

The mediating role of entrepreneurial orientation on the relationship between organization capacity and performance of manufacturing small and medium enterprises

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Abstract

This cross-sectional study was carried out to establish the effect of organization capacity and entrepreneurial orientation (EO) on performance of manufacturing SMEs in Kenya. The small and medium enterprise (SME) manufacturing segment is integral to the economies of developing countries because it breeds growth, innovation and prosperity. In Kenya, manufacturing dominates SMEs' contribution to gross domestic product (GDP) and stimulates investment in all economic sectors. However, Kenya's growth in manufacturing capacity and competitiveness is dismal when compared with similar global competitors. Developing an effective organisation capacity and engaging EO obligates manufacturing SMEs to create production processes that can enhance performance outcomes and achieve competitive advantage. A structured self-administered questionnaire was used to gather quantitative data from all food and beverage SMEs registered with Kenya Association of Manufacturers. Data were analysed using inferential statistics and structural equation modelling was used to test the relationships among the study variables. The study found that organisation capacity has a positive influence on performance of manufacturing SMEs, and that EO fully mediates the relationship between them. The study recommends that for manufacturing SMEs to maximise the performance capabilities of their resources, they have to establish a norm of entrepreneurial behaviours in all their operations.

Keywords: sense-making, decision-making, asset availability, operations management, manufacturing SMEs.

Background

Manufacturing small and medium enterprises (SMEs) anchor world economic development through fomenting growth, innovation and prosperity. Besides developing human capital through workforce training and employment, they also drive innovation, facilitate development of physical and institutional infrastructure, attract foreign exchange earnings, and stimulate investment in other support industries.

Despite their economic importance, the growth of Kenya's manufacturing SMEs has stagnated at a low level. Consequently, Kenya's manufacturing competitiveness is dismal, in contrast with countries of comparable economic dynamics such as Nicaragua, Cambodia, Vietnam, and South Africa (Farole & Mukim, 2013).

The poor total factor productivity growth rates of Kenyan manufacturing SMEs has been associated with "sub-optimal plant sizes, under-utilization of installed capacities, low levels of investment, de-investment from the sector, and limited technological advancement" (Chege, Ngui, & Kimuyu, 2015:9). Accordingly, manufacturing SME managers must redeem these firms by building up strategic firm capacities, including matching resource combinations which can guarantee unique business models (Rotich *et al*, 2015; Barney, 1991). A resourceful firm capacity gives context to orient an SME towards overcoming competition, being a market leader and achieving sustained competitive advantage.

Behaviours that managers must practice to carry out this mandate include organizational sense-making to navigate the uncertainty which characterises the modern economic environment, effective decision-making to sustain organisational action, continuous availability of requisite physical and financial assets, and effective management of firm operations. Moreover, it is necessary to leverage entrepreneurial behaviours to ensure that the firm remains relevant in addressing shifting market tastes. Firm capacity development and engagement of entrepreneurial orientation (EO) are important strategies because they infuse organisational vibrancy and enable manufacturing SMEs to develop a sustained competitive advantage (Rotich *et al*, 2015).

Entrepreneurial orientation is a sustained preoccupation with entrepreneurial behaviours which enable an individual or firm to enter an entrepreneurship ecosystem. Once inside the ecosystem, EO enables them to create, sustain and grow a competitive niche. Thus, EO does not dissipate as a business goes through the different growth phases, but remains important throughout the business life cycle, and is required to activate the potential of firm capacity to engender value creation operations. Ferreira and Azevedo (2008) posit that vision-oriented SMEs in the manufacturing sector require EO as a strategy to project them onto the high-performance pedestal. Otieno, Bwisa and Kihoro (2012) argue that EO enables SMEs to neutralize competition, safeguard their regional market turf and forage into the international globalized market arena.

2. Statement of the problem

Manufacturing is the core of economic growth and structural transformation as it offers greater opportunities than other sectors to accumulate capital, exploit economies of scale, acquire new technologies and drive technological change. Manufacturing SMEs consistently create higher levels of output and employment, and account for unprecedented growth in incomes. However, insufficient production capacity stagnates their growth and constrains their ability to meet the demands of globalised competition (Chege *et al*, 2015).

Manufacturing SMEs face difficulties due to economic uncertainty in the

manufacturing scene, undeveloped decision-making skills particularly relating to the changing nature of manufacturing production technologies, and how the firm's assets should be deployed in appropriate combinations to create value. Moreover, inadequate engagement of entrepreneurial orientation (EO) further compromises their productivity, competitiveness and growth. As a result, the manufacturing sector in Kenya has left a vacuum in its market niche. International manufacturing contestants, cheap imports and counterfeits have readily usurped the unattended market (Farole & Mukim, 2013). The consequences of this take-over include winding up local manufacturing SMEs, demolition of the local manufacturing value chain, aggravated unemployment and economic frustration.

3. Theoretical review

This study finds anchorage in the Resource-Based View (RBV) of the firm. The RBV evaluates a firm's internal resource dynamics in reference to the external competitive environment, with a view to adjusting the firm's competitive positioning using its resource endowments. In this respect, a firm adopts a strategy of unique combinations of heterogenous resources and uses it to differentiate itself in the market, edging out rivals in the process. To ensure sustained above-average returns, the resources should be difficult to acquire, improvise or substitute (Barney, 1991; Ray *et al*, 2004; Amit & Schoemaker, 1993).

According to RBV, manufacturing SMEs can assemble their manufacturing capacity by accumulating resources that are valuable, rare, inimitable and non-substitutable (often abbreviated as *VRIN*). Moreover, they should safeguard resources possessing the *VRIN* evaluations, because they are assets which crystalize into an overall organizational capacity. SMEs can can optimise this capacity to create products unique to their competitive advantage.

Economic value creation through unique products or services results in superior benefits to enhance customer loyalty and perceived quality (Peteraf & Barney, 2003). Unique products and services also enable a firm to achieve competitive advantage through superior cost structure which ensures greater pricing flexibility and increased surplus (Oliver, 1997). Thus, a firm that can exploit its resource-capability combinations can improve its performance and differentiate itself from the competition. The resource-capability combinations are reflected in the firm's aggregate organisational capacity in the form of sense-making and decision-making abilities, available assets and strategically oriented operations management.

4. Relationship between organization capacity and firm performance

Because they are heterogeneous, the various elements of the organisation's capacity must be coordinated and applied in some designed combinations aimed at achieving set performance targets that can guarantee growth, profitability and efficiency. The onus remains on management to monitor the firm's operations and ensure fidelity between firm strategy and performance. However, successful operations are predicated on management competence to optimally employ tacit aspects of

knowledge combined with physical infrastructure. Mustapa *et al* (2014) demonstrated that in order to raise a manufacturing company's corporate performance, it must be endowed with adequate infrastructure, which must then be functionally harmonized with its corporate governance. Grewal and Slotegraaf (2007) argued that as managers routinely make decisions on access and deployment of limited resources to build organisational capabilities for sustainable competitive advantage, they must "recognise that organisational capabilities involve complex and intricately woven underlying processes" (p. 451). These decisions influence capability embeddedness which has an incremental effect on firm performance beyond the effects from organisational resources and capabilities.

Being a multi-construct term, organization capacity encompasses several components, including sense-making, decision-making, asset availability and operations management. Thomas, Clark and Gioia (1993) showed how the direct and indirect effects of sensemaking activities of scanning, interpretation and action link to organisational outcomes. These actions should receive the attention of all organisational actors in all levels of management because they enable SMEs to increase the variety of their technology (and hence products), and enable them to address the diversity in an evolving market. Exclusion of other organizational actors from the decision process by any level of management affects negatively the overall organisational sensemaking, and results in an impairment of the ability to absorb and utilize new knowledge (Filstad, 2014). Thus, barriers to sensemaking are barriers to organizational performance. It is necessary to delete impediments to sense-making in order to promote organizational performance. Accordingly, the following hypothesis is postulated:

H₀₁: Sense-making has a positive influence on performance of manufacturing SMEs in Kenya.

The use of strategic decisions is significantly associated with firm performance, although the relationship differs across industrial settings (Kesenwa, Oima and Oginda, 2013). Carmeli *et al*, (2009) found that participatory decision-making processes are positively associated with decision effectiveness, but there is both a direct and an indirect relationship (through decision effectiveness) between participatory decision-making processes and firm performance. Their findings show that in the aggregate, decision-making has an important role to play in enhancing firm performance, especially if a participatory decision-making process is promoted. Importantly, firm performance is promoted through consultation in regard to procurement of manufacturing process inputs and financing strategy to support implementation of decisions that expedite production and other support operations. Accordingly, the following hypothesis is postulated:

H₀₂: Decision making affects performance of manufacturing SMEs in Kenya.

The importance of asset availability is in rationalizing the constitution of the firm in the first place, since the firm cannot fulfil its mission if it is divested of assets. In addition to identifying the specific assets that a firm requires for continued operation, it is also necessary that these assets are available to the different firm levers for generation of economic rents. According to Landini, Alessandro and Lasagni (2014), availability of highly skilled human capital goes hand-in-hand with the likelihood of building an

intangible asset base and propensity to exploit complementarities in asset stocks. The presence and utilisation of a set of resources, including not only human resources, but also physical infrastructure and network transactions, is a necessity for promoting the performance and growth of small firms (Ferreira, Azevedo & Ortiz, 2011). Thus asset availability is a basic infrastructural element for firm performance. Thus, the following hypothesis is stated:

H₀₃: Asset availability has a positive influence on performance of manufacturing SMEs in Kenya.

Competent management of all the operations carried out in a firm facilitates value creation synergies of the assets resident in a firm. A manager's skills to oversee the activities of a firm play an important integrating role in generating business performance. According to Friebel & Schweiger (2012), however, management quality explains relatively little in terms of firm performance, although it was found to explain some of the differences between firms in different parts of Russia. In contrast, Lwiki *et al* (2013) found a positive relationship between inventory management and a manufacturing firm's financial performance in sugar manufacturing firms in Kenya. Thus, there is evidence to associate operations management with success in firm performance. A focused strategy for enhancing performance is necessarily tied to a firm's business plan and encompasses production schedules and allied quality control measures. The following hypothesis surmises that:

H₀₄: Operations management is positively related to performance of manufacturing SMEs in Kenya.

In the aggregate, all the four organisation capacity factors considered in this study – sense-making, decision-making, asset availability and operations management – are expected to have a combined influence on performance of manufacturing SMEs in Kenya. It is thus hypothesized:

H₀₅: Organization capacity factors have a joint influence on performance of manufacturing SMEs in Kenya.

5. Entrepreneurial orientation, organisation capacity and firm performance

The concept of EO and its effect on firm performance has been studied widely, with results showing that EO is a mechanism for the success and survival of firms. For example, Soininen (2013) found that EO has positive implications for firm performance because it is a main driver of SME performance and a positive factor behind a firm's long-run growth. However, during times of economic crisis, different dimensions of EO may exert positive and negative effects on performance, with the performance implications varying across different stages of the crisis and also depending on how the performance outcome is measured. It has also been shown that EO is a moderator of the relationship between quality management and performance of food manufacturing firms (Mburia, Wanjau & Kinyanju, 2016).

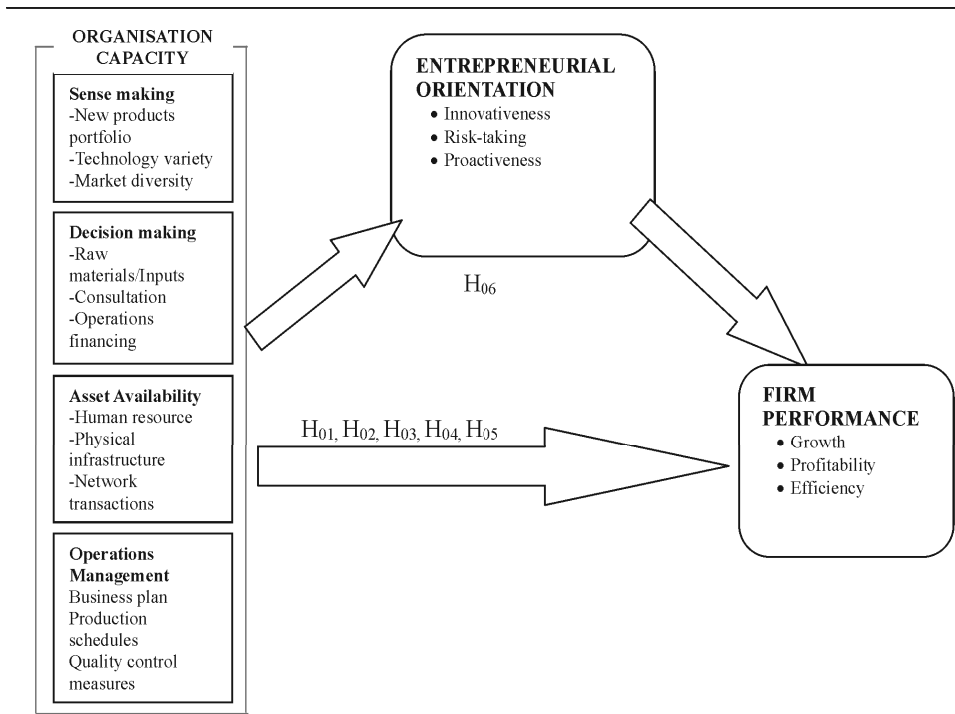
Entrepreneurial orientation has also been shown to mediate the relationship between different antecedent variables and performance outcomes, but the results have not been definitively conclusive. For instance, Bakar, Mahmood and Ismail (2014) observed that EO partially mediates the relationship between knowledge management and firm performance. Suggestions have been made that factors internal and external to the firm may either mediate or moderate the relationship between various antecedent

variables and firm performance (Zainol & Ayadurai, 2010, 2011; Hughes & Morgan, 2007; Fis & Cetindamar, 2009). This inconclusiveness calls for investigations into different ways in which EO influences firm performance. Also motivated by the positive relationship between organisation capacity on firm performance (Grewal & Slotegraaf, 2007), this study focused attention on the effect of EO as a mediator of that relationship, especially targeting SMEs in the manufacturing sector. Thus, it is hypothesised:

H₀₆: Entrepreneurial orientation mediates the relationship between organization capacity and performance of manufacturing SMEs in Kenya.

6. Conceptual framework

The relationship between organisation capacity, firm performance and entrepreneurial orientation is shown in Figure 1.



Source: Adapted from Albert & Hayes (2003) in Hall, Sarkani, and Mazzuchi, (2011)

Figure 1: Conceptual Framework

7. Methodology

The study was a cross-sectional census survey employing quantitative methods and involved eighty-nine SME food manufacturers registered with Kenya Association of Manufacturers (KAM). The sampling frame was the 2015 KAM register. A structured self-administered questionnaire was used to gather primary data from all enterprise

owners/managers, because they are the most conversant with the firms' strategic position; moreover, they make strategic decisions for the firm's operations. Data analysis was done using the Statistical Package Software for Social Sciences (SPSS) Version 20 and Smart PLS 3 software developed by Ringle, Wende and Becker (2015).

8. Empirical data

Out of the 89 distributed questionnaires, 76 usable were returned, constituting an effective response rate of 85%. The received questionnaires were verified for completeness, as a result of which four were excluded from analysis because they were irredeemably incomplete.

Before conducting analysis, the coded data were subjected to various tests to make them amenable for further statistical analysis. These tests included common method variance (CMV), outliers, linearity, normality, multi-collinearity, sphericity, reliability and validity. Herman's single factor statistical test, which was used to test for CMV, showed that the cumulative percentage of sums of squared loadings extracted was 44.751%. Being less than the 50% upper threshold, there was no indication of common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

Univariate tests for outliers showed that the standard scores of the composite values of the constructs ranged from -3.02 to 1.14, indicating absence of outliers in the dataset. Standard scores with z-scores more than 3.29 are evidence of outliers (Tabachnick & Fidell, 2007). Linear relationships between first order constructs was indicated by the significant and high Pearson correlation coefficients (see Appendix 1). Normality was tested using skewness and kurtosis. Skewness metrics ranged from -2.624 to -0.047, and fitted between the limits of -3 and +3 (Curran, West and Finch, 1997). Kurtosis values ranged from -.726 to 8.999, indicating acceptable data normality, as they were less than the upper threshold of 10 for a normal distribution (Kline 2011).

The variance inflation factor (VIF) was used to diagnose multicollinearity. The VIF values for first order and second order constructs ranged from 1.961 to 5.105. These values were acceptable as they were less than the upper threshold of 10 (Kline, 2011). Sphericity was detected using KMO and Bartlett's tests. As Table 1 shows, the KMO measure was greater than 0.6, and the hypothesis for Bartlett's test was rejected at $p < .01$. Thus, the constructs were suitable for factor analysis (Adams, Khan, Raeside, & White, 2007).

Table 1: Results for KMO and Bartlett's Test of Sphericity

Item	KMO measure	Bartlett's test	Sig.
Sense-making	.680	$\chi^2=129.365$.000
Decision-making	.887	$\chi^2=283.153$.000
Asset Availability	.766	$\chi^2=180.351$.000
Operations management	.830	$\chi^2=232.869$.000
Entrepreneurial orientation	.852	$\chi^2=399.876$.000
Performance	.809	$\chi^2=273.323$.000

The data were also investigated for construct reliability. Table 2 shows the study variables and their first order constructs, indicating their fulfilment of the construct

reliability requirements for PLS-SEM analysis and model estimation (Chin, 2010; Bacon, Sauer and Young, 1995; Hair, Ringle, & Sarstedt, 2011). Each construct reliability measure was significant at 1%.

Table 2: Construct Reliability

Study variables	Construct	Composite reliability ≥ 0.7
Sense-making	New products Portfolio	1.00
	Technology Variety	0.805
	Market Diversity	0.775
Decision-making	Raw Materials/Inputs	0.860
	Consultation	0.866
	Operations Financing	0.922
Asset Availability	Human Resource	0.858
	Physical Infrastructure	0.812
	Network Transactions	0.753
Operations Management	Business Plan (BP)	0.941
	Production Schedules (PS)	0.923
	Quality Control (QC)	0.800
Entrepreneurial Orientation	Innovativeness (IN)	0.875
	Proactiveness (PR)	0.925
	Risk taking (RT)	0.910
Firm Performance	Growth (PG)	0.791
	Efficiency (PE)	0.783
	Profitability (PP)	0.868

The data were also checked for convergent and discriminant validity by examining values of Pearson correlation coefficients and average variance extracted (AVE) (see Appendix 1). Acceptable discriminant validity is indicated by the high correlations between constructs of the same variable, while convergent validity is shown by the small range of the correlations between them. As required for SEM, all values of AVE were above 0.5, and the square roots of AVE values for the respective first order constructs, indicated in bold figures in the diagonal, were all greater than the correlations between all constructs in the same row and and the same column.

9. Results and discussion

The relationships between the study variables, their sub-constructs and indicators were modeled reflectively. Table 3 shows Pearson's correlation coefficients, which were examined to determine the relationship between the individual sense-making (SM), decision-making (DM), asset availability (AA) and operations management (OM) and the the performance of manufacturing SMEs. All the correlations were positive and highly significant. These results confirmed hypotheses H_{01} , H_{02} , H_{03} , and H_{04} .

Table 3: Correlations

Path	Sample mean	p-value
Sense-making \otimes Firm Performance	0.702	0.000
Decision-making \otimes Firm Performance	0.932	0.000
Asset Availability \otimes Firm Performance	0.865	0.000
Operations Management \otimes Firm Performance	0.871	0.000

A regression was run using Smart PLS 3 to show the joint relationship of sense-making, decision-making, asset availability and operations management on the performance of manufacturing SMEs. The results are shown in Table 4. These results confirm hypothesis H₀₅ that organisation capacity factors have a joint influence on performance of manufacturing SMEs.

Table 4: Regression Results for Individual Independent Variables

Variable	SM	DM	AA	OM
Beta	0.708	0.936	0.859	0.862
Significance	0.000	0.000	0.000	0.000

The strong positive correlations between each of the independent variables (sense-making, decision-making, asset availability, operations management) and firm performance, and their associated high beta values implies that manufacturing SMES consider these dimensions of organisation capacity to be important for realising corporate performance targets. To guarantee successful performance, management must pay attention to an organisational design that prioritises strategic proportion of these elements.

Mediation Role of Entrepreneurial Orientation

Table 5 shows results of the mediation analysis. The first regression showed that organization capacity had a positive and significant influence on EO ($r_1=0.759$, $t=10.820$, $R^2=0.576$). The results of the second regression showed that organization capacity had a positive and significant influence on firm performance ($r_2=0.397$, $t=3.039$, $R^2=0.158$). The results of the third regression showed that when EO was entered into the relationship as a mediating variable, there was a positive and significant influence of EO on firm performance ($r_3=0.359$, $t=1.870$, $R^2=0.125$), while controlling the influence of organization capacity.

The result of the fourth regression showed that, with EO in the relationship, the earlier significant influence of organization capacity on firm performance reduced from 0.397 to 0.062; moreover, this influence was no longer significant ($p=0.764$). The inclusion of EO as a mediator in the relationship between organization capacity and firm performance resulted in an effect increase (R^2) from 12.5% to 18.3%. This demonstrates full mediation effect of EO, and supports hypothesis H₀₆ that EO mediates the relationship between organisation capacity and performance of manufacturing SMEs in Kenya.

Table 5: Results of Regression Analysis for Overall Mediation Model

Regression	Path	Sample mean	Std error	R ²	t-statistic	p-value
Second	Organization capacity → Entrepreneurial Orientation	$r_1=0.784$	0.070	0.615	10.820	0.000

First	Organization capacity → Firm Performance Entrepreneurial orientation	$r_2=0.397$	0.109	0.158	3.039	0.003
Third	→ Firm Performance Organization	$r_3=0.388$	0.192	0.129	1.870	0.062
Fourth	capacity → Firm Performance	$r_4=0.062$	0.208	0.183	0.300	0.764

The import of the finding that EO mediates the relationship between organization capacity and firm performance implies that if the firm lacks a strategy to apply the capacity for generation of competitive advantage, then mere possession or development of the different firm capacity elements does not guarantee enhanced performance. Therefore, accumulation of resources has to be matched with knowledgeable firm operatives who have the knack to exploit the potential in resource accumulation and convert it into value. Specifically, entrepreneurial operatives will identify the unique features in resource accumulations and exploit these features to generate unique value deliverables (Bakar, Mahmood, & Ismail, 2014).

The RBV of the firm envisages that the accumulated resources will be applied to create competitive advantage, by exploiting individual and joint resource distinctiveness, and the capability to combine the resource portfolio for unique value creation. These resource-combination competencies reside in the firm's human resource. To put these competencies into play requires a management strategy that pervades throughout the internal firm environment. In particular, management is called upon to be entrepreneurial in managing knowledge inherent in the firm's human resources (Bakar *et al*, 2014; Zainol & Ayadurai, 2010). It must also be entrepreneurial in managing other tacit resources, in addition to the physical and financial resources. If the strategy of entrepreneurial management is successfully implemented, the firm will generate an organizational cohesion that is premised on productivity enhancement (Mustapa *et al*, 2014). Moreover, this cohesion will ease the coordination of all the firm's functions, and enhanced firm performance can be guaranteed.

Leveraging EO will also motivate firm operatives to engage their creativity in performance of their tasks, and this in turn will result in new products, new production methods and also new methods of managing the evolving innovativeness – in short, new production systems. The competency to perform entrepreneurial acts can be considered as an EO stock. The amount of EO stock in a firm can be determined from the number of entrepreneurially minded employees that it engages. To build and sustain a strong competitive advantage, manufacturing SMEs could start by considering the stock of EO they already possess in order to strategize how to exploit it, and go a step further to maximize its application in the firm's operations. Also, manufacturing SMEs should enact a motivation policy that can encourage their staff to engage their entrepreneurial knack for firm performance enhancement (Bakar *et al*, 2014).

For manufacturing firms in Kenya, hope in reclaiming home ground lost to foreign

competitors lies in capitalizing on the enabling power of EO to revamp overall productivity in terms of goods production, distribution of goods to consumers, and management of relationships with all stakeholders in the manufacturing ecosystem. Therefore, manufacturing SMEs that will build an on-going competitive advantage have a self-commissioned mandate to build a tangible and intangible resource base, corresponding to its desire to claim domestic and regional markets and conquer global niches. The mandate also includes supporting entrepreneurial practice by availing resources for developing innovations that are in line with the firm's mission. This will ensure that EO is mainstreamed into the firm's operations, and the strategic outcome of a superior competitive advantage will be achievable.

Conclusions

This study contributes important insights to knowledge on organisation capacity, EO and firm performance, on which there is a lingering paucity of research attention, especially in relation to EO as a mediator of the relationship between organisation capacity and performance of manufacturing SMEs. The current study shows that organisation capacity is a requirement to enable manufacturing SMEs to benefit from the practice of EO. By developing the tacit resources and capabilities of sense-making and decision-making, ensuring strategic availability of the various required assets, and practising competent operations management, manufacturing SMEs are able to establish the building blocks for a dynamic organisation capacity that can be exploited to raise performance outcomes. This capacity needs an infusion of EO to activate the unique value creation synergies to produce sustainable competitive advantage. This study recommends that SMEs should implement a strategy on how to establish a norm of entrepreneurial behaviours in managing all the firm's operations, including resource accumulation and allocation plans, with a view to optimising the rent-extraction capabilities inherent in those resources. It also recommends government support to manufacturing SMEs through collaborating with the manufacturing sector to develop a programme of reconfiguring management processes to enhance manufacturing sector performance, and enlist SMEs in this initiative.

The findings of this study should be applied cautiously, because it focused on the food and beverage sector. Future studies could involve all the manufacturing sectors to enable generalization of the findings to the whole industry. The cross-sectional design of the study is an acknowledged limitation; it is suggested that futures studies use a longitudinal design so that the findings show the evolving economic dynamics.

References

- Adams, J., Khan, H. T., Raeside, R., & White, D. (2007). *Research Methods for Graduate Business and Social Science Students*. New Delhi: Response Books.
- Amit, R., & Schoemaker, P. J. (1993). Strategic Assets and Organizational Rent. *Strategic Management Journal*, 14, 33-46.
- Bacon, D. R., Sauer, P. L., & Young, M. (1995, June). Composite Reliability in Structural Equations Modeling. *Educational and Psychological Measurement*, 55(3), 394-406.
- Bakar, H. A., Mahmood, R., & Ismail, H. (2014). Combined Effect of Knowledge Management

- and Entrepreneurial Orientation on Performance of Small and Medium Enterprises. *Knowledge Management International Conference (KMICe) 2014, 12 – 15 August 2014*, (pp. 554-560). Malaysia: Knowledge Management International Conference.
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99-120.
- Carmeli, A., Zachary, S., & Halevi, M. Y. (2009). Does Participatory Decision-making in Top Management Teams Enhance Decision Effectiveness and Firm Performance? *Personnel Review*, Vol. 38(No. 6), 696-714.
- Chege, J., Ngui, D., & Kimuyu, P. (2015). Scoping Paper on Kenyan Manufacturing. *Learning to Compete Working Papers*(Working Paper No. 025), 1-32.
- Chin, W. W. (2010). Chapter 28 - How to Write Up and Report PLS Analyses. In V. Esposito Vinzi, W. Chin, J. Henseler, & H. Wang, *Handbook of Partial Least Squares, 1st ed.* (pp. 655-690). Springer.
- Curran, P. J., West, S. G., & Finch, J. F. (1997). The Robustness of Test Statistics to Nonnormality and Specification Error in Confirmatory Factor Analysis. *Psychological Methods*, 1, 16–29.
- Farole, T., & Mukim, M. (2013). *Manufacturing Export Competitiveness in Kenya: A Policy Note on Revitalizing and Diversifying Kenya's Manufacturing Sector*. Republic of Kenya. Washington DC: World Bank.
- Ferreira, J., & Azevedo, S. G. (2008). Entrepreneurial Orientation and Growth of Firms. *Problems and Perspectives in Management*, Vol 6(Iss 1), 82-88.
- Ferreira, J., Azevedo, S. G., & Ortiz, R. F. (2011). Contribution of Resource-based View and Entrepreneurial Orientation on Small Firm Growth. *Cuadernos de Gestion*, 11(1), 95-116.
- Filstad, C. (2014). The Politics of Sensemaking and Sensegiving at Work. *Journal of Workplace Learning*, Vol 26(No.1), 3-21.
- Fis, A. M., & Cetindamar, D. (2009). The Missing Link between Firm-level Entrepreneurship and Performance. *9th International Entrepreneurship Forum, 16-18 September 2009* (pp. 1-12). Istanbul: International Entrepreneurship Forum.
- Friebel, G., & Schweiger, H. (2012). Management Quality, Firm Performance and Market Pressure in Russia. *Conference on the Diversification of the Russian Economy on 3-4 February 2011*. (pp. 1-29). EBRD: European Bank for Reconstruction and Development.
- Grewal, R., & Slotegraaf, R. J. (2007). Embeddedness of Organizational Capabilities. *Decision Sciences*, 38(3), 451-488.
- Hair, J., Ringle, C., & Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *Journal of Marketing Theory and Practice*, 19(2), 139-152.
- Hughes, M., & Morgan, R. E. (2007). Deconstructing the Relationship between Entrepreneurial Orientation and Business Performance at the Embryonic Stage of Firm Growth. *Industrial Marketing Management*, 36, 651–661.
- Kesenwa, A., Oima, D. O., & Oginda, M. (2013). Effects of Strategic Decision Making on Firm's Performance: A Case Study of Safaricom Limited, Nairobi, Kenya. *International Journal of Business and Social Science*, Vol. 4(No. 13), 92-105.
- Kline, R. B. (2011). *Principles and Practice of Structural Equation Modeling* (Third ed.). New York: The Guilford Press.
- Landini, F., Alessandro, A., & Lasagni, A. (2014). Intangible Asset Dynamics and Firm Behaviour. *DRUID Society Conference 2014, CBS, Copenhagen, June 16-18* (pp. 1-39). Copenhagen: Druid Society.
- Lwiki, T., Ojera, P. B., Mugenda, N. G., & Wachira, V. K. (2013). The Impact of Inventory Management Practices on Financial Performance of Sugar Manufacturing Firms in Kenya. *International Journal of Business, Humanities and Technology*, Vol.3(No.5), 75-85.
- Mahmood, R., & Hanafi, N. (2013). Entrepreneurial Orientation and Business Performance of Women-Owned Small and Medium Enterprises in Malaysia: Competitive Advantage as a

- Mediator. *International Journal of Business and Social Sciences*, 4(1), 82-90.
- Mburia, B. W., Wanjau, K., & Kinyanjui, J. K. (2016). Effect of Quality Management and Entrepreneurial Orientation on Performance of Food Processing Firms in Kenya. *Asian Academic Research Journal*, 3(9), 177-194.
- Mustapa, I. R., Ghazali, N. A., & Mohamad, M. H. (2014). The Moderating Influence of Organizational Capacity on the Association between Corporate Governance and Corporate Performance. *International Conference on Accounting Studies, 18 - 19 August 2014* (pp. 76 – 83). Kuala Lumpur: Elsevier.
- Ngoze, M., & Bwisa, H. (2014, September 2nd). *Entrepreneurial Orientation and Financial Performance of Manufacturing Firms in Developing Countries: Are Kenya's Manufacturing Firms Exempted?* Retrieved December 18th, 2015, from <http://ssrn.com/abstract=2490713>
- Oliver, C. (1997). Sustainable Competitive Advantage: Combining Institutional and Resource-Based Views. *Strategic Management Journal*, Vol. 18:9, 697-713.
- Otieno, S., Bwisa, H. M., & Kihoro, J. M. (2012). Influence of Entrepreneurial Orientation on Kenya's Manufacturing Firms Operating under East African Regional Integration. *International Journal of Learning & Development*, Vol. 2(No. 1), 299-319.
- Peteraf, M., & Barney, J. (2003). Unraveling The Resource-Based Tangle. *Managerial and Decision Economics*, Vol. 24, 309-323.
- Podsakoff, P., MacKenzie, S., Lee, J., & Podsakoff, N. (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology*, 88, 879-903.
- Ray, G., Barney, J. B., & Muhanna, W. A. (2004). Capabilities, Business Processes, and Competitive Advantage: Choosing the Dependent Variable in Empirical Tests of the Resource-Based View. *Strategic Management Journal*, 25, 23-37.
- Ringle, C. M., Wende, S., & Becker, J.-M. (2015). *SmartPLS*. Retrieved March 24th, 2017, from "SmartPLS 3." Boenningstedt: SmartPLS GmbH: <http://www.smartpls.com>
- Rotich, A. K., Wanjau, K. L., & Namusonge, G. (2015). Moderating Role of Entrepreneurial Orientation on the Relationship between Relationship Lending and Financial Performance of Manufacturing SMEs in Kenya. *European Journal of Business and Management*, 7(18), 198-209.
- Soininen, J. (2013). *Entrepreneurial Orientation in Small and Medium-Sized Enterprises During Economic Crisis*. Unpublished Docoral Thesis. Lappeenranta University of Technology: Lappeenranta.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using Multivariate Statistics*. Boston: Pearson Education, Inc.
- Thomas, J. B., Clark, S. M., & Gioia, D. A. (1993). Strategic Sensemaking and Organizational Performance: Linkages among Scanning, Interpretation, Action and Outcomes. *Academy of Management Journal*, Vol. 36(No. Z), 238-270.
- Zainol, F. A., & Ayadurai, S. (2010). Cultural Background and Firm Performances of Indigenous (Bumiputera) Malay Family Firms in Malaysia: The Role of Entrepreneurial Orientation as a Mediating Variable. *Journal of Asia Entrepreneurship and Sustainability*, Vol VI(Issue 1), 3-19.
- Zainol, F. A., & Ayadurai, S. (2011). Entrepreneurial Orientation and Firm Performance: The Role of Personality Traits in Malay Family Firms in Malaysia. *International Journal of Business and Social Science*, 2(1), 59-71. Retrieved September 15th, 2014, from <http://www.ijbsnet.com>

Appendix 1: Validity Analysis

	NP	TV	MD	RM	CO	OF	HR	PI	NT	BP	PS	QC	IN	RT	PR	PG	PP	PE
NP	1.00																	
TV	.650**	.820																
MD	.524**	.682**	.800															
RM	.364**	.525**	.459**	.925														
CO	.467**	.555**	.543**	.792**	.820													
OF	.393**	.430**	.476**	.465**	.746**	.874												
HR	.225	.358**	.356**	.668**	.607**	.522**	.817											
PI	.268*	.372**	.306**	.490**	.494**	.401**	.619**	.826										
NT	.536**	.421**	.478**	.456**	.503**	.451**	.496**	.400**	.711									
BP	.199	.257*	.239*	.643**	.524**	.476**	.539**	.489**	.276*	.943								
PS	.219	.341**	.322**	.671**	.649**	.587**	.666**	.502**	.354**	.711**	.926							
QC	.257*	.435**	.330**	.606**	.640**	.433**	.516**	.429**	.463**	.541**	.641**	.817						
IN	.446**	.529**	.528**	.580**	.632**	.488**	.514**	.506**	.491**	.359**	.453**	.411**	.837					
RT	.359**	.487**	.525**	.503**	.556**	.450**	.325**	.408**	.426**	.267*	.287*	.417**	.723**	.879				
PR	.367**	.468**	.492**	.599**	.643**	.574**	.488**	.472**	.531**	.395**	.443**	.451**	.600**	.518**	.897			
PG	.166	.149	.204	.230*	.189	.163	.169	.147	.107	.024	.111	.183	.222	.295**	.207	.756		
PP	.188	.370**	.374**	.263*	.274*	.310**	.206	.176	.165	.045	.231*	.207	.333**	.288*	.262*	.719**	.818	
PE	.161	.278**	.210	.387**	.395**	.300**	.295**	.270*	.106	.189	.207	.289*	.397**	.381**	.378**	.703**	.637**	.879

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

*Correlation is significant at the 0.05 level (2-tailed)

The bold figures in the diagonal are values of the square root of AVE for each respective construct. They demonstrate that the constructs have discriminant validity.