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INFLUENCE OF VALUE CHAIN'S SUPPORT ACTIVITIES ON THE PERFORMANCE OF MULTINATIONAL MANUFACTURING FIRMS: A CASE OF COCA COLA LTD

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ABSTRACT

This study determined the value chain activities, key factors influencing these activities and how they contribute to performance in the multinational manufacturing companies in Nairobi. The study adopted a cross sectional descriptive survey intended to establish the activities that constitute the value chain and extent in which these activities affect performance in the manufacturing industry in Kenya. The target population of the study was 47 value chain professionals; these were managers and heads of departments of Coca Cola Ltd in Kenya. Primary data was collected using semi structured questionnaire that was administered by drop and pick methods. Data from questionnaires was summarized, coded, tabulated and analyzed. Editing was done to improve the quality of data for coding. Coded data was then fed into the statistical package for social sciences (SPSS) version 21. Linear Regression Analysis was used to investigate the relationship between the variables and the organizational performance of manufacturing companies. From the study findings it was established that the main factors that influence the value chain in the manufacturing industry in Kenya were well managed procurement costs, use of modern information technology, effective human resources management, efficient firm infrastructure and continuous improvement. The study recommended that value chain professionals in the manufacturing industry embrace collaborative relationships with their suppliers so as to optimize their value chain costs. Technology was also viewed as one of the failures in achieving a sustainable value chain performance and indications from the findings of its crucial role in the implementation suggested that firms should also invest in information technology not only in their firms but also in partnership with suppliers so as to streamline operations in the value chain.

Key Words: *Value Chain, Organizational Performance, Manufacturing Industry*

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INTRODUCTION

Industries are aware of the strategic importance of individual activities within their value chain in the current business environment. They thrive by concentrating on the particular activities within the value chain that allow them to maximize value for their customers and the firm. These firms also use the value chain approach to better understand which distribution channels along the value chain will yield the greatest performance. Through effective planning and execution, these firms and their customers adapt to the market's demand such that when the firm purchases, produces and distributes products to the market this increases their revenue. (Aguko, 2014)

Porter (2001) argues that a firm can achieve sustainable organizational performance by focusing on operational effectiveness and distinctive strategic positioning. According to Kotler (2015), in a hyper competitive economy with increasing rational buyers, a company can only win by creating and delivering superior value, involving five capabilities; understanding customer value; creating customer value; delivering customer value; capturing customer value and sustaining customer value. The crucial ingredient for a company to improve its market performance is the concept of value chain and value delivery network.

The Value Chain concept was developed and popularized in 1985 by Michael Porter. This was his seminal work on the implementation of competitive strategy to achieve superior business performance. Porter defined value as the amount buyers are willing to pay for what a firm provides, and conceived the value chain as the combination of nine generic value added activities operating within a firm activity that work together to provide value to customers. He linked up the value chains between firms to form what he called a Value System (Porter, 1985).

Value is an activity that increases the market form or function of the product or service; and in today's business climate, there is a need to maximize the value of every process in a business Value chain performance represents the concept of managing an organization with regard to the activities, resources and strategies of other organizations upon which it must rely in order to develop, produce and market goods and services. Value is measured by total revenue, a reflection of the price a firm's product commands and the units it can sell. A firm is profitable if the value it commands exceeds the costs involved in creating the product (Porter, 1985).

There are four performance measures used to assess the success of value chains in a firm. These are efficiency, degree of responsiveness flexibility and quality. Efficiency is the utilization of resources in the value chain. It is measured in terms of production costs, profit, return on investment and level of inventory. Degree of responsiveness is the time spent in the fulfillment of a request. It is measured through product lateness, customer response time, lead-time, shipping errors and customer complaints. Flexibility is the degree of responsiveness of the value chain to a changing environment. It is measured through customer satisfaction and the flexibility in volume and lost sales. Quality consists of product and process quality. Product quality includes product safety and health, shelf-life, product reliability and convenience while process quality consists of the characteristics of production and marketing systems.

The Coca-Cola Company, which is headquartered in Atlanta, Georgia, but incorporated in Wilmington, Delaware is an American multinational beverage corporation, and manufacturer, retailer, and marketer of nonalcoholic beverage concentrates and syrups. The company is best known for its flagship product Coca-Cola, invented in 1886 by pharmacist John Stith Pemberton in Atlanta, Georgia. Coca-Cola started operations in Kenya in 1948, on a Nairobi plot measuring just a quarter of an acre. The new beverage proved so popular that another production line was commissioned almost immediately in the

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coastal town of Mombasa. Coca Cola Sabco acquired Nairobi Bottlers Limited in 1995. Coca-Cola Sabco's Kenyan plant in Embakasi, Nairobi, employs approximately 923 people. It is one of the biggest bottling plants in the group. This state-of- the-art facility was officially opened in 2005.The establishment of the Embakasi plant was made possible by the tremendous success of its predecessors, Nairobi Bottlers Ltd (NBL) and Flamingo Bottlers Ltd in Nakuru, which together contributed almost 50% of the country's total volume.

Statement of the Problem

Value chain describes the activities within and around an organization, and relates them to an analysis of the competitive strength of the organization. It evaluates which value each particular activity adds to the organizations products or services. This idea was built upon the insight that an organization is more than a random compilation of machinery, equipment, people and money. If these things are arranged into systems and systematic activities, it will become possible to produce something for which customers are willing to pay a price. Porter argues that the ability to perform particular activities and to manage the linkages between these activities is a source of competitive advantage (Porter 1985)

Various studies both locally and internationally have been done on value chain analysis. Internationally, Antoniou, Levite, Schreihans (2008) researched on Managing Value Chain Strategy seeking to find out a working model for evaluating the impact of autonomous and non-autonomous elements of the value chain as they relate to, outsourcing in accordance to corporate strategy. Nectar (2010) researched on the Value Chain Analysis on the Petroleum Supply Chain and he confirmed issues around value chain analysis and their importance in conferring competitive advantage in the context of oil industry.

Odero (2006) researched on the Value Chain and competitive advantage in the corporate banking industry in Kenya in which he explored the competitive factors in the banks value chain that brought out a competitive advantage. He observed that for a bank to be competitive it must first assess its competitors' goals and strategies to meet all existing and potential competition, then reassess each strategy regularly to determine how it has been implemented and whether it has succeeded or needs replacement by a new strategy to meet changed circumstances, new technology, new competitors and new economic environment.

Changwony (2012) researched on the value chain approach to stakeholder's analysis and management of tea trade in Kenya and concluded that warehouse operators were the most important stakeholders within the supply chain with tea brokers being the least important. Ghonar (2015) researched on strategic management of value chain activities and performance of Safaricom Kenya limited. He found that Safaricom had adopted strategies in areas which include financial, technology, organization structure, customer care and also in its products. Safaricom management had clearly defined their product concept as an objective in customer's terms in order to deliver expected value which is immeasurable to competitors.

From the above studies, there appears to be little, if any studies on in-depth analysis of value chain in the manufacturing industry in Kenya and its relation to performance. The manufacturing companies therefore becomes critical for this study in order to bridge the knowledge gap and try to understand the strategic direction in relation to value chain and performance, hence the purpose of this study.

Objectives of the Study

The study established the influence of value chain's support activities on the performance of

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multinational manufacturing firms in Nairobi: A case of Coca Cola Ltd. The specific objectives were;

- To establish the influence of human resource activities in the organizational performance of Coca Cola Kenya
- To establish the influence of technology development on value chain and how it influences performance.
- To determine the influence of procurement activities on organizational performance
- To determine the influence of firm's infrastructure on organizational performance

The following questions were instituted to aid the research in the determination of solving the above stated problem

- What effect does human resource activities have on a firm's performance?
- What effect does technological development have on the performance of a firm?
- What effect does procurement have on the performance of a firm?
- What effect does firm infrastructure have on a firm's performance?

LITERATURE REVIEW

Resource Based View

The Resource-Based View (RBV) of strategy has a long linkage stretching back to Penrose (1959). Initiated in the mid-1980s by Mwailu and Mercer (1983), Wernerfelt (1984), Rumelt (1984) and Barney (1986), the Resource - Based View (RBV) has since become one of the dominant contemporary approaches to the analysis of sustained competitive advantage. A central principle of the Resource - Based View is that firms compete on the basis of their resources and capabilities (Peteraf and Bergen, 2003). In the 1990s with the rise of resource – based approach, strategy researchers' focus regarding the sources of sustainable competitive advantage shifted from industry to firm specific effects (Spnaos & Liukas, 2001).

Behn (2014) emphasizes the importance of the idiosyncratic attributes of the firm in developing its competitive position. A resource is a relatively observable, tradable asset that contributes to a firm`s market position by improving customer value or lowering cost (or both); and a capability denotes the ability of a firm to accomplish tasks that are linked to higher economic performance by increasing value, decreasing cost, or both.

Wernerfelt (1984) further suggested that evaluating firms in terms of their resources could lead to insights that differ from traditional perspectives. Barney (1991) identified the needed characteristics of firm's resources in order to generate sustainable competitive advantage as: valuable, in the sense that they exploit opportunities and neutralize threats in a firm's environment. Rare among a firm's current and potential competitors, inimitable, and non-substitutable. Peteraf (1993) shows four conditions underlying sustained competitive advantage: superior resources (heterogeneity within an industry), ex post limit to competition, imperfect resource mobility, and ex-ante limits to competition. Peteraf and Bergen (2003) make clear that Barney`s (1991) and Peteraf`s (1993) frameworks are consistent once some terms are unequivocally defined.

Value rarity imitability organization (VRIO) framework is a tool derived from RBV to analyze the internal strength and weaknesses and asks questions about the valuable, rare, imitable and organization aspects of the firm resources and capabilities in order to evaluate competitive potential. The framework has limitations described by Barney in five ways: the responsibility for competitive advantage in a firm, competitive parity and competitive advantage, difficult to implement strategies, socially complex resources and the role of the organizations. These limitations are what gave rise to the use of Value

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Chain as a strategic tool for diagnosing the firm's valuable resources and capabilities to improve performance and achieve competitive advantage.

Dynamic Capabilities

The RBV concept, limitations of being effective in inert and non-turbulent environment gave rise to the dynamic capability concept that was seen to be suitable to a rapidly changing environment. The primary focus of the resource-based view is on a leveraging current capability for gaining and sustaining competitive advantage and in the same breath, Eisenhardt and Martin (2000) say that this leveraging approach to competitive advantage is not as beneficial in turbulent markets. Hence to ascertain how capabilities evolve in environments of substantial change, the resource-based view is usefully complemented by the dynamic capabilities research literature on dynamic processes.

Dynamic capability is "the capacity of an organization to purposefully create, extend or modify its resource base" (Helfat et al., 2007:1). There is a lot of literature demonstrating how firms use dynamic capabilities for adding, shedding, and transforming the resource base (Cepeda & Vera, 2007; Danneels, 2008; Moliterno & Wiersema, 2007).Majority of this research focuses on resource creation and reconfiguration within the firm's boundaries (e.g. Zahra et al., 2006; Zollo & Winter, 2002), such as the creation, integration, and retention of internal knowledge assets (Cepeda & Vera, 2007; Marsh & Stock, 2006), the reconfiguration of resources between internal divisions (Galunic & Eisenhardt, 2001), or the transformation of internal organizational forms and functions (Rindova & Kotha, 2001). Rindova and Kotha through their empirical research, identify dynamic capabilities as emergent and evolving.

Dynamic capabilities help sustain firm`s evolutionary fitness by enabling the creation, extension and modification of its resource base thereby creating long-run competitive success (Teece 2007). Dynamic capabilities can be clustered into three activities and adjustments which are a necessity if a firm is to sustain itself as markets and technologies change: identification and assessment of an opportunity (sensing); mobilization of resources to address an opportunity and to capture value from doing so (seizing); continued renewal (transforming).

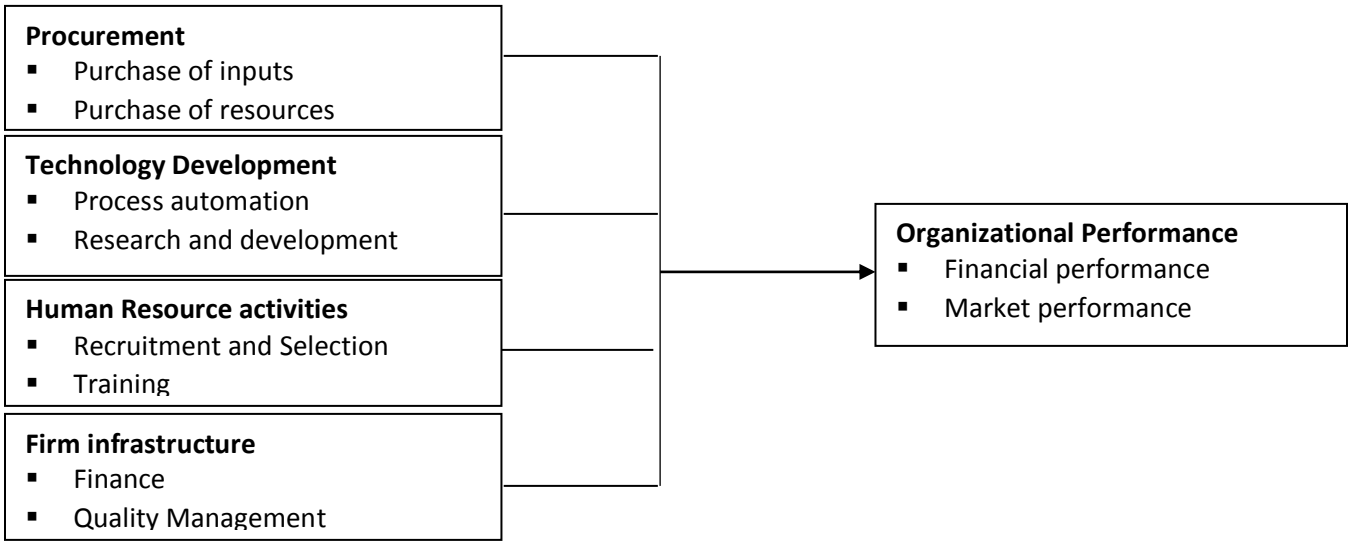

Figure 1: Conceptual Framework

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Empirical Studies

Odhiambo (2010) focused on the Value Chain Analysis in Telkom Kenya. He concluded that firms that take the value chain activities seriously often reported improved performance in their organizations. Mutua (2013) focused on value chain and competitive advantage in commercial banks in Kenya with specific emphasis on four largest banks in terms of market share and workforce such as Kenya Commercial bank, Equity Bank, Barclays Bank and Cooperative Bank and observed that value chain is applied to a large extent in a banking sector as a competitive advantage tool that helps to analyze specific activities through which the firm can create value and have competitive advantage.

Muhoro (2014) in his study on the Value Chain Practices and Management of the Kenya Meat Commission concluded that proper management of the value chain led to increased organizational performance Marete (2010) on the other hand, researched on the application of Hines value chain model by Kenya Medical Supplies Agencies (KEMSA) focusing on four managers of all core departments at KEMSA and observed that the adoption rate of "pull" strategy advocated by Prof Peter Hines was moderate as only one third of the health facilities were supplied using "pull' strategy while the remaining two thirds were supplied using "push" strategy by Porter (2001).

Changwony (2012) focused on the value chain approach to stakeholder's analysis and management of tea trade in Kenya and concluded that Warehouse operators were the most important Stakeholders within the supply chain with tea brokers being the least important. Odero (2006) looked at the Value Chain and competitive advantage in the corporate banking industry in Kenya in which he explored the competitive factors in the banks value chain that brought out an advantage. He observed that for a bank to be competitive it must first assess its competitors' goals and strategies to meet all existing and potential competition, then reassess each strategy regularly to determine how it has been implemented and whether it has succeeded or needs replacement by a new strategy to meet changed circumstances, new technology, new competitors and new economic environment.

Ghonar (2015) researched on the strategic management of value chain activities and performance of Safaricom Kenya limited. He found that Safaricom had adopted strategies in areas which include financial, technology, organization structure, and customer care and also in its products. Safaricom management had clearly defined their product concept as an objective in customer's terms in order to deliver expected value which is immeasurable to competitors.

METHODOLOGY

Descriptive research design was used for this study. Descriptive research design ensures systematic collection and analysis of data is done in order to answer research questions concerning current status of an activity, project, program, or event. The respondents were composed of the various 47 departmental managers who comprehensively covered all areas of the business in the organization. Primary information was gathered by use of a questionnaire. To check the validity and reliability of the questionnaire in gathering the required data for purposes of the study, a pilot test was conducted. According to Orodho (2009) the purpose of pilot testing is to establish the accuracy and appropriateness of the research design and instruments. To establish validity, the research instrument was given to two experts to evaluate the relevance of each item in the instrument in relation to the objectives. The same was rated on the scale of 1 (very low extent) to 5 (very high extent). Data collected was analysed using both descriptive and inferential statistics. Descriptive analysis was done with the help of Statistical Package for Social Science program (version 23) and subsequently presented

using mean, standard deviation graphs and pie charts and written discussion. Multiple linear regression analysis was conducted to establish the exact strength of influence of each of the independent variables on the dependent variable in order to inform policy and practice from the information thus generated.

Since both quantitative and qualitative data was collected and analysed, quantitative data was presented using statistical techniques which included tables in percentages, charts, and bar graphs while qualitative data was presented using written narratives and any other appropriate presentation method. This formed a suitable basis for arriving at important findings and conclusions.

FINDINGS AND DISCUSSION

Value Chain in the Multinational manufacturing in Nairobi

The respondents were asked to rate the extent to which value chain activities were practiced in their firm using a Likert scale of 1-5 where; 1=very low extent, 2=low extent, 3=Moderate, 4= high extent, 5= very high extent. Table 1 below showed the research findings.

Table 1: Value Chain in the Multinational Manufacturing in Nairobi

	Mean	Std. Deviation
Effective human resource management	3.3095	1.15796
Well managed procurement costs	3.5238	1.04153
Efficient firm infrastructure	3.9048	0.57634
Use of modern information technology	3.9286	0.77752

From the research findings it was established that the main factors that influence value chain in the manufacturing industry in Kenya were use of modern information technology, effective human resources management and efficient firm infrastructure while to a moderate extent; well managed procurement costs. These findings concurred with studies by Cameron (1986), Dess & Robinson (1984), Murphy, Trailor, & Hill (1996) and Steers (1975) who states that there are many dimensions to performance and positive performance in one dimension may simultaneously result in negative performance in another dimension. Each organizational stakeholder will have a different perspective of what is valuable based upon their purpose for associating with the organization. Creditors may perceive value to be created by the organization's ability to generate positive cash flow while equity investors may perceive value in expending company resources to create future opportunities, even if it diminishes cash flow and tangible company assets in the short term. For instance, if resource accumulation and profitability are hypothesized as separate dimensions of performance, adding resources in the form of equity may result in a lower risk adjusted return on investment.

This meant that the company had performed well on one dimension, resource accumulation, while it had earned lower performance on the second construct, profitability. Examining each dimension separately, without consideration of the other dimension will lead to decidedly different conclusions than examining the counter balancing effects of the two dimensions simultaneously. To equate these levels of performance, a measure that co-varies with each dimension is needed.

Value Chain Practices in Multinational manufacturing in Nairobi

Respondents were asked to rate the implementation of the value chain activities in their respective firms.

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The findings showed that 12.5% of the respondents gave a moderate extent on the implementation of the value chain activities in their firms, whereas a majority of the respondents agreed to a great extent 50% that company(s) implements value chain activities in their firms.

Respondents were also asked to indicate the extent at which their firm's practice the following value chain activities to assess performance. Descriptive statistics on table below shows that the respondents were asked to rate several factors that their firm's practices pertaining value chain activities to assess performance. They were asked to rate them according to the extent to which they are practiced in their company(s) using a Likert scale of 1-5.

On procurement costs, respondents also strongly agreed that participatory/team-based approach in making procurement decisions, adherence to service level agreements and resolving internal and external user queries was also agreed with a mean score of 2.4048. This is in line with Porter (1998) who asserts that improved purchasing practices can strongly and positively affect the cost and quality of purchased inputs. The table below shows the research findings.

Table 2: Use of Value Chain Approach to Assess Performance

Procurement Costs	Mean	Std. Deviation
Adherence to service legal agreement	2.2381	1.03145
Resolving internal and external user queries	2.4048	1.19060
Purchasing of quality resources and input	2.6667	1.14053
Participatory based approach in making procurement decision	2.7381	1.06059
Technology Development	Mean	Std. Deviation
Quality checks for new software before releasing to internal and external users	1.9762	1.19935
Timely support to all other departments	2.3571	0.95818
Exploring opportunities of employing new techniques that meet the requirements and expectation of users through research and development	2.3810	1.01097
Provision systems and services which are cost effective timely to both customers and staff	2.5238	0.70670

Human Resource Activities	Mean	Std. Deviation
Monitors compliance to service legal agreement	1.8095	0.83339
Recruitment and selection of skillful employees	1.9524	0.73093
Recruitment and selection of skillful employees	1.9524	0.73093
Training of employees	2.0000	0.88345
Sensitizing internal users on full functionalities of its processes	2.3333	1.09693

Firm Infrastructure	Mean	Std. Deviation
Employing and receiving safety precautions	1.5476	0.70546
Providing tools that meet work requirements	2.0476	0.82499
Regular checks and innovations	2.1905	0.91700
Provision of working tools that meet the mordern technology needs	2.2619	0.96423

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On Information technology (ICT) Development; timely support of all other departments, quality checks of all new software's before releasing to internal and external users, exploring opportunities of employing new techniques that meet the requirements and expectations of users, providing system and services which are cost effective, timely to both customers and staff and observing service level agreements were all agreed to a large extent as value chain activities to assess performance. The standard deviations also support the findings due to the small figures. Trailor & Hill (1996) and Steers (1975) states that technology development is the optimal use of technology to improve products, services and their delivery to customers. Technology therefore cuts across both primary and support value chain activities. If well managed, technology can be a powerful source of sustainable performance in the organization.

Human Resource activities of value chain that are used to assess performance were also agreed on to a larger extent. These statements were: sensitizing internal and external functionalities of its process, monitoring compliance to SLAs in all levels, promptly resolving internal user's queries and supporting all internal department requirements. Capon (2008), argues that the Human resource function is concerned with recruiting managing, training, developing and rewarding staff in a manner that helps the firm achieve the highest form of competence and enhance performance. Human resource activities impact on motivation, attitude and staff turnover, aspects that are critical to any firm. If these activities are effectively executed, human resource can be a key basis of performance for the firm.

Firm infrastructure also dictates the value chain performance, based on the respondent's level of agreements, the statements on providing tools that meet work requirements, and regular checks and renovations were all strongly agreed on, while employing and reviewing safety precautions, working tools meets the modern technology needs and training on the use of new tools and equipment were moderately agreed on.

Relationship Between Value Chain Analysis and Organizational Performance

Respondents were asked to indicate the extent to which the organization experiences the following performance indicators as a result of implementation of value chain activities. The table below shows the research findings.

Table 3: Relationship between Value Chain Analysis and Organizational Performance

	Mean	Std. Deviation
The firm is able to achieve objectives within their budgets	3.4286	0.91446
Employees are clear about firms vision and strategy	3.5714	1.23254
Employees are regularly provided with training in their areas of work	3.6190	1.28694
Employees are clear about values and practices required for the firm to be successful	3.8333	1.10247
Customers are satisfied with your firms performance	3.9286	0.60052
The firm adapts well to changes in the external environment	3.9524	0.73093
The firm adapts well to changes in the external environment	3.9524	0.73093
The firm adapts well to changes in the external environment	3.9524	0.73093
The firm enjoys a good reputation with its stakeholders	4.0000	0.79633
Team work exists within the organization	4.0952	0.79048

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From the research findings on table 3 above, there is a lot of team work on these firms and employees are clear about the values and practices required for the firms to be successful. These firms are also able to achieve objectives within their budgets, operations, employees are regularly provided with training in their areas of work. Customers are moderately satisfied with the firms' performance even though they enjoy a good reputation with their stakeholders. Over the past few years, most of the firms have shown steady, measurable cost reduction while maintaining or improving quality and they also adapt well to changes in the external environment. These findings confirm the research by the Institute of Management Accountants, IMA (1986) that value chain analysis helps firms assess performance in three areas; Firstly, through identification of sources of profitability and understanding the cost of their internal processes; Secondly, by identifying opportunities for creating and sustaining superior differentiated products and finally understanding the relationships and associated costs among external suppliers and customers.

Regression Analysis

The regression analysis is concerned with the distribution of the average value of one random variable as the other variables which need not be random are allowed to take different values. The regression model specifically connects the average values of y for various values of the x-variables.

The regression model was as follows: $y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 e$

Where:

y = Organizational Performance

β_0 = Constant Term

β_1 = Beta coefficients

X_1 = Procurement costs.

X_2 = Technology Development

X_3 = Human Resource Activities

X_4 = Firm Infrastructure

Table 4: Strength of the model

Model Summary

Change Statistics				
R Square Change	F Change	df1	df2	Sig. F Change
.631	15.820	4	37	.000

Predictors: (Constant), Firm infrastructure, Human Resource activities, ICT Development, Procurement costs.

Analysis in table 4 showed that the coefficient of determination (the percentage variation in the dependent variable being explained by the changes in the independent variables) R^2 equals 0.631 that is, Firm infrastructure, Human Resource activities, ICT Development and Procurement costs leaving only 1.5 percent unexplained. The P- value of 0.000 (Less than 0.05) implies that the model of Organizational Performance is significant at the 5 percent significance.

Table 5: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.297	4	3.324	15.820	.000[b]
	Residual	7.775	37	.210		
	Total	21.071	41			

a. Predictors: (Constant), Firm infrastructure, ICT Development, Human Resource activities, Procurement costs.

b. Dependent Variable: Organizational Performance

ANOVA findings (P- value of 0.00) in table 5 showed that there is correlation between the predictor's variables (Firm infrastructure, Procurement costs, ICT Development, Human Resource activities and response variable (Organizational Performance). An F ratio is calculated which represents the variance between the groups, divided by the variance within the groups. A large F ratio indicates that there is more variability between the groups (caused by the independent variable) than there is within each group, referred to as the error term. A significant F test indicates that we can reject the null hypothesis which states that the population means are equal. The P value is 0.000 which is less than 0.005 significance level.

Table 6: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.184	.569		2.080	.044
	Well managed procurement costs	-.450	.153	-.654	-2.941	.006
	use of modern information technology	.029	.158	.032	.185	.854
	Effective human resource management	.780	.132	1.260	5.912	.000
	Efficient firm infrastructure	.382	.215	.307	1.777	.084

a. Dependent Variable: Organizational Performance

The established multiple linear regression equation becomes:

$Y = 1.184 - 0.450X_1 - 0.029X_2 + 0.780X_3 - .382X_4$

The study found that Firm infrastructure, Procurement costs, Human Resource activities, have significant influence on Organizational Performance since Procurement costs β=-.450, t=-2.941, p=<.000*: Human Resource activities β=..780 t=5.912 p=<.000*: ICT Development β=.029 t=0.185 p=<.000*: Firm infrastructure β=.382, t=1.777.

CONCLUSION AND RECOMMENDATION

From the research findings the study concluded that firms in the manufacturing industry are moving towards collaborative relationships with their suppliers to improve on their value chain performance. Value chain professionals largely depend upon four major aspects. They are timely technology development, procurement costs, Human Resource activities and firm infrastructure. Procurement costs included activities such as adherence to service level agreements, resolving internal and external user queries, sensitizing internal users on full functionalities of its process, value, and contract management and pricing structures. Strategic partnership issues may be who to choose as a supplier and for what type of product or service.

Information technology (ICT) development include innovation, timely support of all other departments, quality checks of all new software's before releasing to internal and external users, exploring opportunities of employing new techniques that meet the

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requirements and expectations of users, providing system and services which are cost effective, timely to both customers and staff and observing service level.

Human Resource activities of value chain that are used to assess performance were also strongly agreed. These statements were: sensitizing internal and external functionalities of its process, monitoring compliance to SLAs in all levels, promptly resolving internal user's queries and supporting all internal department requirements. Firm infrastructure also dictates the value chain performance, based on the respondent's level of agreements, the statements on providing tools that meet work requirements, regular checks and renovations, employing and reviewing safety precautions, working tools meets the modern technology needs and training on the use of new tools and equipment were all strongly agreed.

The study recommended that value chain professionals in the manufacturing industry embrace collaborative relationships with their suppliers so as to optimize their supply chain costs. This can be through establishing clear communication networks, joint risk assessment and management and having strategic supplier partnerships with their key suppliers. Firms should also establish trustworthy suppliers to ensure commitment and credibility in transactions. Technology was viewed as one of the failures in achieving value chain performance and indications from the findings of its crucial role in the implementation suggest that firms should also invest in technology not only in their firms but also in partnership with suppliers so as to streamline operations in the value chain.

Limitations

In this study not all respondents answered the questionnaire hence the result could be more realistic if the researcher got responses from all respondents. The study used data collected from various departmental heads and these individuals might have wanted to depict their departments in the best light. This in turn implied that the departmental heads might have censored information that would have given better insight on the performance of the various departments.

The findings of this study cannot be generalized for other multinational manufacturing companies in Nairobi. Company specific factors have to be considered in order to conclusively determine that there is a relationship between value chain analysis and performance of company in the manufacturing industry.

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