

# Effect of Supply Chain Management Competencies on Organization Performance a Survey of Parastatals in Nairobi County

Rose Cherotich Ruttoh<sup>1</sup>, Dr. Yusuf Kibet (PhD)<sup>2</sup>, Evans Biraori Oteki<sup>3</sup>

<sup>1</sup>Master of Science in Procurement and Logistics, Jomo Kenyatta University of Agriculture and Technology

<sup>2</sup>Senior Lecturer, Moi University

<sup>3</sup>PhD student, Jomo Kenyatta University of Agriculture and Technology

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**Abstract:** Supply chains as one of the governance aspect are complex systems with different structures and power proportions between partners. Managers would be in a better position to meet the challenges of global supply chain processes if they understand the implementation issues and their roles on supply chain effectiveness. The main purpose of the study is to investigate the effect of supply chain management competencies on organizational performance and specifically the effect of innovation Orientation on organizational performance. Explanatory research design was used. The population of study comprised 244 employees from selected Parastatals in Nairobi City County. Questionnaires were used to collect data and data was analyzed using descriptive statistics like means, frequencies, and percentages, and inferential statistics, Pearson correlation and multiple regressions. Results indicated that innovation orientation has significant and positive effect on organizational performance. This concludes that firms whose managers have innovation orientation improve performance. It is recommended that there should be further research and development on innovative and leading organizational practices in order to enhance performance and need for supply chain management policies and procedures that follow an appropriate sequence and structure.

**Keywords:** Governance, Management competencies, Organizational performance, Parastatals, Supply chains.

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## 1. INTRODUCTION

Supply chain management practices comprise a set of approaches and practices that effectively integrate with suppliers, manufacturers, distributors, and customers to improve the long-term business performance and their supply chain (Chopra and Meindl, 2007). Strategic supplier partnerships need better coordination between the organization and its suppliers because it influences the strategic and operational capabilities of individual participating companies. This long-term relationship between the organization and its suppliers help them achieve significant ongoing benefits (Li *et al.*, 2005; Li *et al.*, 2006). Strategic supplier partnerships include buying goods and services from suppliers and impacting the suppliers system and operational capabilities, adding value and improving the supply chain performance (Sufian, 2010).

Inter-organizational information systems are often used to support new supply chain management initiatives, as they can improve inter-firm information sharing. Firms are able to realize cost savings and improve processes through information sharing (Enslow, 2006). Accordingly, supply chain members have recognized the importance of information sharing as an essential factor influencing supply chain performance ( Lee *et al.*, 2000, Rai *et al.*, 2006). The benefits of information sharing are well recognized (e.g., Klein and Rai, 2009), and various information technology solutions for sharing information and integrating supply chain processes are available; however, firms may still avoid sharing information with their upstream or downstream partners (e.g. Lee *et al.*, 1997, Karen, 2010). Selfish enhancement of their own

competencies, increasing bargaining power within a relationship, and the ability to influence terms and conditions in their own favor through control over strategic information are some of the factors that prevent firms from sharing supply chain information (Argyres and Liebeskind, 1999, Nair *et al.*, 2011). As a result, varying forms of information sharing behaviors can be observed within supply chains

Resource based view (Barney, 1991) looks for internal sources of firm's sustained competitive advantage and aims to explain why firms in the same industry might differ in performance. RBV argues that firms are heterogeneous to one another due to possessing some strategic resources and capabilities, on which consequently competitive advantage is acquired (Barney, 1991; Wernerfelt, 1984). Thus, competitive advantage is acquired by accumulating strategic resources and capabilities. The Competence-based Perspective (CBP) explores the development of core competences as a source of competitive advantage (Prahalad and Hamel, 1990), and argues that core competencies of a firm are sources of competitive advantage it assumes that unique resources exist at the supply chain level, and that supply chains can be inimitable competitive weapons.

### 1.1 Statement of the Problem:

Adoption of supply chain management competencies is an option to remedy the challenge. However, the previous research findings and results have been contradicting and no attempt to clear the contradictions; biased and unbalanced analysis of the different measures of firm performance, as well as the failure to use weighted scores to measure firm performance; the limited and still evolving literature on supply chain competence. Therefore, this study attempted to investigate SCM competency in innovation Orientation and the effect on supplier chain performance in private firms in Nairobi, Kenya.

### 1.2 General Objective:

To investigate the effect of supply chain management competencies on organizational performance

### 1.3 Research Objectives:

To assess the effect of innovation Orientation on organizational performance

### 1.4 Research Hypothesis:

$H_{01}$ : Innovation Orientation has no significant effect no organizational performance

### 1.5 Significance of the study:

Managers of the firms will benefit from the study through understanding the best competencies they need for supply managers. This study will help the researcher to realize the importance of selecting the best supply chain management competencies. It will help to provide insights to support future research regarding strategic guidance for organizations in supply management.

## 2. LITERATURE REVIEW

### 2.1. Resource-Based View Theory:

The study will be guided by resource-based theory developed by Barney (1991). The theory assumes firms are profit-maximizing entities directed by bounded rational managers operating in distinctive markets that are to a reasonable extent predictable and moving towards equilibrium (Bromiley & Papenhausen, 2003; Leiblein, 2003). It accepts that information about the future value of a resource is asymmetrically distributed.

The theory argues that firms are heterogeneous to one another due to possessing some strategic resources and capabilities, on which consequently competitive advantage is, acquired (Barney, 1991). Thus, competitive advantage is acquired by accumulating strategic resources and capabilities. The Competence-based Perspective (CBP) explores the development of core competences as a source of competitive advantage (Prahalad and Hamel, 1990), and argues that core competencies of a firm are sources of competitive advantage it assumes that unique resources exist at the supply chain level, and that supply chains can be inimitable competitive weapons.

## 2.2 Conceptual Framework:

The study drew its independent variable from Eltantawy (2011) namely; Innovation Orientation which is linked to or organization national performance of ME. Hence, the figure 2.1 presents the three independent variables against organizational performance.

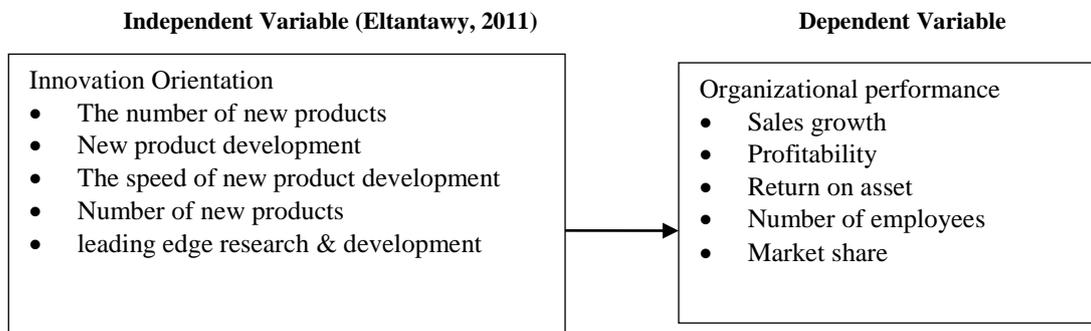


Figure 2.1 Conceptual Framework

### 2.2.1 The Concept of Organizational Performance:

Richard *et al.*, (2009) defined organizational performance as comprising the actual output or results of an organization as measured against its intended outputs (or goals and objectives). He mentioned that it is the ability of an organization to fulfill its mission through sound management, strong governance and a persistent rededication to achieving results. Don Hee (2011) on the other hand defined organization performance as the analysis of a company's success compared to its profitability. He added that within corporate organizations, there are three primary dimensions analyzed: financial performance, market performance and shareholder value performance. In some cases, production capacity performance may be analyzed.

Organizational Performance has been defined as the ability of an organization to fulfill its mission through sound management, strong governance and a persistent rededication to achieving results. Effective nonprofits are mission-driven, adaptable, customer-focused, entrepreneurial, outcomes oriented and sustainable. (Bibhuti 2006).

### 2.2.2 Concept of Supply Chain Management Competencies:

Eric (2004) argues that supply chain management executives need to have the competence of expertise at managing supply chain functions such as transportation, warehousing, inventory management, and production planning. However, the supply chain process extends end-to-end within the firm and even outside the firm, including the relationships with suppliers and customers on a global basis.

Leading firms now see the competence of supply chain management functional leader as the necessary executive to coordinate the end-to-end supply chain process, even though he or she does not control it all. The battle for top supply chain talent must be focused on acquiring people with process expertise, not simply functional competence. The mental shift to supply chain-as-a-process leads inevitably to the shift of the role of the supply chain executive from a functional focus to process focused, and to supply chain leadership becoming part of the executive team. (Marc 2004)

The best talent can only be acquired after it has been identified. To select the right people to oversee the increasingly pivotal supply chain responsibility, supply chain management must know the blueprint for the "dream" supply chain leader. These characteristics can be grouped into five key qualities: Global orientation, Systems thinking, Inspiring and influential leadership, Technical savvy and Superior business skills. (Lincoln 2003)

All senior business executives today need to be globally capable and competent. Global sourcing and global supply chains have expanded tremendously in recent years, for both retailers and manufacturers. There are few companies that do not source globally, sell globally, or have competitors that do so. Therefore, supply chain executives must manage, like never before, an enterprise that extends across continents and must deal effectively with suppliers and customers worldwide. (John 2005).

### 2.3 Empirical Review:

#### 2.3.1 Link between Innovation Orientation and Organizational Performance:

Effective supply chain management has become a potentially valuable way of securing competitive advantage and possessing a major impact on organizational performance both directly along with time-to-market for rapid product innovation (Helper & Sako, 2010). In the light of Chandler's arguments, and theories from organizational economics and engineering, supply chain management innovations are associated with lean production. Outsourcing means more production activities, thus, increasing managerial coordination across multiple firms. Helper and Sako (2010) like Chandler, reflect on the nature of innovation in supply chain management, which includes a rise in mass production and remains highly relevant today.

Supply chain innovation orientation is important for companies of all sizes. It means looking at the way a company applies its assets, operating resources, and capabilities to develop new ways to satisfy customer needs. If all these are done to the fullest then there will be high performance in an organization. Leslie (2006)

Supply chain management provides organizations with a productivity advantage, and value advantage. Productivity advantage gives a lower cost profile and the value advantage provides the product or offering a differential 'plus' over competitive offerings. (Sovereign 2008) It is important to note that it is possible to add more innovation to products and processes through the maximization of value and cost reduction.

Breaking through the current practices and improving the current efficiency through innovation are the way for a corporate to face more challenges and adapt to more changes. An innovative organization attaches importance to creativeness (originality) and innovation changes, and supports its members to pursue new concepts independently (Gazi *et al.*, .2010). Innovation is a tool of entrepreneurship; and corporate venturing is a pre-requisite for rapid development of organizations in a global economy. Hence, greater performance in an organization will be achieved (Maritz and Lobo, 2009).

Scott and Bruce (2004) argue that when the members of an organization are conscious of the organizational climate of innovation, they perceive the organizational support for innovation. Such consciousness influences the occurrence of innovation behavior. On the other hand, the expectation of the management level on the innovation of the subordinates also impacts their innovation behavior. Senechal (2004) said that organizational innovation covers four major topics such as process innovation, function innovation, operation mechanism innovation, and transverse coordination innovation.

## 3. RESEARCH METHODOLOGY

Explanatory research design was used in the undertaking of this research because it provided rich detail about cases of a predominantly qualitative in nature (Ball, 1981). The study targeted a population of 244 top management in procurement drawn from 122 state corporations in Nairobi County. Primary data was gathered from respondents using the questionnaires as data collection instruments. The study used quantitative method to analyze data. Quantitative data was analyzed using descriptive statistical method, the statistical tools such as mean, mode and standard deviation was done using SPSS. Multiple regression analysis was applied to analyze the relationship dependent variable and several independent variables and test the hypothesis. Regression equation is a function of variables  $x$  and  $\beta$   $Y = \beta_0 + \beta_1 X_1 + \epsilon$  Where  $\beta_0$  is the intercept,  $\beta_1$  measures change in  $Y$  with respect to  $X_1$ , Where;  $Y$  represents organization performance,  $X_1$  represents Innovation Orientation and  $E$  error term

## 4. DATA ANALYSIS, PRESENTATION AND INTERPRETATION OF FINDINGS

### 4.1 Innovation Orientation Information:

The researcher sought to establish the impact of innovation orientation on organizational performance. The findings were illustrated in table 4.1. From the findings, 90.4% (187) of the respondents strongly agreed that innovative and leading edge research & development is pursued in their firm. However, a mean of 1.91 indicated that this was not the case. About the use of the latest technological innovations in new product development, 56.1% (116) of the respondents affirmed that their firms embraced new technology. However, this was not the case as revealed by a mean of 2.29. In addition, 74.9% (155) of the respondents affirmed that the speed of new product development is in check. However, a

mean of 2.17 revealed that this was not the case. Finally, the number of new products the firm has introduced was not many as evidenced by a mean of 2.34. However, 56.6% (117) of the respondents were of the contrary opinion.

**Table 4.1 Innovation Orientation**

|   |      | SA   | N    | SD   | Mean | Std. Deviation | Skewness |
|---|------|------|------|------|------|----------------|----------|
| The level of innovative and leading edge research & development pursues in your firm. | Freq | 187  | 9    | 11   | 1.91 | 0.698          | 1.07     |
|   | %    | 90.4 | 4.3  | 5.3  |      |                |          |
| The use of the latest technological innovations in new product development.           | Freq | 116  | 83   | 8    | 2.29 | 0.81           | -0.145   |
|   | %    | 56.1 | 40.1 | 3.9  |      |                |          |
| The speed of new product development.   | Freq | 155  | 50   | 2    | 2.17 | 0.587          | 0.24     |
|   | %    | 74.9 | 24.2 | 1    |      |                |          |
| The number of new products the firm has introduced                                    | Freq | 117  | 48   | 42   | 2.34 | 1.107          | 0.197    |
|   | %    | 56.6 | 23.2 | 20.3 |      |                |          |

#### 4.2 Organizational Performance:

The researcher also sought to establish organizational performance. Research findings showed that in the past three years or since its inception relative to other firms, their firm has experienced increased sales turn over (mean=3.9). However, only 26.1% (54) of the respondents affirmed that there has been increased profit margins. Nonetheless, mean of 3.01 showed that this was not the case. In addition, 74.9% (155) of the respondents disagreed that there has been an increase in the number of employees. However, a mean of 3.78 shows those respondents were in agreement with this assertion. Additionally, 41% (85) of the respondents affirmed that there has been improved image and reputation as supported by a mean of 3.69. Finally, 41.1% (85) of the respondents were impartial on whether there has been improved performance as affirmed by a mean of 3.2.

**Table 4.2 Organizational Performance Information on Respondents**

| In the past three years or since its inception relative to other firms my firm has experienced |           | SA   | N    | SD   | Mean | Std. Deviation |
|--|-----------|------|------|------|------|----------------|
| Increased sales turn over  | Frequency | 14   | 27   | 166  | 3.9  | 0.937          |
|  | Percent   | 6.7  | 13   | 80.2 |      |                |
| Increased profit margins   | Frequency | 54   | 93   | 60   | 3.01 | 0.911          |
|  | Percent   | 26.1 | 44.9 | 29   |      |                |
| Increase in the number of employees  | Frequency | 58   | 66   | 83   | 3    | 1.031          |
|  | Percent   | 16.9 | 8.2  | 74.9 |      |                |
| Improved image and reputation  | Frequency | 85   | 29   | 93   | 3.69 | 1.012          |
|  | Percent   | 41   | 14   | 44.9 |      |                |
| Improved overall performance   | Frequency | 38   | 85   | 84   | 3.2  | 0.902          |
|  | Percent   | 18.3 | 41.1 | 40.6 |      |                |

#### 4.3 Correlation Statistics:

Pearson Correlations results in table 4.3 showed that innovation orientation was positively and significantly correlated to organizational performance ( $r=0.496$ ,  $p<0.01$ ). Thus, innovation orientation had 49.6% positive relationship with organizational performance. Findings provided enough evidence to suggest that there was linear relationship between innovation orientation and organizational performance.

**Table 4.3 Correlation Statistics**

|                        | organizational performance | Innovation orientation |
|------------------------|----------------------------|------------------------|
| Performance            | 1                          |                        |
| Innovation orientation | .496**                     | 1                      |

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

#### 4.4 Hypothesis Testing:

Hypothesis ( $H_{01}$ ) stated that there is no relationship between innovation orientation and organizational performance. Findings showed that innovation orientation had coefficients of estimate which was significant basing on  $\beta_1 = 0.153$  (p-value = 0.015 which is less than  $\alpha = 0.05$ ) implying that we reject the null hypothesis stating that there is no significant relationship between innovation orientation and organizational performance. This indicates that for each unit increase in the positive effect of innovation orientation, there is 0.153 units increase in organizational performance. Furthermore, the effect of innovation orientation was stated by the t-test value = 2.456 which implies that the standard error associated with the parameter is less than the effect of the parameter.

**Table 4.4 Coefficient of Estimates**

|                        | Unstandardized Coefficients |            | Standardized Coefficients |        | Collinearity Statistics |           |       |
|------------------------|-----------------------------|------------|---------------------------|--------|-------------------------|-----------|-------|
|                        | B                           | Std. Error | Beta                      | T      | Sig.                    | Tolerance | VIF   |
| (Constant)             | -0.438                      | 0.271      |                           | -1.615 | 0.11                    |           |       |
| Innovation orientation | 0.181                       | 0.074      | 0.15                      | 2.456  | 0.02                    | 0.666     | 1.502 |

Predictor: (Constant), , innovation orientation

Dependent Variable: Organizational performance

Hence, the model developed is as follows.  $Y = -0.438 + 0.153X_1$

## 5. SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

### 5.1 Summary of Findings. Innovation Orientation and Organizational Performance:

According to hypothesis statement, innovation orientation has no significant effect on organizational performance ( $H_{01}$ ), research findings show inconsistency with the hypothesis since innovation orientation recorded a beta coefficient ( $\beta$ ) of (0.134,  $\rho=0.008<0.05$ ), hence, innovation orientation was positively associated with organizational performance. Therefore, the findings are in agreement with Helper & Sako, (2010) asserting that, in order to secure competitive advantage, it would be necessary to embrace effective supply chain management so as to have a major impact on organizational performance both directly along with time-to-market for rapid product innovation.

Further, Helper and Sako (2010) affirmed that innovation in supply chain management leads to a rise in mass production and remains highly relevant today. Additionally, it is also evident that supply chain innovate on orientation is important for companies of all sizes. If a company applies its assets, operating resources and develops new ways of satisfying its customers to the fullest, high performance would be noted in such an organization, Leslie (2006).

According to Harnsen, (2006), researchers in services marketing have realized that innovation strategies particularly service quality, satisfaction, loyalty, participation in services delivery, lifetime value, services culture, climate, employee empowerment, hiring, and training services employees, and incentives contributes to a performing organization. The above assertion is in agreement with the research findings that innovation orientation contributes to organizational performance. On a similar note, in order for a corporate to face more challenges and adapt to more changes it has practice innovation.

### 5.2 Conclusion:

From the study findings, it is evident that innovation orientation has a significant effect on organizational performance. Organizations that possess high innovation orientations engage in value creation strategies such as market segmentation, developing new products/services for new markets thus enhancing organizational performance.

### 5.3 Recommendation:

From the study findings, it was evident that innovation orientation has an impact on organizational performance. There is therefore need for firms to use the latest technological innovations in new product development. Further, the speed of new product development should be hastened and the number of new products that are first to market should be increased in order to enhance organizational performance

### 5.4 Suggestions for Further Research:

More research and studies should be carried out to determine other factors that affect organizational performance other than the ones mentioned. Some of the factors can be those in human capital and spread of technology.

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