	131	3.41	1.221	0.358	31.991	.001
Our firm always actively seek short-term securities for investments	131	3.03	.976	0.322	35.533	.003
Our development partners are always willing to provide debt capital for our expansion programs	131	3.02	1.170	0.387	29.496	.000
This firm invest adequately in ordinary shares	131	2.94	1.352	0.460	24.886	.000
This business relies on borrowings to finance its operating activities	131	2.79	1.045	0.375	30.511	.002
These firm results to capital market for long-term capital	131	2.74	1.298	0.474	24.157	.000
The company has bought debt instruments in other companies	131	2.50	1.273	0.509	22.508	.000
Aggregate Score	**131**	**3.09**	**1.17**	**0.386**		

Source: Survey Data (2018)

The results in Table 2 above showed that on aggregate, financial resources had a mean score of 3.09, a standard deviation of 1.17 and a coefficient of variation of 0.386. These results showed that manufacturing firms sought to obtain financial resources to a moderate extent and that the resources are relevant in influencing performance of manufacturing firms in Kenya. There were however, high levels of dispersions as depicted by the high values of the standard deviation and coefficient of variation. Individually, the manufacturing SMEs in Kenya endeavour to retain

much of their profits to meet their operations to a great extent as evidenced by a mean score of 3.84. On the other hand, most small and medium-sized manufacturing firms do not buy debt instruments in other firms as the attribute had the lowest average score of 2.50. This means that most manufacturing SMEs in Kenya relied on retained earnings as a major source of financing their operations. These results were consistent with observations made by Zarutskie (2010) who concluded that financial resources constitute a vital factor in the functioning of any business enterprise. In addition, the study showed that internal sources of capital are less expensive compared to external sources of capital because of the floatation costs involved. In light of this revelation, the small and medium manufacturing firms relied more on retained earnings, an internal source and less on debt capital.

The statistical findings showed that all the statements measuring financial resources had P-values less than 0.05 meaning that they were all statistically significant. This implies that they the statements were statistically relevant in measuring financial resources. These findings were consistent with Barney (2007) who concluded that financial resources are essential for firm performance. Zarutskie (2010) also noted that financial resources constitute a vital factor in the functioning of any business enterprise.

The second objective of the study was human resources adopted in this study due to the role it plays in ensuring that the firm optimally employ all other resources to make the most of their utility and maximising firm performance. The variable was measured in this study using personnel expertise, level of commitment, loyalty of employees and decision-making skills as recommended by Sirmon, Hitt, Ireland and Gilbert (2011).

Table 3: Descriptive Statistics for Human Resources

	N	Mean	Std. Deviation	Coefficient of Variation	t-statistic	Sig. (2-tailed)
The board of directors and their respective committees are the topmost decision-making organ in the company.	131	3.98	1.153	0.290	39.467	.000
Our company highly rely on the skills possessed by our employees	131	3.95	1.125	0.285	40.140	.000
The experience of our staff is a key pillar of performance	131	3.90	1.073	0.275	41.604	.000
We always recruit skilled employees	131	3.88	1.177	0.303	37.714	.000
This firm always attempt to match the level of expertise required with the employees' expertise.	131	3.87	1.033	0.267	42.871	.000
We encourage our employees to undergo in the job training to enhance their capability	131	3.67	1.034	0.282	40.659	.000
We regularly carry out competence assessment on our employees	131	3.56	1.075	0.302	37.863	.000
When promoting our staff, we always assess their decision-making skills	131	3.56	1.110	0.312	36.756	.000

We regularly organize workshops for our employees	131	3.50	1.173	0.335	34.200	.000
Every year we offer training programs for our employees	131	3.49	1.236	0.354	32.294	.000
Decision making in this company is always inclusive	131	3.49	1.218	0.349	32.792	.000
This company offer career development opportunities to our employees	131	3.47	1.112	0.320	35.760	.000
We encourage our employees to participate in decision making	131	3.45	1.158	0.336	34.093	.000
Our management regularly hold consultative meetings with the members of staff	131	3.43	1.164	0.339	33.709	.000
We only recruit experienced staff in our business	131	3.11	1.083	0.348	32.831	.000
It is the policy of the company to always recruit internally.	131	3.03	1.202	0.397	28.853	.000
Aggregate Score	**131**	**3.58**	**1.13**	**0.318**		

The results showed the aggregate mean score for human resources of 3.58 and a standard deviation of 1.13 and a coefficient of variation of 0.318. These results indicate human resources were that Positive relationships between human resource management practices and general financial results have been demonstrated in determining performance of manufacturing SMEs to a great extent. These results were consistent with the findings reached by Nyberg, Moliterno, Halo & Lepak (2014) who concluded that human capital generates superior performance and Lazear (2009) also concluded that a firm must invest in its employees through education, training and development if its human capital was unique and ultimately generate greater performance than competitors.

In majority of manufacturing SMEs, the board of directors and their respective committees are the top most decision-making organ in the company evidenced by a mean of 3.98 and a standard deviation of 1.153, implying that there were structures within the manufacturing SMEs that guided decision making to a great extent. In addition, the statement that had the least mean score was that it is the policy of the company to always recruit staff internally as evidenced by a mean score of 3.03 and a standard deviation of 1.202 respectively. This implied that majority of manufacturing SMEs recruit experienced staff internally but only to a moderate extent. While the manufacturing SMEs recognised the role of human resource development from within the firm, they also appreciated the relevance of external recruitment so as to bring in new ideas into the firm.

The findings showed that deviations based on standard deviation were the highest in terms of providing employee training programs each year as evidenced by a standard deviation of 1.236. This implied that most respondents did not witness any employee training programs in their company each year. The study finally noted that all the statements had a p-value less than 0.05 depicting their significance in measuring human resources construct. Similar findings were obtained by Nyberg, Moliterno, Halo & Lepak (2014). He concluded that human capital is generating superior performance. Lazear (2009) also concluded that a firm must invest in its employees through education, training and development if its human capital was unique and ultimately generate greater performance than competitors. However, the results contradict the findings of Kimani (2010) that there was a low negative correlation between strategic human resource management practice and performance

The third variable in this study was physical resources which was adopted in the study due to the relevance of physical resources in the manufacturing business. The variable was operationalized using production facility, ICT infrastructure, natural resources and marketing infrastructure. The descriptive analysis results were as evidenced in Table 4.

Table 4: Descriptive Statistics for Physical Resources

	N	Mean	Std. Deviation	Coefficient of Variation	t-statistic	Sig. (2-tailed)
This organization is connected to the internet	131	3.85	1.106	0.287	39.824	.000
The layout of our factory is designed to improve performance.	131	3.76	1.006	0.268	42.801	.000
Use of ICT in our organization has improved our performance	131	3.75	1.166	0.311	36.797	.000
All departments in this organization are connected through an internal network	131	3.64	1.222	0.336	34.104	.000
The production facility available is adequate to meet our customers' demands.	131	3.60	.943	0.262	43.647	.000
The company has adequate distribution channel for our products	131	3.59	.927	0.258	44.292	.000
Our marketing team is adequately empowered to carry on their functions	131	3.57	.985	0.276	42.907	.000
The organization has invested in adequate production facility.	131	3.57	.953	0.267	41.523	.000
There is adequate space in the production section.	131	3.56	1.054	0.296	38.642	.000
There is free flow of raw materials and finished goods on the production floor.	131	3.48	1.105	0.318	36.059	.000
This company has a strong marketing infrastructure	131	3.45	1.104	0.320	35.773	.000
Processes in this organization have been automated	131	3.44	1.124	0.327	34.984	.000

	N	Mean	Std. Deviation	Coefficient of Variation	t-statistic	Sig. (2-tailed)
This firm has adequately invested in information communication technology.	131	3.41	1.129	0.331	34.588	.000
This firm encourage sharing of databases with our customers to monitor their stock levels	131	3.31	1.164	0.352	32.573	.000
We have adequate access to natural resources	131	3.23	1.092	0.338	33.832	.000
Most of our raw materials are natural resources	131	3.11	1.125	0.362	31.611	.000
Aggregate Score	**131**	**3.52**	**1.08**			

Source: Survey Data (2018)

The mean score for physical resources was 3.52 which indicated that most manufacturing SMEs in Kenya used physical resources to a large extent to influence their organisation performance. However, as evidenced by a standard deviation of 1.08, there was also a large disparity in the use of physical resources. Furthermore, most of Kenya's manufacturing SMEs were linked to the internet as evidenced by a mean score of 3.85. This implied that the participants agreed to a large extent that they linked their firms to the internet. The results signified the relevance of connectivity to the internet on firm performance. Pitt, et al. (2016) showed that connectivity to the internet may boost firm performance by improving access to market information, facilitating more effective coordination of firms' production and delivery chains and by creating new business opportunities. Accordingly, manufacturing SMEs in Kenya tap in to the internet so as to increase performance levels. It was also observed that the statement with the least mean score was that most of raw materials used by manufacturing SMEs were natural resources as evidenced by a mean score of 3.11. It is thus concluded that majority of manufacturing SMEs only relied on natural resources to a moderate extent.

It was evidenced by Paunov and Rollo (2016) that internet and intranet adoption positively affects a firms' labour productivity and also improves firms' performance in Africa. The results were also consistent with the conclusion reached by Myeda and Pitt (2014) that selecting a proper distribution channel strategy positively affects firm performance. Moreover, all the statements measuring physical resources had P-values less than 0.05 significance level meaning that they were all significant. These findings were compatible with the outcomes of Benjamin and Orodho (2014), who found that physical facilities boost manufacturing and superior performance, Myeda and Pitt (2014), demonstrated that facility management encourages organisational performance and provides competitive advantage. Mong'are (2012) also established that physical resource availability effects school performance, particularly in resource-intensive, practical-oriented subjects.

The fourth independent objective of the study was intellectual capital and was adopted in this study due to its importance in managing and efficient utilization of strategic resources and influencing firm performance. The variable was operationalized through, innovations, number of patents, knowledge level and number of new products as advised by Chu, et al (2011), Vafaei, et al (2011) and Dumay and Garanina (2013). Table 5 shows the results.

Table 5: Descriptive Statistics for Intellectual Capital

	N	Mean	Std. Deviation	Coefficient of Variation	t-statistic	Sig. (2-tailed)
We encourage all our staff to be innovative.	131	3.63	1.131	0.312	36.758	.000
Our company encourage our staff to study widely	131	3.51	1.211	0.345	33.180	.000
We encourage our employees to suggest	131	3.47	1.185	0.341	33.537	.000

52

new products that may increase customer utility

	N	Mean	Std. Dev			
The management of this firm has adopted a number of innovative initiatives.	131	3.31	1.082	0.327	35.048	.000
Our production processes are knowledge based	131	3.31	1.171	0.354	32.390	.000
We design new production processes frequently	131	3.24	1.108	0.342	33.427	.000
This company has patented all its production formulae	131	3.13	1.303	0.416	27.487	.000
This firm develop new products regularly	131	3.13	1.041	0.333	34.421	.000
This firm has a library to encourage our staff to improve their knowledge level	131	2.91	1.406	0.483	23.680	.000
Our enterprise design and produce new products every year	131	2.90	1.129	0.389	29.407	.000
This firm boast of having the greatest number of patents	131	2.88	1.259	0.437	26.163	.000
Aggregate Score	**131**	**3.221**	**1.184**			

Source: Survey Data (2018)

The overall mean score for intellectual capital was 3.221 implying that majority of manufacturing SMEs employed intellectual capital only to a moderate extent. This could be because majority of the manufacturing enterprises developed and produced a certain line of products which are patented already hence, only a few developed new products and innovated new once. As noted earlier by Vafaei, Taylor and Ahmed (2011) intellectual capital can be converted into future profits and comprises resources such as ideas, inventions, technologies, designs, processes and informatics programs. Consequently, as noted by Bowen, Morara and Mureithi (2019) due to the failure to exploit the intellectual capital at their disposal, most manufacturing SMEs may have had bad performance and eventually shut down their activities.

The highest mean score was observed on the statement that majority of manufacturing SMEs in Kenya encourage their staff to be innovative with mean score of 3.64 implying innovation was enthralled some manufacturing enterprises. The results tallied with the statement with the least mean score which showed that most firm boasted of having majority number of patents with a mean score of 2.88 meaning that manufacturing enterprises hardly innovated new products and process as evidenced by few patents granted. The study thus established that although some manufacturing enterprises endeavoured to be innovative, this did not translate into new products or process. In view of Ngugi (2014) intellectual capital positively influence the growth of Manufacturing SMEs in Kenya while Njuguna (2014) showed that intellectual capital improves financial performance of Kenyan state corporations. In the light of these findings, the study finds that manufacturing SMEs in Kenya would greatly profit from capitalizing on the intellectual capital available by being innovative, developing fresh products and procedures and sharing this understanding across the company. The observed high standard deviation of 1.184 indicate that there was a high variation amongst the respondents on the role of intellectual capital in their firms. Therefore, while some manufacturing SMEs tapped into their intellectual capital through knowledge sharing, innovation and growth of new products some remained dormant which may have adversely affected their performance level.

Performance was the dependent variable of the study operationalized through profitability in form of profit margin, sales volume, market share and number of customers. The results of descriptive analysis on the variable were as evidenced are presented in Table 6.

Table 6: Descriptive Statistics for Performance

	N	Mean	Std. Deviation	Coefficient of Variation	t-statistic	Sig. (2-tailed)
The quality of our products has helped us increase the number of customers	131	3.95	1.152	0.292	39.199	.000
The number of customers in this firm has been gradually increasing	131	3.89	1.010	0.260	44.136	.000
Our firm has been experiencing growing sales volume	131	3.85	1.016	0.264	43.419	.000
Gross profit margin has been on the rise	131	3.79	.950	0.251	45.687	.000
We have observed a steady increase in profit before tax	131	3.66	1.058	0.289	39.553	.000
This company has over the years experienced gradual growth in profit after tax	131	3.63	1.083	0.298	38.409	.000
Our main products occupy the bigger portion of market share	131	3.63	1.018	0.280	40.775	.000
Our customers have been gradually increasing their order volumes	130	3.62	1.109	0.306	37.157	.000
We pride as the manufacturing firm with the highest market share	131	3.52	1.126	0.320	35.784	.000
Aggregate Score	**131**	**3.727**	**1.058**			

Source: Survey Data (2018)

Organisation performance had an overall mean score of 3.727 implying that most participants agreed that their company's performance had significantly risen. In addition, the general standard deviation was 1.058, which demonstrates that Kenya's manufacturing SMEs had a strong dispersion in performance. Based on the magnitude, the majority of manufacturing SMEs in Kenya were established to rely on the quality of their products to boost the number of clients as evidenced by a mean score of 3.95 and a standard deviation of 1.152. The elevated value of the standard deviation shows that among the small and medium-sized manufacturing companies there was high variability in the pursuit of quality goods.

The respondents also believed to a great extent that their manufacturing firm had the highest market share with a mean score of 3.52 and a standard deviation of 1.126. Although, this is the statement that received the least mean score, the results showed that majority of the respondents believed that their firm held a significant proportion of the market in the regions that they operate. Hatch and Howland (2015) had earlier concluded that for firms to effectively compete in the complex and highly competitive environment, companies must constantly improve the quality of their products, reducing costs, and differentiating their products and services. The results therefore show that

54

manufacturing SMEs in Kenya had adopted this strategy to a great extent though with a significant level of variability as evidenced by a high standard deviation.

According to Gitau, (2014), measuring organizational performance often involve financial measurements indicators such as sales growth, profit rate, return on investment, return on sales, return on equity, and earnings per share. By this definition, it was established that most of the selected manufacturing SMEs in Kenya experienced steady performance in the past ten years. In this view, the study found that manufacturing SMEs in Kenya had high performance.

4.3 Regression Analysis Results

In order to determine the extent to which strategic resources effected the performance of manufacturing SMEs in Kenya, multiple regression analysis was initially conducted on all independent variables. The multiple regression model tested was as follows;

$$FP = \beta_o + \beta_1 FR + \beta_2 HR + \beta_3 PHR + \beta_4 INC + \varepsilon \ (1)$$

Where: -
FP = Firm Performance
β_o = Constant
$\beta_1, \beta_2, \beta_3 \& \beta_4$ = Beta Coefficients
FR = Financial Resources
HR = Human Resource
PHR = Physical Resources
INC = Intellectual Capital
ε = Error Term

The results of the linear regression analysis were as shown in Table 7.

Table 7: Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.8657[a]	.7495	.7366	.5840

a. Predictors: (Constant), Financial Resources, Intellectual Capital, Human Resources, Physical Resources
b. Dependent Variable: Performance
Source: Survey Data (2018)

The results in Table 7 above indicates that model was 0.7495 implying that 74.95 percent of the variation in performance of manufacturing SMEs in Kenya is explained by financial resources, human resources, physical resources and intellectual capital. It also implies that 25.05 percent of variation in performance of manufacturing SMEs in Kenya is explained by other variables other than those in the model.
The analysis of variance (ANOVA) results are as evidenced in Table 8.

Table 8: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	61.23	4	15.3075	94.269	0.0000
	Residual	20.46	125	0.1624		
	Total	81.69	130			

a. Dependent Variable: Performance
b. Predictors: (Constant), Financial Resources, Intellectual Capital, Human Resources, Physical Resources
Source: Survey Data (2018)

The results in Table 8 above show the analysis of variance results for strategic resources and performance and show a p value of 0.000< 0.05 which indicates that the regression relationship was significant in predicting how financial resources, human resources, physical resources and intellectual capital influences performance of manufacturing SMEs in Kenya. Similar conclusion were reached using the F statistic for F $((4, 130) = 94.269 > 2.4436$ F) critical, implying that the model was significant and adequate in predicting performance.

Further the study calculated the coefficients of the variables and obtained the results shown in Table 9.

Table 9: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.309	0.712		4.647	0.0000
Financial Resources	0.346	0.148	0.216	2.338	0.0229

Human Resources	0.205	0.068	0.178	3.015	0.0038
Physical Resources	0.562	0.213	0.132	2.638	0.0107
Intellectual Capital	0.127	0.027	0.194	4.704	0.0000

a. Dependent Variable: Performance

Source: Survey Data (2018)

From Table 9, the constant had a coefficient of 3.309 which means that if all the variables in the study were kept constant at zero (0) performance of manufacturing SMEs in Kenya would be 3.309. Furthermore, the findings indicate that the financial resource coefficient was 0.346, meaning that keeping all other factors constant a unit increase in financial resources would result in a 0.346 increase in manufacturing SMEs performance in Kenya. The findings also indicate that a unit increase in human resources would result in a 0.205 increase in the performance of production SMEs in Kenya if all other factors were kept constant.

Furthermore, the findings showed that keeping all other factors constant, increasing one unit of physical resources would result to a 0.562 increase in manufacturing SMEs performance in Kenya. Finally, the results showed that if all other variables were held constant and intellectual capital increased by one-unit, the performance of manufacturing SMEs in Kenya would increase by 0.127. Furthermore, the findings showed that all variables had a p-value less than 0.05 which meant that all variables were significant in anticipating performance of manufacturing SMEs in Kenya.

These results were consistent with the findings of Zarutskie (2010) who suggested that financial resources are critical in achieving superior performance. At the same time, Phillips (2012) concluded that without financial resources, organisations may not run smoothly as well as take adequate investments. Similarly, Salazar, Soto and Mosqueda (2012) concluded that absence of financial resources has led to poor performance in most organisations. At the same time Wernerfelt (2011) human capital is among the most important attributes in generating superior performance. Similar results were posted by Nyberg et al (2014) human capital generates superior performance for the organisation.

Additionally, Benjamin and Orodho (2014), physical facilities represent one of the most important components of organizational resources that stimulate production and superior performance. Moreover, Pitt, et al (2016) concluded that there is a strong relationship between facility management and organisation performance. Finally, Dumay and Garanina (2013) concluded that possession of intellectual knowledge, applied experience, organizational technology, customer relationships and professional skills catapults the firm to better performance.

4.4 Correlation Analysis

The objective of correlation analysis was to establish the nature and strength of the relationship that exist among the study variables. To achieve this objective, Pearson's product moment correlation was used. The results were as shown in table 10.

Table 10: Correlation Analysis Results

		Performance	Financial Resources	Human Resources	Physical Resources	Intellectual Capital
Performance	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	131				
Financial Resources	Pearson Correlation	.550	1			
	Sig. (2-tailed)	.001				
	N	131	131			
Human Resources	Pearson Correlation	.406	.336	1		
	Sig. (2-tailed)	.005	.000			
	N	131	131	131		
Physical Resources	Pearson Correlation	.668	.333	.781	1	
	Sig. (2-tailed)	.002	.000	.000		
	N	131	131	131	131	
Intellectual Capital	Pearson Correlation	.158	.383	.682	.753	1
	Sig. (2-tailed)	.001	.000	.000	.000	
	N	131	131	131	131	131

Source: Survey Data (2018

Table 10 shows that the correlation coefficient between performance and financial resources was 0.550 with a significance level of 0.001. The correlation coefficient between performance and human resources was found to be 0.406 with a significance level of 0.005. The correlation coefficient between performance and physical resources was

0.668 with a significance level of 0.002, performance while intellectual capital had a correlation coefficient of 0.158 and a significance level of 0.01.

From the analysis, it was found that there was a strong positive correlation between performance of manufacturing SMEs and financial resources and physical resources. The findings also showed a positive and moderate positive correlation between performance of manufacturing SMEs and human resources and a weak positive correlation between performance of manufacturing SMEs and intellectual capital. In general, the results showed that there was a positive correlation between performance of manufacturing SMEs and all the study variables implying that an increase in strategic resources lead to an increase in performance of manufacturing SMEs in Kenya.

These results coincided with the conclusions of Zarutskie (2010) that financial resources are positively correlated with organisation performance. Phillips (2012) also showed that a positive correlation exists between financial resources and organisations performance. At the same time Benjamin and Orodho (2014) showed a positive relationship between physical resources and organisational performance. According to Wernerfelt (2011) human capital and performance are positively correlated. Finally, organisation performance is positively correlated with intellectual capital (Ngugi, 2014).

5. Conclusion

Based on the findings of the study, it was also noted that financial resources were significant in predicting performance of manufacturing SMEs firms. The study thus concluded that financial resources have a positive and significant influence on performance of manufacturing SMEs in Kenya. Further, financial resources significantly predicted profitability, sales volume and market share but failed to significantly predict the number of customers. In addition, the study found that human resource which was measured using personnel expertise, level of commitment, loyalty of employees and decision-making skills was significant in predicting performance.

In addition, physical resources affected performance to a great extent. It was also established that physical resources were significant in predicting profitability and market share but insignificant in predicting sales volume and number of customers. The study therefore concluded that physical resources have a significant influence on performance of manufacturing SMEs in Kenya. On the other hand, the study found that performance of small and medium manufacturing enterprises was moderately influenced by intellectual capital although the influence was not significant. The study thus concluded that intellectual capital has no significant influence on performance of manufacturing SMEs in Kenya.

6. Recommendation of the Study

Based on the conclusions of the study. The following recommendations for policy implications were suggested. The study concluded that financial resources have a positive and significant influence on performance of manufacturing SMEs in Kenya. Management of manufacturing SMEs should therefore ensure that there are enough financial resources to meet their daily transactions and ensure that they are able to acquire the relevant strategic resources for efficient running of their firms. In addition, the study concluded that human resources have a positive and significant influence on performance of manufacturing SMEs in Kenya and thus the management of small and medium manufacturing enterprises should always ensure that they have adequate committed and well-skilled personnel with the required expertise.

The study also concluded that physical resources have a significant influence on performance of manufacturing SMEs in Kenya. The study recommends that the management of small and medium manufacturing enterprises in Kenya should invest significantly in physical resources in order to maximise the performance of these firms. In addition, the study concluded that intellectual capital has no significant influence on performance of manufacturing SMEs in Kenya. Thus, the study recommends that the management of small and medium manufacturing enterprises should carry our cost benefit analysis before committing their resources to protect their intellectual capital in form of patents.

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