

# **Moderating Effect of Firm Size on the Relationship between Functional Integration and Firm Performance**

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## **ABSTRACT**

*The study aimed to determine the effect of functional integration on the performance of manufacturing firms in a developing country context. The study used descriptive survey approach. A structured and semi structured questionnaire was administered to 176 manufacturing firms in Nairobi and surrounding areas. A response rate of 63% was achieved. While, correlation and multiple regression analysis, was used to explain the direction and nature of relationship between the variables respectively. F-statistic was also used to decide the validity of the model while R-squared was used to help determine the model goodness-of-fit. The findings revealed that performance of manufacturing firms was significantly related to the extent of emphasis on the functional integration dimension of strategic planning in the firms. The study, concluded that functional integration dimension in strategic planning had significant effect on manufacturing firm performance indicators of the firms. The study also concluded that, firm size is not moderator in the relationship between functional integration and firm performance. This implies that, irrespective of firm size, functional integration as a strategic capability is available to both small, medium and large*

*manufacturing firms in Kenya. It also suggests that there may be other moderators not dealt with in the study.*

**Key words:** *Strategy, Strategic Planning, Functional Integration, Firm performance.*

## **Introduction**

The manufacturing sector is a critical economic pillar to Kenya's Vision 2030. The overall goal for the manufacturing sector has been "to increase its contribution to GDP by at least 10% per annum. The sector contributes 13% of the total formal employment and according to the World Bank, (2013) , the sector has the potential to play an important role in putting Kenya on a sustainable growth path. However, as a share of GDP, manufacturing has continued to stagnate at between 10 and 12 percent of GDP throughout the past two decades. As a share of GDP, however, manufacturing has continued to stagnate at between 10 and 12 percent of GDP throughout the past two decades. While this level is well ahead of its regional peers, it remains far behind South Africa (which has a similar population level) and international peers who have experienced major growth in the manufacturing sector's contribution to GDP. As recently as 2000, manufacturing was the second largest contributor to the Kenyan economy. It has since fallen to fourth in importance, having been surpassed by the transport & communications and wholesale and retail trade sectors. (World Bank, 2014). It has also been observed, that firm level factors and processes seem to have been ignored in the discourse. The study aims to determine the effect of management participation dimension of strategic planning and firm performance from a Balanced Score Card perspective, which combines financial performance measures and non-financial performance.

## **Research Questions:**

The study sought to answer two fundamental questions:

What is the effect of functional Integration on the performance of Kenya's manufacturing firms? What is the moderating effect of firm size on the relationship between functional integration and performance of Kenya's manufacturing firms?

## **Literature Review:**

### **Functional Integration**

In the Resource Based View (RBV) of the firm, a firm is an bundle of resources that is meant to create and deliver value. This is done at various levels by integrating and coordinating activities of the various aspects of the firm including, the people, the structure, the processes in order to ensure organizational goals are and strategies are executed while helping the firm achieve sustainable competitive advantage. According to Ramanujam and Venkatraman (1987) Kargar and Parnell (1996) functional integration or functional coverage could be described as the extent of coverage given to different functional areas with a view to integrating different functional requirements into a general management perspective.

Ramanujam et al, (1986) argue that functional coverage can vary because of strategic differences in the competitive postures of firms in an industry. Jarzabkowski and Balogun (2009) concur that organizations are placing increased emphasis on strategic planning as a means of enabling communication, participation, and integration around common goals of the organization. They further, confirm that, to deliver integration a strategic planning process needs to take account of the divergent interests that people in the organization bring to that process. Phillips and Moutinho (2000) suggested knowledge and experience from different functions and from different levels within the firm enhances the functional integration role of strategic planning systems.

Functional integration has been dissected into internal integration and external integration. O'Leary-Kelly and Flores, (2002); Pagell, (2004) describe internal integration as the extent to which separate departments within an organization work together to efficiently meet end customers' needs. That, in developing a business plan, it is essential to coordinate the marketing component with the other functions of the organization, the financial, production, procurement, personnel, research and development (R&D) plans and the short and long term corporate strategies and objectives. Marketing plans should be consistent with the financial and accounting perspectives of the firm, be in agreement with the organization's personnel and procurement procedures and aimed at achieving the corporate objectives (Homburg, Christian & Workman, 1994). Second, it is essential to incorporate marketing inputs in the other corporate plans (e.g., financial, production, procurement, R&D and personnel) as well as the overall short and long term plans of the firm (Day,2000).

Paiva and Gavronski (2009) listed key decision areas which are dependent on cross functional integration between manufacturing and marketing. This areas include strategic planning integration, strategic or visionary forecasting, new product or process development, tactical forecasting, demand management and operational integration. Tyler and Gnyawali, (2002) likewise, showed that , a high level of coordination between different departments is likely to facilitate the sharing of important information between various departments for fast and efficient response to the external stimuli. A comprehensive understanding of the interrelationships between marketing and the other business functions requires predominantly recognition of the importance of identifying and understanding the nature and magnitude of these of interrelationships and conditionings (Davenport, et al 2011)

Goldstein and Ward (2004) cited in Kushner, (2012) found that the integration of leading specialists positively influences organizational performance. Consequently, they observed that, results hint at the potential for further research on organizations in specialized industries, such as consulting or capital goods, to study the integration of senior project managers or development engineers.

Cross-functional cooperation must be viewed as an investment, and should thus be used only when integration of functions is critical and when simpler mechanisms for coordination, such as plans and schedules, are inadequate (Ketokivi et al,2006). To achieve integrated plans of an organization's functions, their development should be coordinated since the initial phase so that each function of the organization has to know and understand what the others make.

In addition, when developing plans for each function, each and every one must understand the impact of these actions on customers and the potential response from competitors.

The perpetually dynamic environments under which businesses operate require a gradual approach toward strategic integration in order to determine and pursue the appropriate organizational priorities. The process of strategic integration involves crafting and implementing strategic objectives from an informed perspective of an organization's competitive environment. The adoption of strategic integration portends the following implications to business organizations, adjusting structures and relationships that affect functional groups and related processes in organizations to achieve greater profit margins through shared organizational processes, adjusting targets, reward systems, and metrics to reflect changes in procedures and approach to production (Ketokivi, et al, 2006).

According to Schmidt (2008) organizations that view integration as a “strategy” and that focus their people, policies and investments around the strategy will have a clear competitive advantage. They will create an agile business where each link in the chain can change and adapt to meet local needs while the end-to-end chain remains strongly aligned with the overall operating model. A clear outcome of the process of functional integration will be a common action platform borne out of an amalgamation of the functional plans provided, which anchors the integrative role of strategic planning in the firm. The study thus hypothesized that;

**Ho<sub>1</sub>:** Functional Integration has no significant effect on the performance of Kenya’s manufacturing firms.

### **Firm Performance**

Measurement of organizational performance is not easy for business organizations with multiple objectives of profitability, employee satisfaction, productivity growth, corporate social responsibility and adaptability (Waiganjo, 2013). Khatri and Ng(2000) defined performance as the way an organization performs vis-a-vis other similar organizations in its industry, not only on traditional financial indicators of performance but on important non-financial indicators as well.(cited in Elbanna and Naguib, 2009). Kargar and Parnell (1986) and Ramanujam and Venkatraman (1987) describe firm performance as, how well or badly a firm is performing both financially and non-financially.

*Ramanujan et al, (1986) asserted that an exclusive emphasis on financial performance is conceptually unsound.* Elbanna (2009) and McLarney (2001) have noted that in measuring strategic planning effectiveness, traditional strategic planning research has neglected the role of a range of non-financial outcomes. These include efficiency in operations, public

image, quality of products and employee satisfaction. The firm performance criteria in general have traditionally focused on metrics based on financial information. However, financial measures are historical in nature, reporting outcomes and the consequences of past actions (Kaplan & Norton, 2001) thus, they are of little use in improving current performance (Kagioglou *et al.*, 2001). This situation has led to criticism of business environments that rely on lagging financial measures, since these measures result in short-termism, lack of strategic focus, local optimization and misleading signals for continuous improvement and innovation that are not externally focused on customers and competitors (Bourne *et al.*, 2000; Anderson & McAdam, 2004). Parker (2000) averred that financial measures fail to include the less tangible factors such as product or service quality, customer satisfaction and employee morale and added that they tend to be very insular and inward-looking and only take what is happening in the firm into account.

A number of studies have adopted a multi-dimensional approach to assessing firm performance. Phillips and Moutinho (2000) describing performance as the accomplishments and outcomes of an entity, caution that generally agreed measures of performance of a company are hard to come by but, adds that, the option to ignore performance is not viable, since performance improvement is an important strategic objective. In an attempt to address some of the challenges, Walker and Ruekert (1987) broke down the important aspects of corporate strategy into effectiveness, efficiency, and adaptability, however, they then admit that there is little agreement as to which measure is best. Elbanna (2008) suggested Non-financial measures which included, increased effectiveness in achieving strategic goals, increased commitment among line managers shared vision, fit between internal and external capabilities and consideration of the future implications of decision. Kaplan and Norton (2008) argue that the Balanced Score Card considers financial indications as one of the critical measures of firm performance. Performance in manufacturing firms is measured in terms of a firm's profit margins, volume of sales and employment opportunities created as a result of the firm's products and services being sold in the market place (Kiganane, 2013).

According to Kaplan and Norton (1992) the financial perspective use a financial performance measurement indicator as to whether the company's strategy, implementation and execution are affecting the bottom line enhancement. Financial goals for large companies will be profitability, growth and shareholder's value. However, Amoako-Gyampah and Acquah (2008) limited themselves to sales growth, and market share omitting other measures such as profitability because of desire to obtain a large response rate and observed that in Ghana, there is often reluctance by firms to divulge sensitive financial information on profitability and performance, even when the data requested were subjective. The study thus integrated financial and non-financial parameters with direct impact on performance. These parameters have been used together with the financial measures of sales growth, profitability growth, Assets growth and employment growth referring to employment opportunities created. Non-financial measures included;

customer growth, internal business processes and firm learning and growth focussing on aspects such as, innovation, research and development.

### **Firm Size**

Studies on the association between strategic planning and performance have been found inconclusive. (Greenley, 1986; Miller et al, 2013; Elbanna, 2010). One possible explanation for the strategic planning performance linkage inconsistencies could be, the contingent role of firm characteristics such as size, age, firm ownership, technology among other. Namada et al, (2014) having observed apparel and textiles sub sector firms in the Kenya's Export Processing Zone (EPZ) suggested that the relationship between management participation as a dimension of strategic planning and firm performance may be moderated by organizational culture, power politics and company size. .

According to Niresh & Velnampy, (2014), firm size is a primary factor in determining the profitability of a firm due to the concept of economies of scale in the neo classical view of the firm. Oladele and Olagunju (2013) showed that *in today's world firm size is very critical to performance due to the phenomenon of economies of scale. Essentially, it means larger manufacturing entities can obtain cost leadership relative to smaller firms. Firms size is seen by manufacturing companies as a resource in obtaining sustainable competitive advantage in terms of profit and market share.* Ramasamy, Ong and Yeung, (2005) observed that the association between firm performance and firm size was ambiguous and cautioned need for industry specific consideration while, advising researchers to proceed on a case-by-case basis of analysis and avoid the tendency to generalise. Babalola (2013) concluded that firm size, both in terms of total assets and in terms of total sales, had a positive impact on the profitability of manufacturing companies in Nigeria. Abdurahman, Awad, Erik and Jeffrey (2003) in Oladele et al (2013) observed that the nature of the relationship that exists between firm size and profitability is an essential matter that may shed some light on the factors that enhance profits in firms.

The link between firm size and performance has been contentious since Gibrat (1931) hypotheses, described that firm's growth rate is independent of its size. Palangkaraya, Stierwald and Yong (2005) in their study showed that larger and older firms were less productive, but found the evidence less than conclusive. In more recent studies, however, a positive relationship has been established between the size of the firm and profit. Akinyomi et al (2013) in their study found that firm size, both in terms of total assets and in terms of total sales, has a positive effect on the profitability in Nigerian manufacturing companies. Accordingly, Cabral and Mata, (2003) in their study of Portuguese manufacturing firms validated the view that availability of more accurate and complete data set has been adduced as the reason for the conflict between what was previously held as independent relationship between firm size and growth and new findings that there is positive relationship. Wu (2006) in Prasetyantoko and Parmonon (2012) argued that larger firms have



stronger competitive capability than the smaller ones as a result of their superior access to resources.

Kannadhasan and Nandagopal (2009) examined the role of firm size as a moderator on the performance and strategy relationship and found there is a statistically significant relationship ( $p > 0.05$ ) among strategy, firm size and performance of Indian automotive companies. Firm size has been acknowledged to play a moderating role for relatively smaller firms when they are internationalizing, size has its biggest impact when relatively smaller SMEs acquire international knowledge and experience. In the study, in order to identify contingent factors that interact in the strategic planning dynamics firm size was investigated as moderator in the relationship between strategic planning practices and performance of manufacturing firms in Kenya.

Overall, the findings support the RBV, indicating that New Zealand firms focusing on IT competencies will more likely gain significant benefits in market and development performance, although smaller sized firms achieve greater development performance than larger sized firms at all levels of IT competency.

Pagano and Schivardi (2003) found a positive and robust association between average firm size and growth. , that that larger average size fosters productivity growth because it makes possible to take advantage of all the increasing returns associated with R&D and finally argue that firm size has a causal impact on growth. The study then hypothesized that;

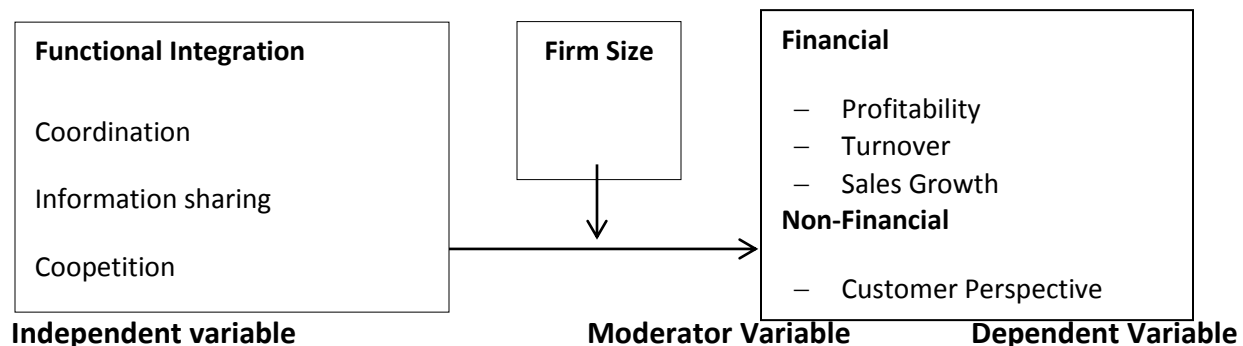
**H<sub>02</sub>:** Firm Size has no significant moderating effect on the relationship between functional integration and performance of Kenya’s manufacturing firms.

**Conceptual Framework:**

Below is the conceptual framework for the study

**Strategic Planning Practices**

**Performance of manufacturing firms**



**Regression Results for Effects of Functional Integration and Firm Performance.**

The regression model of X<sub>2</sub> and Y was significant(  $F(1,108) = 13.053$ ,  $p\text{-value} < 0.001$ ), functional Integration is a valid predictor in the model. See Table 4.13(b). The Coefficient of

determination  $R^2$  of 0.108 showed that 10.8% of firm performance can be explained by the dimension of Functional Integration in strategic planning. The adjusted  $R^2$ , explained 0.100 or 10%, the rest can be explained by other factors not included in the model. The R of 0.328 shows there is weak positive correlation between extent of Functional Integration in strategic planning and firm performance. The standard error of 0.941 shows the deviation from the line of best fit results are shown in Table 4.13 (a)

The study hypothesized  $H_{01}$ : *Functional Integration has no significant effect on the performance of Kenya’s manufacturing firms.*

The results of the survey revealed that there was positive relationship between Functional Integration and performance of manufacturing firms in Kenya. ( $\beta_2=5.994, t= 3.613, p\text{-value} < 0.001$ ). To test the relationship the Regression Model fitted was  $Y= \beta_0 + \beta_2X_2+ e$

The null hypotheses ( $H_{02}$ ): Functional Integration has no significant effect on the performance of Kenya’s manufacturing firms or ( $H_{02}: \beta_2 = 0$ ) is therefore rejected ( $\beta_2=5.994, t= 3.613, p\text{-value} < 0.001$ ) and conclude that Functional Integration ( $X_2$ ) significantly influences firm performance ( $Y$ ). The Model equation is :  $Y=49.287 + 5.994X_2$

Where,  $Y$ , is Firm Performance,  $X_2$ , is Functional Integration

The beta coefficient for Functional Integration was significant ( $\beta_2=5.189, t= 3.687, p\text{-value} < 0.001$ ). It implies that, One (1) unit increase in the dimension of Functional Integration in strategic planning leads to an increase of 5.994 in firm performance index. This is displayed by Table 4.14.

**Table 4.14 Regression Results for Functional Integration on Firm Performance**

(a) Model Summary										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					
					R Square Change	F Change	df1	df2	Sig. Change	
1	.328 <sup>a</sup>	.108	.100	9.40934	.108	13.053	1	108	.000	
a. Predictors:		(Constant), Functional Integration								



<b>(b) ANOVA<sup>b</sup></b>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1155.645	1	1155.645	13.053	.000 <sup>a</sup>
	Residual	9561.853	108	88.536		
	Total	10717.498	109			

a. Predictors: (Constant), Functional Integration

b. Dependent Variable: Firm Performance

<b>(c) Coefficients<sup>c</sup></b>								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	49.287	6.547		7.529	.000		
	Functional Integration	5.994	1.659	.328	3.613	.000	1.000	1.000

a. Dependent Variable: Firm Performance

**X2=Functional Integration; Y= Firm Performance**

**Discussion of findings on Effect of Functional Integration and firm Performance**

The findings on Table 4.14 confirm that functional integration positively influenced firm performance ( $\beta=5.994$ ,  $t= 3.613$ ,  $p\text{-value} < 0.001$ ). The Regression Analysis results showed that functional integration positively influenced firm performance in the manufacturing firms in Kenya. For every unit increase in the extent of functional integration, there was a corresponding increase in firm performance index by 0.328 or 32.8%. The Pearson's Correlation Coefficient for functional integration and firm performance ( $R=0.328$ ,  $p\text{-value} < 0.001$ ), was significant at 0.05 level of significance. Functional integration positively influences performance among manufacturing firms in Kenya.

This study supports the hypotheses by Paiva et al,(2011) who found that all manufacturing integration aspects are positively related to sales growth, while manufacturing-R&D integration is positively related to profitability. Similarly, Swink, Narasimhan and Wang (2007) also showed that manufacturing integration throughout the value chain between internal and external actors positively influences business performance. Chen et al (2007) found that marketing/logistics collaboration increases firm performance through the mediation of firm-wide cross-functional integration.

Luo et al (2006), agreed that the degree to which a firm's departments cooperate in conjunction with various levels of competition in the firm's social structure jointly defines the firm's level of cross-functional Cooperation. Their study, showed that cross-functional Cooperation has an important effect on performance outcomes through enhanced market learning, paving the way for new insight into how cross-functional interactions can affect a firm's competitive advantage. Analysis provided support for positive associations between the frequency of collaborative integration between marketing and logistics departments and logistics managers' perceptions of the effectiveness of the relationship between departments, as well as, departmental performance relative to competitors. (Stank, Daugherty & Ellinger,1999).

### **The Moderating Effect of Firm Size on the Relationship between functional integration and Firm Performance.**

Under this section regression analysis was run in order to validate whether firm size influenced the relationship between functional integration and firm performance. The study hypothesized that:

**Ho<sub>2</sub>:** Firm Size has no significant moderating effect on the relationship between functional integration and performance of Kenya's manufacturing firms.

To test the hypotheses the following models were fitted:

**Model 1:**  $Y = \beta_0 + \beta_2 X_2 + e$

**Model 2:**  $Y = \beta_0 + \beta_2 X_2 + \beta_M M + e$

**Model 3:**  $Y = \beta_0 + \beta_2 X_2 + \beta_M M + \beta_{2M} X_2 M + e$

The three models were all significant (p-value=0.002, p-value=0.001, p-value =0.004, respectively), refer to Table 4.19(b). The Coefficient of Determination ( $R^2$ ) for the first model was .091, see Table 4.19(a) meaning that functional integration, on its own, contributed 9.1% to the change in the performance of the manufacturing firms. However, the nature of this relationship between functional integration and the performance of Kenya manufacturing firms changed substantially, with the introduction of firm size a predictor. Table 4.19(a) indicates that the,  $R^2$  before the introduction of firm size was 0.091. However, upon the introduction of Firm

Size as predictor, the  $R^2$  significantly changed from .0.091 (9.1%) to .139 (13.9%) an increase of 0.38 and was still significant, This means that functional integration with Firm Size can explain up to 15.7 % of the performance of Kenyan manufacturing firms. With addition of the interaction term ( $X_2 * M$ ), the model further improved albeit marginally to  $R^2$  of .132, an increase of 0.003, however the model became insignificant ( $p$ -value=0.574).

On the moderating effect of M on the relationship between  $X_2$  and Y, all the three models were found to be significant ( $p$ -value=0.002,  $p$ -value=0.001,  $p$ -value =0.004, respectively). The F Change for  $X_2$  was significant (F Change=9.683,  $p$ -value=0.002), implying that,  $X_2$  significantly influences Y as discussed earlier in 4.6.2.

On adding M (Firm Size) as a predictor to the model containing  $X_2$ , the F Change reduced substantially, however the predictor, remained significant (F Change=4.172,  $p$ -value = 0.044). With the introduction of the interaction term ( $X_1M$ ) to this model, the model deteriorated and became insignificant, revealing (F Change =0.318,  $p$ -value=.574). This implied that M (Firm Size) has some predictive value, but negatively moderates the relationship between functional integration ( $X_2$ ) and firm performance (Y). This means that one unit of functional integration decreases firm performance index by 2.516.

The equation of the models is as follows:

**Model 1:  $Y = 72.563 + 5.659 X_2$**

**Model 2:  $Y = 69.405 + 6.186 X_2 + 4.390M$**

**Model 3:  $Y = 69.128 + 8.178X_2 + 4.661M - 2.516 X_2M$**

**Table 4.19(a). The Moderating Effect of Firm Size on Functional Integration and Firm Performance Model Summary.**

<b>Model Summary</b>										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					
					R Square Change	F Change	df1	df2	Sig. Change	F
1	.301 <sub>a</sub>	.091	.081	9.687	.091	9.683	1	97	.002	
2	.359 <sub>b</sub>	.129	.110	9.532	.038	4.172	1	96	.044	
3	.363 <sub>c</sub>	.132	.104	9.566	.003	.318	1	95	.574	

a. Predictors: (Constant), X2

b. Predictors: (Constant), X2, Firm Size

c. Predictors: (Constant), X2, Firm Size, X2M

**ANOVA<sup>d</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	908.640	1	908.640	9.683	.002 <sup>a</sup>
	Residual	9102.247	97	93.838		
	Total	10010.886	98			
2	Regression	1287.704	2	643.852	7.086	.001 <sup>b</sup>
	Residual	8723.182	96	90.866		
	Total	10010.886	98			
3	Regression	1316.773	3	438.924	4.796	.004 <sup>c</sup>
	Residual	8694.113	95	91.517		
	Total	10010.886	98			

a. Predictors: (Constant), X2

b. Predictors: (Constant), X2, Firm Size

c. Predictors: (Constant), X2, Firm Size, X2M

d. Dependent Variable: Firm Performance

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig.
		B		Beta		
1	(Constant)	50.578	7.163		7.061	.000
	Functional Integration	5.659	1.819	.301	3.112	.002
2	(Constant)	45.373	7.496		6.053	.000
	Functional Integration	6.186	1.808	.329	3.421	.001
	Firm Size	4.390	2.149	.197	2.042	.044

a. Dependent Variable: Firm Performance

**X2= Functional Integration; M=Firm Size; X2M= Interaction Term**

### **Discussion on the Moderating Effect of Firm Size on the Relationship between Functional Integration and Firm Performance**

The results of the multiple regression analysis gives conclusive evidence that while firm size is a predictor of the relationship between functional integration and firm performance.

It does not moderate the link between functional integration and firm performance.

While, Functional Integration, has been accepted to enhance a firm's operational performance through facilitating the acquisition and transformation of information within the company (Liu, Shah & Schroeder, 2012). However, Paiva, et al (2011) did not find evidence of support for the positive linkage between integration of manufacturing and marketing function on firm performance. They explained that the manufacturing integration in the different stages of the value chain have different effects on performance and asserted that this could be because, primarily manufacturing actually interacts directly with R&D, and even in the most successful plants, the interaction of manufacturing with suppliers and marketing is indirect.

### **Conclusion**

Functional integration was found to be positively associated with firm performance and a significant factor in performance of manufacturing firms in Kenya. The practices of coordinating, knowledge sharing with other department and functional areas, alignment of departmental planning with division and corporate plans was found in place. Top management support or coordination was also established. Functional integration in the Resource based view of the firm is a vital resource and capability. Firms utilize functional integration as a mode of enhancing cooperation, which combines cooperation and competition among departments, while focussed on the strategic outcomes of the firm. Cross functional integration is also emerging as a higher level order of functional integration in which there is intense relationship between departments to accentuate the operation efficiencies of the firm.

On the moderating effect of size on the relationship between functional integration and firm performance, Based on the findings, the study shows that firm size, displayed predictive value in the model but showed it does not moderate the relationship between functional integration and firm performance. The results of the multiple regression analysis gave conclusive evidence that while firm size is significant in the relationship between functional integration and firm performance. However, it does not moderate the link between functional integration and firm performance. This means that as the firm size increases there is equal impact on both medium and small firms as well as large firms. Hence, irrespective firm size, there is strong need for coordination and cooperation between the departments so as to synchronize their efforts and departmental strategies

and action plans through information sharing and regular updates to facilitate inter departmental and cross functional integration.

### **Recommendation**

Functional integration as a capability available to all firms and which regardless of their size can be exploited by the firms. It is recommended that functional integration is not limited to mundane coordination of routines and operational activities. It is suggested, that should take functional integration to next higher level, in which there is deep and embedded cooperation, exchange of ideas and cooperation between the various functional areas. The study recommends anchoring of cross functional integration between specific areas such as marketing, procurement, logistics, finance and human resource management. Thus cross functional integration in the firm shall help in cost reduction and competitive positioning. Firms should leverage on technology to be effective in this regard.

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