INFLUENCE OF ORGANIZATIONAL STRUCTURE ON PERFORMANCE OF LARGE MANUFACTURING FIRMS IN KENYA

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ABSTRACT

Even though Kenya has been praised for its robust economy and that is set to become one of the top five fastest-growing in sub-Saharan Africa, manufacturing output remains low compared to other sectors. Kenyan manufacturers have registered stagnation and declining profits of over $330 million annually and government loses of $67 million in potential tax revenue for the last five years due to contingencies. It is estimated that manufacturing companies have lost 70 per cent of their market share in East Africa and this has resulted in some firms announcing plans to shut down their plants and shift operations to Egypt. The general objective of the study was to establish the influence of strategic contingent organizational factors on performance of large manufacturing firms in Kenya by reviewing organizational structure as the study variable. The study adopted a mixed research design of cross-sectional research design and descriptive survey design and the research philosophy was positivism. The study population study was 499 large scale manufacturing companies with a sample size of 217 managers from each of the 217 companies. Data was collected through the administration of questionnaires to the relevant managers. The study findings revealed that organization structure has a significant effect on performance of large manufacturing firms in Kenya. The findings of the study revealed that majority of the companies had a specialized organization structure. Further results indicated that the nature of the span of control in majority of companies is high. On the relationship between Organizational structure and Return on Equity, the study findings revealed that departmentalization, degree of centralization and degree of specialization were positively and significantly related to ROE. Departmentalization was further found to be positively and significantly related to Profit before tax while degree of centralization and degree of specialization were found to be positively and significantly related to ROA. Based on the study findings, the study concluded that organizational structure influences performance. Organization structure has significant effect on performance of large manufacturing firms in Kenya. The sub-constructs of organizational structure that is; specialized organization structure, nature of the span of control, centralization and departmentalization influences performance positively. The study recommended that large manufacturing firms in Kenya should put in place better organizational structure strategies as it leads to better performance. The companies should ensure they have a specialized organization structure, high nature of the span of control, centralized structure and have departmentalization in the company.

Key words: ***Strategic contingent, organizational structure, organizational factors, Large manufacturing firms, performance, Kenya.***

INTRODUCTION

Background and Research Gap

The manufacturing sector is the third biggest industrial sector after agriculture and transport and communication. It is the third leading sector contributing to GDP in Kenya. The sector has experienced fluctuations over the years under different financial conditions mostly contingent in nature (KPMG, 2014). Although Kenya is the most industrially developed country in East Africa, the manufacturing sector in Kenya constitutes 10 per cent of the industrial sector contribution to GDP (RoK, 2014). The growth in manufacturing industry has declined to 3.3 per cent in 2011 as compared to 4.4 per cent in the year 2010 mainly due to a challenging operating environment (KNBS, 2012) The manufacturing sector has high, yet untapped potential to contribute to employment and GDP growth. As an important sector in the overall economic growth, therefore manufacturing sector requires in depth analysis at industry as well as firm level.

The contingency theory of Organizations predicts that the relationship between an organization's factors such as its structure, information technology, dynamic capabilities and leadership characteristics and firm's performance depend upon the level of their contingent nature (Donaldson, 2006). Contingency theory suggests an organization needs to match its firm factors with its contingencies to be successful (Donaldson, 2006). The point to note is that organizational factors cannot be generalized therefore each organization needs to be designed ready to respond to contingencies in to avoid loss of performance. According to Thompson (2007), the significant challenges for complex organizations are posed by contingencies and therefore a firm should properly design their organizational factors to be contingent in order to specifically address them than operating under earlier strategic arrangement. In the dynamic and volatile environments in which most manufacturing companies operate today, flexibility of organizational factors is a valuable capability for competitive advantage (Schmenner & Tatikonda, 2005). However, in the process of adopting the techniques of manufacturing flexibilities, firms still find it challenging to realize benefits towards performance (McDougall 2006; Anderson, 2013). Manufacturing organizational factors flexibility towards performance due to contingencies has emerged as an important source of competitive advantage as companies seek to be responsive to changing customer demands while remaining competitive on the dimensions of cost and quality (Hallgren *et al*.,2011).

Problem Statement

Kenya has been experiencing turbulent times with regard to its organizational practices and this has resulted in declining profits in the manufacturing sector of the economy (Mutindi, Namusonge & Obwogi, 2013). Statistics from World Bank show that Kenyan manufacturers of large scale firms have registered stagnation and declining profits for the last five years due to a turbulent operating environment (WB, 2014). It is estimated that large manufacturing companies have lost 70 per cent of their market share in East Africa largely attributed to contingencies (RoK, 2014a).

In 2014, manufacturing sector in Kenya contributed barely 10% to the GDP which represented 3.4 per cent growth to Sh.537.3 Billion indicating a decline from the previous year 2013 where it had reported a 5.6 per cent growth mainly due to a challenging operating environment like high operational costs (KNBS, 2014).

Many large Manufacturing firms have relocated or restructured their operations, opting to serve the local market through importing from low-cost manufacturing areas such as Egypt therefore resulting in job losses (Nyabiage & Kapchanga, 2014) citing turbulent operating environment and high operating costs. This is an indication that many manufacturing firms in Kenya are experiencing performance challenges with many reporting profit warnings due to challenges in the operating environment (RoK, 2014). Previous studies have shown that contingent organizational factors are critical drivers to performance of organizations (Brewster & Mayrhofer, 2012). Organizations seek to fit their organizational factors to contingencies in order to achieve high performance and to avoid any losses resulting from the misfit when contingencies change (Donaldson, 2006). In addition, previous empirical findings show that contingent firm factors measures have lacked precision and consistency by providing no clear direction on the influence of contingent organizational factors on firm's performance (Walters & Bhuian, 2004; Lee *et al*., 2001).Many studies have focused on financial performance measures ignoring non-financial indicators like environment (Kargar & Parnell 2009).It is therefore inadequate to merely analyse firm's performance by financial performance especially under today's changing operating environment (Qi, 2010).

The manufacturing sector in Kenya has a huge untapped potential contribution to employment and GDP if the challenges facing this sector are properly addressed (Wagana & Kabare, 2015). The study would eventually help in determining what is needed to stop manufacturing firms from failing, stagnating in performance or relocating from Kenya resulting to job losses and therefore continue in operation to the foreseeable future. This study forms the basis to fill this gap.

Study Objectives

The general objective of the study was to establish the influence of strategic contingent organizational factors on performance of large manufacturing firms in Kenya. Specifically, the study sought to establish the influence of organizational structure on performance of large manufacturing firms in Kenya.

RESEARCH METHODOLOGY

The study adopted a mixed research design of cross-sectional research design and descriptive survey design. Using cross-sectional design, the researcher was able to obtain research data over the same period of time. While descriptive research design was used to establish the cause and effect relationship between the dependent variable (Firm Performance) and the independent variables (Contingent organizational factors). The study population study was 499 large scale manufacturing companies. Stratified random sampling method was applied to come up with the sample size, since the population is heterogeneous. The study used a sample size of 217 large manufacturing firms. Data was collected through the administration of questionnaires to the relevant managers. An odds regression model was used to establish the relationship between firm performance and organization structure.

The multiple regression model took the form below:

Odds of Y/ X= β_0+ β_1 Organization structure +ε

Where:

Y = Firm performance (Binary dependent variable [High performance =1, Low performance = 0]) and **ε** = Random or Stochastic term

FINDINGS AND DISCUSSION

Response Rate

The number of questionnaires that were administered was 217. A total of 157 questionnaires were properly filled and returned. This represented an overall successful response rate of 72.4% as shown on Table 1. Babbie (2004) asserted that return rates of 50% are acceptable to analyze and publish, 60% is good and 70% is very good. Based on these assertions from renowned scholars 72.4% response rate is adequate for the study.

Table 1: Response Rate

Response	Frequency	Percent
Returned	157	72.4%
Unreturned	79	27.6%
Total	**217**	**100%**

Organization Structure

The sought to establish the influence of organizational structure on performance of large manufacturing firms in Kenya. The measures of organization structure were degree of Specialization, span of Control, degree of Centralization and departmentalization.

Degree of specialization

The respondents were asked whether their company had a specialized organization structure. 82% of the respondents indicated that their company had a specialized organization structure. 18 %

stated that the company did not have specialized organization structure. The results are as indicated in Figure 1.

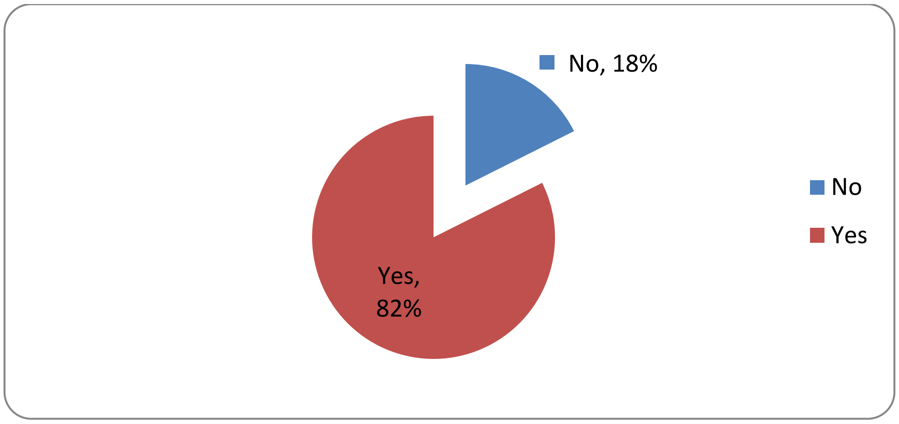

Figure 1: Specialized Organization structure

The respondents were further asked to rate the degree of specialization and 88% of the respondents who had admitted to having specialized organization structure stated that the degree was high. 12 % indicated that it is low. The results are presented in Figure 2.

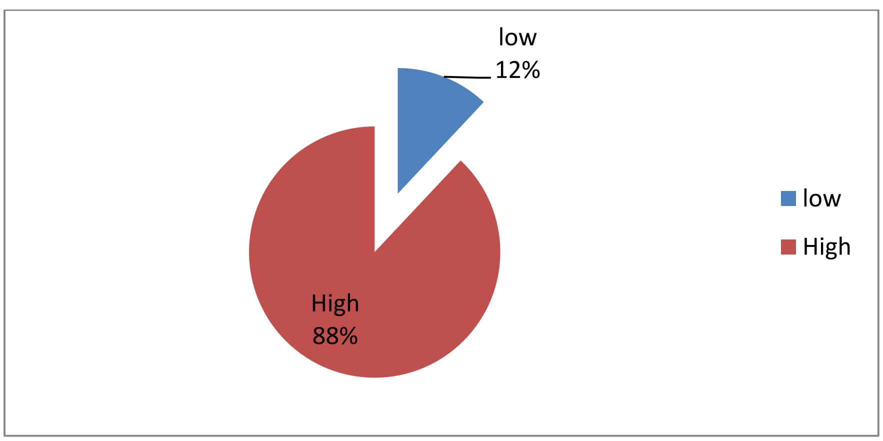

Figure 2: Rating of the degree of specialization

The results in Table 2 indicate that 50.4 percent of the respondents admitted that having specialized organization structure improved performance by 6-10% while 50% of the respondents who don't have specialized organization structure indicated that lack of it decreased performance by 6-10%. Another 50% of these respondents also indicated that lack of specialized structure decreased performance by more than 10%. The findings of the study confirms the argument by Chandler (1962) and Channon (1971) that that organizations must fit structure and processes if the strategy wants to produce positive results. The use of specialization improves performance.

Table 2: Specialized Organization Structure

	Indicator	Percent
specialized organization structure and performance	Improved performance by 0-5%	0.0
	Improved performance by 6-10%	50.4
	Improved performance by more than 10%	49.6
Lack of specialized organization structure and performance	Decreased performance by 0-5%	0.0
	Decreased performance by 6-10%	50.0
	Decreased performance by more than 10%	50.0

Span of Control

Respondents were asked to describe the nature of the span of control in their companies and majority of the respondents, 73%, indicated that it was high while 27% indicated that it was low as indicated in Figure 9.

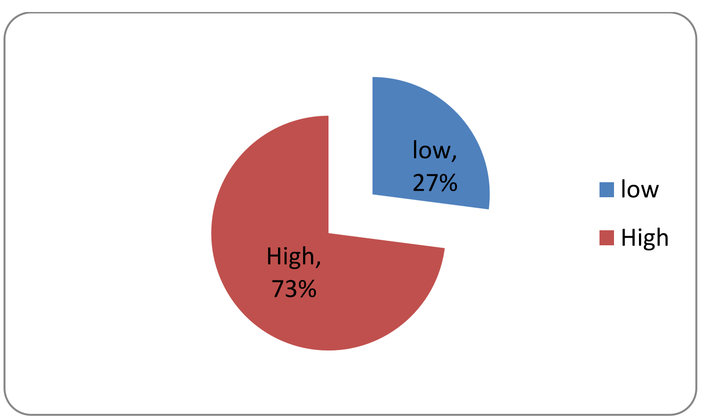

Figure 3: Span of Control

The results in Table 3 indicate that having majority of the respondents, 59.5%, indicated that having a high span of control improved performance by 6-10%. Majority, 62.8% of those respondents who had admitted to having low span of control indicated that it decreases performance by 6-10%.

Table 3: Span of control

	Indicator	Percent
High span of control and performance	Improved performance by 0-5%	0.0
	Improved performance by 6-10%	59.5
	Improved performance by more than 10%	40.5
Low span of control and performance	Decreased performance by 0-5%	0.0
	Decreased performance by 6-10%	62.8
	Decreased performance by more than 10%	37.2

Degree of centralization

The respondents were asked to state the type of structure adopted by their organization. Majority of them, 87%, stated that their companies had adopted centralized structure while 13% indicated that their companies had adopted decentralized structure. The results are indicated in Figure 4.

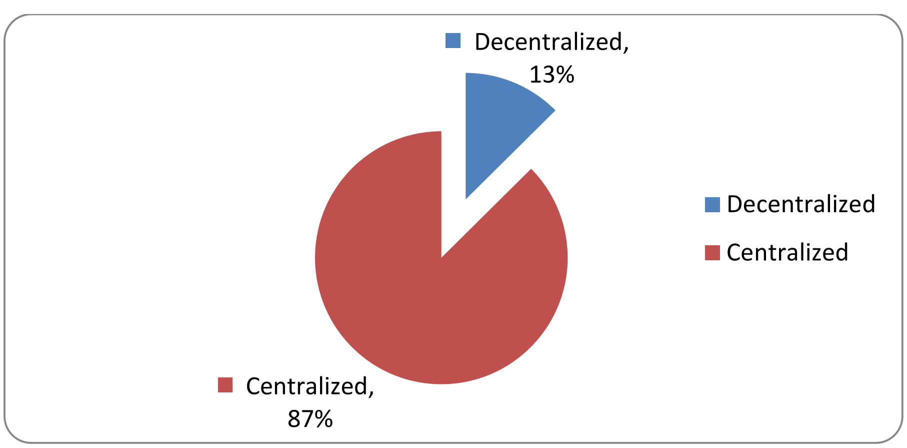

Figure 4: Type of Structure

The respondents who indicated that their companies had centralized structure were further asked to indicate the degree of centralization. Majority of them, 86%, indicated that there was high degree of centralization while 14% indicated low degree as indicated in Figure 5.

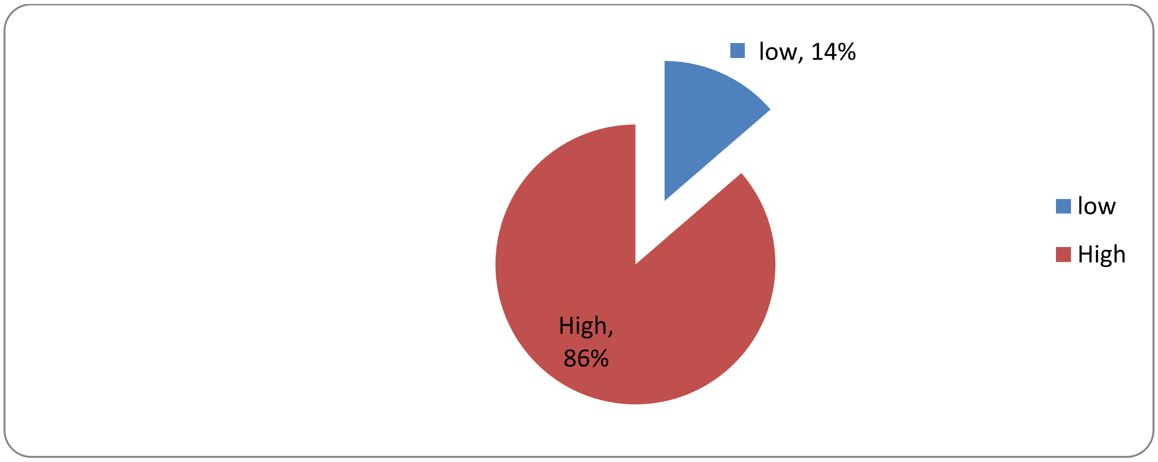

Figure 5: Degree of centralization

The results in Table 3 indicate that majority, 52.5%,of the respondents indicated that centralized structure improved performance by 6-10% while majority,55% of those who had decentralized structure believed that it decreased performance by 6-10%. According to Donaldson (2001) a firm's performance will depend on the degree of adjustment existing between organizational context and organizational structure, without forgetting that no single form of organization exists without factoring the influence of contingencies on its performance. The degree of centralization is believed to have an effect on performance positively as the results confirms.

Table 3: Centralization and performance

	Indicator	Percent
Centralized type of structure and performance	Improved performance by 0-5%	0.0
	Improved performance by 6-10%	52.5

	Indicator	Percent
Decentralized type of structure and performance	Improved performance by more than 10%	47.5
	Decreased performance by 0-5%	0.0
	Decreased performance by 6-10%	55
	Decreased performance by more than 10%	45

Departmentalization

The respondents were asked to state whether the organization structure in their company was departmentalized. Majority of the respondents as shown by a percentage of 84% indicated that the structure was departmentalized while 16% indicated that the structure was not departmentalized.

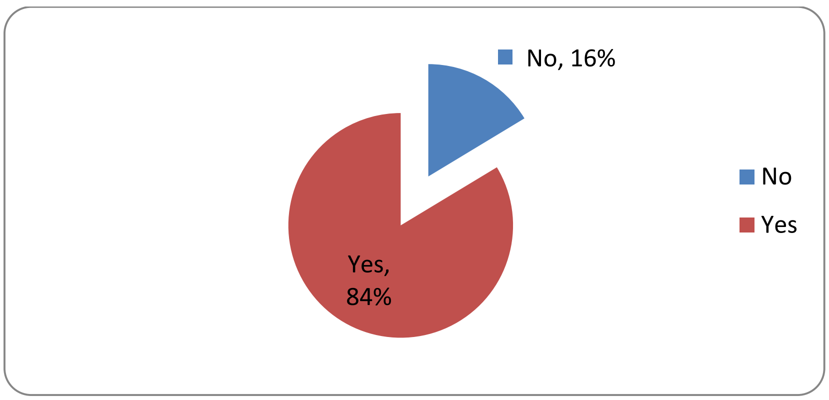

Figure 6: Departmentalization

The results in Table 6 indicate that 51.9% of the respondents indicated that departmentalization improved performance by 6-10%. A majority, 65.4% of those respondents who did not have departmentalization stated that it decreased performance by the same margin.

Table 4: Centralization and performance

		Percent
Departmentalization and Performance	Improved performance by 0-5%	0.0
	Improved performance by 6-10%	51.9
	Improved performance by more than	48.1

		Percent
	10%	
Lack of departmentalization and Performance	Decreased performance by 0-5%	0.0
	Decreased performance by 6-10%	65.4
	Decreased performance by more than 10%	34.6

Relationship between Organizational structure and Return on Equity

Results in Table 5 show the results of the odd ratio regression with regard to Return on Equity. The results reveal that departmentalization was positively and significantly related to ROE. The odds of observing better ROE was 14.111 times higher for those firms with departmentalized organization structure compared to those firms who had no departmentalized organization structure. The results also reveal that degree of centralization was positively and significantly related to ROE. The odds of observing a better ROE was 6.736 times higher for those firms with high degree of centralization as compared to those firms with lower degree of centralization. Further, the results also show that degree of specialization was positively and significantly related to ROE. The odds of observing a better ROE was 10.245 times higher for those firms with high degree of specialization as compared to those firms with lower degree of specialization. The findings of the study confirm the findings of a study by Edelman, Brush and Manolova (2005) who argued that organizational structure influences performance.

Table 5: Odd Ratio Regression for Return on Equity

	B	S.E.	Wald	df	Sig.	Exp(B)
Departmentalization	2.647	0.716	13.649	1	0.000	14.111
Degree centralization	1.907	0.797	5.735	1	0.017	6.736
Span of control	-1.316	0.706	3.477	1	0.062	0.268
Degree of specialization	2.327	1.109	4.401	1	0.036	10.245
Constant	-0.907	0.65	1.947	1	0.163	0.404

Relationship between Organizational structure and Profit before tax

Results in Table 6 show the results of the odd ratio regression with regard to Profit before tax. The results reveal that departmentalization had a positive and significant relationship with the odds of better PBT. The odds of observing better PBT was 6.796 times higher for those firms with a departmentalized organization structure as compared to those without. The other sub constructs of organizational structure namely degree of centralization, span of control and degree of specialization were found to be insignificantly related to profit before tax. This finding confirms the argument by Eriksen (2006) that organizational structure does not directly influence firm performance but how contingent it is ultimately influences the performance of firms because contingencies directly influence costs and revenues.

Table 6: Odd Ratio Regression for Profit before tax

	B	S.E.	Wald	df	Sig.	Exp(B)
Departmentalization	1.916	0.76	6.353	1	0.012	6.796
Degree centralization	0.907	0.845	1.151	1	0.283	2.477
Span of control	-1.374	0.796	2.979	1	0.084	0.253
Degree of specialization	19.274	5230.695	0	1	0.997	2.35E+08
Constant	0.623	0.65	0.919	1	0.338	1.864

Relationship between Organizational structure and Return on Assets

Results in Table 7 show the results of the odd ratio regression with regard to Return on Assets. The results reveal that departmentalization was positively and significantly related to ROA. The odds of observing a better ROA was 3.914 times higher for those firms which are departmentalized as compared to those firms which are not departmentalized. The results also reveal that degree of centralization was positively and significantly related to ROA. The odds of observing a better ROA was 5.52 times higher for those firms which had embraced a high degree of centralization compared to those with low degree of centralization. Further, the results also reveal that degree of specialization had a positive and significant relationship with ROA. The odds of observing a better ROA was 17.561 times higher for firms which are highly specialized compared to firms which have low degree of specialization.

Table 7: Odd Ratio Regression for Return on Assets

	B	S.E.	Wald	df	Sig.	Exp(B)
Departmentalization	1.365	0.558	5.97	1	0.015	3.914
Degree centralization	1.708	0.677	6.369	1	0.012	5.52
Span of control	-0.955	0.616	2.403	1	0.121	0.385

Degree of specialization	2.866	1.072	7.147	1	0.008	17.561
Constant	-0.939	0.587	2.559	1	0.11	0.391

Conclusion

The general objective of the study was to assess the influence of strategic contingent organizational factors on performance of large manufacturing firms in Kenya. Based on the study findings, the study concluded that organizational structure influences performance. Organization structure has significant effect on performance of large manufacturing firms in Kenya. The sub-constructs of organizational structure that is specialized organization structure, nature of the span of control, centralization and departmentalization influences performance positively.

Recommendations

The study recommended that large manufacturing firms in Kenya should put in place better organizational structure strategies as it leads to better performance. The companies should ensure they have a specialized organization structure, high nature of the span of control, centralized structure and have departmentalization in the company.

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