

# **Role of Supply Chain Practices on Customer Satisfaction in the Printing Industry in Kenya: A Case Study of Morven Kester East Africa Limited**

Gatobu H. Francis  
Dr. Esther Waiganjo

Jomo Kenyatta University of Agriculture and Technology P.O Box 62000 -00200 Nairobi, Kenya, School of Human Resource Development, Jomo Kenyatta University of Agriculture and Technology, P.O Box 62000 -00200 Nairobi, Kenya.  
Email: francisgatobu@gmail.com

**DOI Link:** <http://dx.doi.org/10.6007/IJARBS/v4-i10/1213>

**Published Date:** 10 October 2014

## **Abstract**

The purpose of this study was to carry out an investigation on the role of supply chain practices on customer satisfaction in the printing industry. Studies by previous researchers have indicated that printing industry faces the challenges of uncertainty associated with sourcing for raw materials from overseas and failure to embrace modern technology which adversely affected the ability to satisfy customers.

The target population was printing firms in Kenya, using Morven Kester East Africa Limited Kenya as a case study. The study used the simple random sampling technique will be used to select the sample size. There were 80 employees involved directly and indirectly in the supply chain process in this firm. The sample was 30% of the employees and this will result to a sample size of 24 employees. The study used questionnaires to gather data. Descriptive analysis was used to analyze the data which was presented in the form of frequencies, tables and percentages.

The results of the study indicated that benchmarking as a supply chain best practice played a pivotal role in customer satisfaction. The company was practicing benchmarking but its potential was not harnessed fully. The study concluded that there is an urgent need for organizations to adopt pro-active approach towards customer satisfaction by adopting practices that provide real-time and accurate response to customer satisfaction.

**Key Words:** Supply Chain Practices, Customer Satisfaction

## **1. Introduction**

Globalization in 21<sup>st</sup> century has imposed the modern manufacturing enterprises towards tough competitions (Altekar, 2005). The tremendous industrial growth in past few decades has completely revolutionized their older manufacturing strategies, giving emergence to the modern concepts of lean, agile, and nowadays leagile manufacturing. These new strategies

enable the enterprises to survive in the existing environment of fierce competitions laid down by their competitors. The requirement of faster delivery within the due date, ability of being flexible to the fluctuation of demand, and to meet the customer expectations are some of the prime motivations that has provoked the manufacturing enterprises to look for the available best alternatives, and implement it in their daily manufacturing practices. This has not been fully adopted in Kenyan printing industry (Chan & Chan, 2005).

Printing industry in Kenya faces a challenge of operating under the platform of obsolete technology which increases the cost of doing business due to many processes involved. Modern machines for colour separation such as CTP if adopted can help to eliminate many processes which are costly but the printers argue that the initial capital outlay for acquiring them is too high (Ikiara, 2009).

### **1.1 Statement of the Problem**

According to Lysons and Farrington (2006), supply chain practices encompasses management of complicated supply chains in their entirety with the objectives of synchronizing all value-adding production and distribution activities and the elimination of such activities that do not add value. It is different from SCM in a sense that the latter deals with controlling various elements in the supply chain.

According to Mutua (2010), Kenyan printing industry faces numerous challenges emanating from acquisition of raw material, sourcing of spare parts, changes in printing technology, high cost of financing business, volatile market for printing paper and training. All these costs are reflected in the final product thereby placing the burden on the final customer. Attaining the printing material in Kenya has been a big challenge to many printers in Kenya, and especially bearing in mind that most of the materials are imported from other countries outside Africa. Despite Kenyan market and printing industry in Kenya at large consume a large number of offset papers and computer papers; the country has less than two firms which manufactures and mill papers. This has made the cost of doing business very expensive due to dynamic currency rate involved in doing the international business while importing the papers in Kenya and the cost of the shipment among others (Ndua & Ng'ethe 2004).

### **1.2 Objectives of the Study**

The general objective of the study was to determine the role of supply chain practices on customer satisfaction in the printing industry.

Specific objectives were:

1. To examine the influence of benchmarking on customer satisfaction in Morven Kester East Africa limited.
2. To determine the role of organizational leadership in driving supply chain practices at Morven Kester East Africa Limited.
3. To establish the influence of collaboration among supply chain players on customer satisfaction at Morven Kester East Africa limited.
4. To examine the influence of responsiveness on customer satisfaction in Morven Kester East Africa Limited.

## **2. Literature Review**

This chapter discussed the relevant literature related to the study. The main objective of literature review was to examine the available and existing information previously done by other researchers. The existing material was reviewed from reference books, journals, reports, periodicals and internet.

## **2.1 Theoretical Framework**

### **2.1.1 Assimilation Theory**

Assimilation theory is based on Festinger's (1957) dissonance theory. Dissonance theory posits that consumers make some kind of cognitive comparison between expectations about the product and the perceived product performance. This view of the consumer post-usage evaluation was introduced into the satisfaction literature in the form of assimilation theory. According to Anderson (1973), consumers seek to avoid dissonance by adjusting perceptions about a given product to bring it more in line with expectations. Consumers can also reduce the tension resulting from a discrepancy between expectations and product performance either by distorting expectations so that they coincide with perceived product performance or by raising the level of satisfaction by minimizing the relative importance of the disconfirmation experienced.

### **2.1.2 Disconfirmation Theory Model**

Mattila, & O'Neill (2005) argues that amongst the most popular satisfaction theories is the disconfirmation theory, which holds that satisfaction is related to the size and direction of the disconfirmation experience that occurs as a result of comparing service performance against expectations. Basically, satisfaction is the result of direct experiences with products or services, and it occurs by comparing perceptions against a standard. Their research also indicates that how the service is delivered is more important than the outcome of the service process, and dissatisfaction towards the service often simply occurs when guest's perceptions do not meet their expectations. According to Ekinci & Sirakaya (2006), it is a judgment that a product or service feature or product or service itself provides a pleasurable level of consumption related fulfillment including levels of under or over-fulfillment.

## **2.2 Empirical Review of Variables**

### **2.2.1 Supply Chain Practices**

The main aim of supply chain practices is to manage complicated supply chains in their entirety with the objectives of synchronizing all value-adding production and distribution activities and the elimination of activities that do not add value so as to deliver customer requirements (Lysons & Farrington, 2007). There have been a lot of changes in the modern supply chain as compared to the conventional ones. The modern supply chain aims towards the full customer satisfaction, while simultaneously making sufficient profit for the enterprises (Lamming, 2006). But day by day increasing and fluctuating market demand, increasing product variety, and desire to make more profit led to the development of a new concept of supply chain best practices, which is an integration of the customer demands and supply chain dynamics. Recent advancements have shown that agile principle has immense potential to counteract the existing complexity of the market scenario.

#### **Benchmarking**

According to Naylor (2002), for practices to be effective, it is important to understand right from the outset, the performance that can be achieved. He views benchmarking as a practice of recognizing and examining the best industrial and commercial practices in industry or in the world and using this knowledge as the basis for improvement in all aspects of business. It is best achieved through analysis of success and spreading of learning throughout the organization, services, and processes and comparing them against the relevant metrics of successful firms (Christopher, 2008).

Previous research into supply chain benchmarking shows that it may lead to increased productivity of the supply chain as managers compare their practices to the best in the field. Stewart (2005) reported that organizations generate a comprehensive set of fact-based

performance measures that can be used to accurately describe a world-class supply chain of planning, sourcing, making, and delivering activities. The benchmarking scheme covers four areas of performance metrics which are identified as the keys to unlocking supply chain excellence: delivery performance, flexibility and responsiveness, logistics cost, and asset management

### **Organizational Leadership**

According to Lysons & Farrington (2006), the impetus of supply chain practices and world class supply chain management must either derive from or have the support of the top management. This requires two-way communication between top management and the senior managers responsible either for the integrated supply chain or functions and processes within it. Important leadership characteristics are the ability to articulate the vision of an optimized supply chain to other team members, set and motivate the team to achieve goals, innovate and introduce change, nature the competencies of the team members, foster a culture of continuous learning and improvement and display high levels of personal integrity.

### **Collaboration**

Lysons & Farrington (2006) asserts that supply chain best practices are normally most likely to be achieved by collaboration between cross functional teams within the organization, customers and suppliers external to it. Synergy among all these layers are imperative in optimizing product, process design, customers' and suppliers' satisfaction.

According to David (2009), Supply chain management (SCM) is becoming critical as firms recognize that competition is shifting from company versus company to supply chain versus supply chain. In the present competitive scenario, the fierce competition has driven most companies to seek means of enhancing performance beyond their four wall boundaries.

### **Responsiveness**

Monk and Wagner (2005) asserts that improving customer responsiveness requires firms to reevaluate their supply chain relationships to utilize business process reengineering, reposition and automate warehouses, design new products and services, reduce new product design cycles, standardize products and processes, empower and train workers in multiple skills, build customer feedback into daily operations and finally link together all the supply chain participants' information and communication systems.

### **2.2.2 Customer Satisfaction**

Customer satisfaction refers to a complete evaluation of accumulated purchase and consumption experience which reflects a comparison between the sacrifice experienced and perceived reward (Iglesias & Guillen, 2006). Sacrifice includes monetary cost of purchasing as well as intangible costs such as waiting. In response to changing market conditions, manufacturing enterprises are becoming customer-centric and innovative in a way customer receive product that better fit their needs (Johnson & Selnes, 2004). A common rationale involves using service differentiation to take advantage of strategic, financial and marketing opportunities.

Research works have shown the importance and the link of internal (employee) satisfaction to the external (customer) satisfaction. Hill and Alexander (2000) stated that there is a positive relationship between employee satisfaction and customer satisfaction and this is achieved in companies that practice employee motivation and loyalty. They reported that "employees that are more motivated to achieve customer satisfaction tend to be more flexible in their approach to their work, make fewer mistakes and use more initiative". Fecikova (2004)

conducted studies on the index method for customer satisfaction measurement and reported that the satisfaction of internal customers is one of the basic factors to satisfy the external customer since they will be in a position to deliver superior product or service when they are motivated internally

### 3. Research Methodology

The research for the study was conducted through a case study to enable the researcher to achieve an in-depth account of all the variables of study by examining them extensively so as to obtain adequate information for drawing inferences.

The population of the study was the top 50 private printing firms in Kenya ( Inkpaste printers and Stationers, 2012).The target population comprised 80 employees of Morven Kester East Africa Limited and its subsidiaries who are directly or indirectly involved in supply chain operations. Due to homogeneity of the population the study applied simple random sampling to select the sample size. This is because simple random sampling gives an equal chance to every respondent in the target population thus minimizing on biasness as well as making it easy to generalize and gather the finding ( Dempsey, 2006).

The main data collection instruments were self administered questionnaires which contained both open ended and closed ended questions. Both primary and secondary data was collected. The primary data provided a presentation of the actual information that was obtained to achieve the aim of the study. Primary data was collected using both open ended and closed ended questionnaires. The instruments were self-administered to the 24 respondents who were selected for the purposes of analysis. Empirical and theoretical literature from journals, books and publications was reviewed to provide secondary data.

Descriptive statistics in the form of frequencies, percentages were used for analysis in this study (Mugenda & Mugenda ,1999). Statistical Package for Social sciences (SPSS) computer software was used to present the data in the form of frequency, tables and percentages.

### 4. Results of the Study

#### 4.1 Benchmarking

The respondents were asked to list documented policies in the organization that have been put in place to support benchmarking.

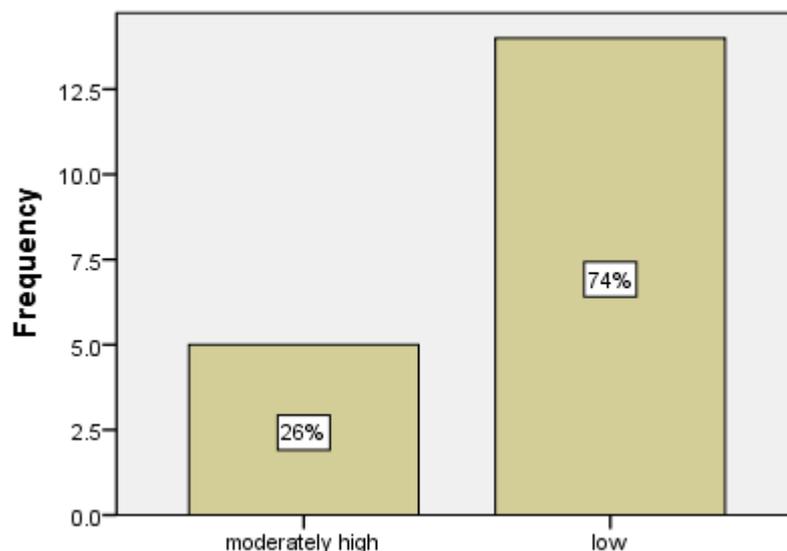
**Table 4. 4: Documented policies**

	Yes (%)	No (%)
Training	94	8
Customer satisfaction	75	25
Quality assurance	40	60

The study established that Majority (94%) of the respondents listed training. Many of the respondents (75%) highlighted customer satisfaction. The study further established that 40% of the respondents said quality assurance is used to support bench marking as indicated in table 2

#### Rating Benchmarking Practice

The study sought to rate the practice of benchmarking in the organization. The study established that majority (74%) of the respondents rated low and 26 % of the respondents rated moderately high as shown in figure 4.1.



**Figure 4.1 benchmarking ratings**

**Benchmarking Measurements**

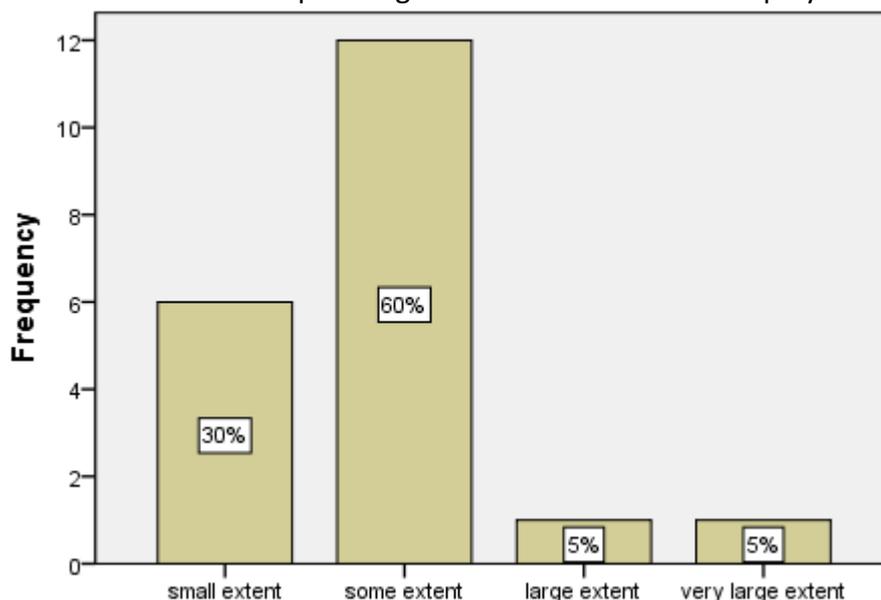
The study sought to find out the parameters that are applied in measuring the effectiveness of benchmarking in the organization. 90% of the respondents listed performance. This is in line with gravin, (2003). Also 70 % of the respondents chose customer satisfaction as another parameter to measure the effectiveness of benchmarking in the organization as indicated in table 3.

**Table 4.5: Benchmarking Measurement**

	Yes (%)	No (%)
performance	90	10
Customer satisfaction	70	30

**Organizational Leadership**

Respondents were asked to rate the extent to which the organization practices two way communication between the top management and lower cadre employees

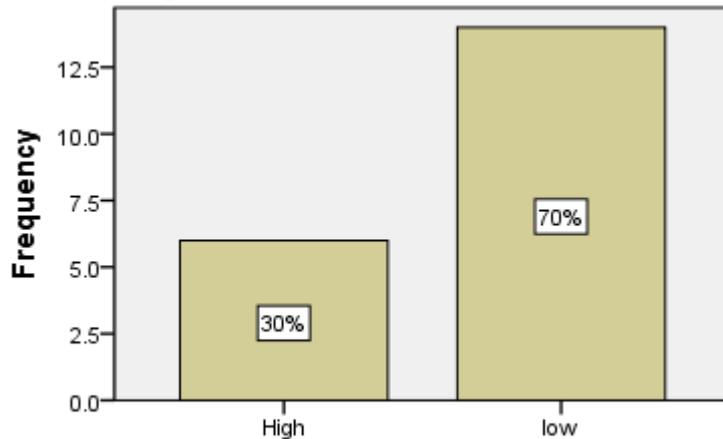


**Figure 4.2 Two Way Communication**

The study established that majority (60%) of the respondents rated to some extent , followed by 30% who rated to a small extent, 5% respondents who rated to a large extent and to a very large extent were 5% in each of the category as indicated in figure 4.2

**Supply Chain Optimization Goals and Objectives**

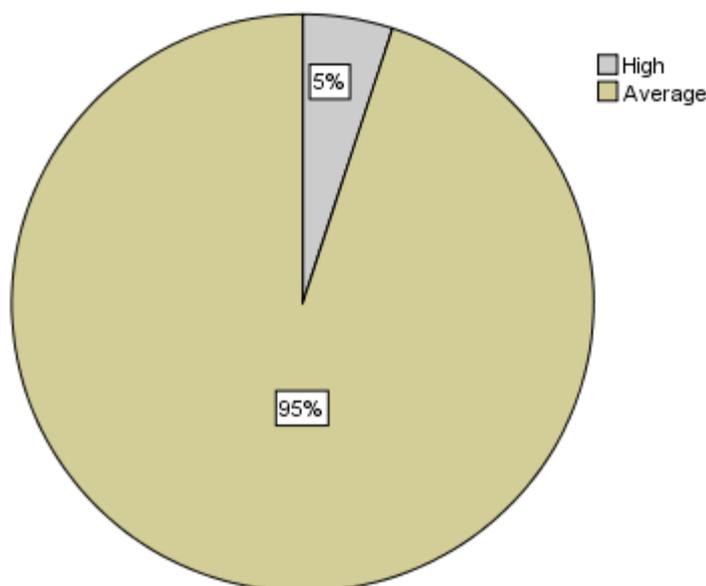
The research sought to find out the extent to which supply chain optimization goals and objectives are aligned in the organizational corporate strategy. The study revealed that most of the respondents 70% rated the extent to be low and the remaining 30% rated high as indicated in figure 4.3



**Figure 4.3 Supply Chain Optimization Goals**

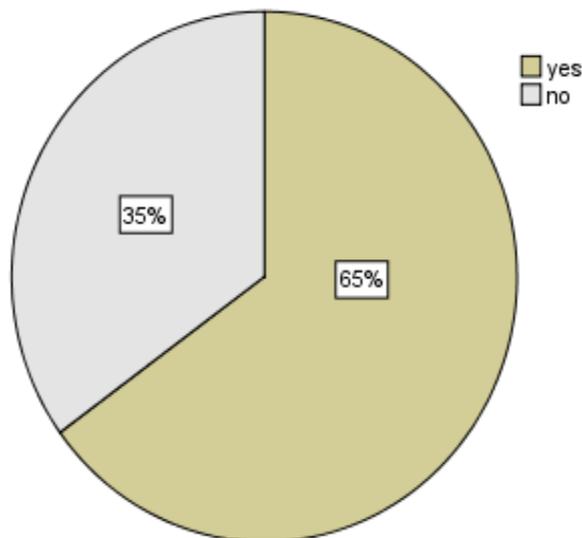
**Collaboration**

Respondents were asked to rate the level of team work among the cross-functional departments and other key players in the supply chain in their organisation. The study established that 95% of the respondents rated high and 5% rated average as shown in figure 4.4 .



**Figure 4.4 Team work Platform of Internal and External Customers**

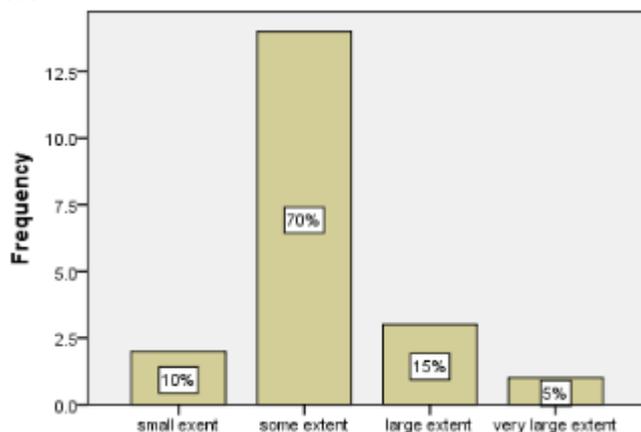
The research sought to find out whether the organization had a platform for coordinating and integrating the needs of both internal and external customers. The study established that majority 65% of the respondents gave a yes response and the remaining 35 % gave a no response as indicated in figure 4.5.



**Figure 4.5 internal and external customers platform**

**Supplier Relationship to Safe Guard Key Strategic Aspects of Supply Chain**

The research sought to find out the extent to which the organization had adopted supplier relationship to safeguard key strategic aspects in supply chain. Majority 70% of the respondents rated to some extent, followed by 15% who rated to a large extent, then 10% who rated to a small extent and 5% who rated to a very large extent. As indicated in figure 4.6.



**Figure 4.6 Supplier relationships to safeguard key strategic aspects in supply chain**

**Responsiveness**

The study sought to examine the effect of responsiveness on customer satisfaction in Morven Kester East Africa Limited. Respondents were asked to list mechanisms that the organisation had put in place to ensure timely and accurate response to customer requirements. Effective information and communication system was the most highlighted at 70% then followed by service delivery system at 30%.

**Table 4.6 Mechanisms for ensuring actual**

	Yes (%)	No (%)
--	---------	--------

Information and communication system	70	30
Service delivery system	30	70

#### 4.2 Customer Satisfaction

The study sought to find out the level of customer satisfaction in terms of order processing , production time, total lead time , overall customer care service , Ability to get the attendant quickly , Attitude of the attendant , Ability to provide a solution and customers overall satisfaction with services and products offered by the organization . None of the customers was very dissatisfied with order processing , 67% of the customers were that they were satisfied , 13 dissatisfied , 8% indicated that they were satisfied with production time , 33% had no opinion , 58% were dissatisfied .In terms of Total lead time , 83% were satisfied , 8% were not sure while 8% were dissatisfied . 58% of the respondent indicated that they were satisfied with overall customer care service, 25% had no opinion, while 17% were dissatisfied with customer service. Majority 92% of the respondents were satisfied on the ability to get attendant quickly, 8% had no opinion. 25% of the respondents were very satisfied with the attitude of the attendant, 58% were satisfied, 8% had no opinion while 8% were dissatisfied with the attitude of the attendant. 20% of the respondents were very satisfied with the ability of attendant to provide a solution, 33% were satisfied, and 7% had no opinion while 20% were dissatisfied with the ability of attendant to provide a solution. 58% of the respondents were satisfied overall with the services and products offered by the organization , 10% of the respondents had no opinion and 33% of the respondents were dissatisfied overall with the services and products offered by the organization as shown in table 4.4

**Table 4.7 Customer Satisfaction**

Customer satisfaction	VS	S	No opinion	DS	VDS
Order processing	0(0%)	13 (67%)	0(0%)	3 (13%)	0(0%)
Production time	0(0%)	2 (8%)	7 (33%)	11 (58%)	0(0%)
Total lead time	0(0%)	16 (83%)	2 (8%)	2 (8%)	0(0%)
Overall customer care service	0(0%)	11 (58%)	5 (25%)	3 (17%)	0(0%)
Ability to get attendant quickly	0(0%)	18 (92%)	2 (8%)	0(0%)	0(0%)
Attitude of the attendant	5 (25%)	11 (58%)	2 (8%)	2(8%)	0(0%)
Ability to provide a solution	4 (20%)	7 (33%)	5 (27%)	4 (20%)	0(0%)
Service and products	0(0%)	11(58%)	2 (10%)	7 (33%)	0(0%)

**Key: Key: VS (very satisfied), S (satisfied), DS (dissatisfied), VDS (very dissatisfied)**

#### Conclusion

From the above study findings and analysis, it can be concluded that there is an urgent need for organizations to adopt a pro-active approach towards customer satisfaction by adopting practices that provides real-time and accurate response to customer requirements. The role played by practices such as benchmarking, organizational leadership, collaboration and responsiveness goes a long way in enhancing a cordial relationship among players in the supply chain in order to deliver value to the final customer. Based on the results of the study, Morven Kester EA Ltd lacks a proper framework for implementing and practicing benchmarking policies which would lay emphasis on its practice and ways of monitoring its effectiveness. This has inhibited company's ability to process customer orders quickly and thus reduce the production time. The findings of this study reveal that benchmarking plays a vital role in ensuring customer satisfaction by constantly learning about emerging changes in the market.

The company practices two way communication channels between top level managers and lower level employees. This explains why employees agree that the organizational leadership has impacted positively on the performance of the organization in as far as customer satisfaction is concerned. Majority of the respondents agreed that there was unity among cross-functional departments but felt the levels at which needs of internal and external customers were integrated was not adequate.

Majority of respondents 70% held that information and communication system was one of the mechanisms the firm had put in place to ensure timely and accurate response to customer requirements. The remaining 30% indicated service delivery system as a tool that enabled the company to respond to customer requirements.

### **Recommendations**

There is need to create awareness on the supply chain best practices among all the players in order to reduce chances of resistance and also create uniformity in the entire supply chain. The main purpose for the supply chain's existence and its best practice is to fulfill customers' needs and requests and at the same time generate profits. Supply chain processes begin when a customer places an order and end when satisfied customer has paid for the particular product or service. When a customer need is defined it triggers the supply chain activities which are trying to solve the existing problem-the satisfaction of the customer need. Then the processes are continuing with the search and finding of the right manufacturers that can produce the needed product or service at the lowest price without deteriorating its quality, go through the distributing channel decisions and end not with the customer's transaction, but with his satisfaction, which in many cases is foreordained by the product's endurance and operations. (Dobler & Burt2004).

Manufacturing firms can reap unlimited benefits by leveraging on supply chain practices. Benchmarking is critical in learning about the new developments in the industry which serves to ensure the firm is able to embrace new technology and also adopt competitive strategies. When organizational supply chain goals are linked with the corporate strategy, cost of raw materials and logistics can be reduced which in turn will optimize the cost of production. Collaboration among all the supply chain players coupled with a responsive approach can enhance organizational competitiveness through reduced lead-time facilitated by smooth flow of material from upstream towards the downstream end of supply chain. This approach will ensure end customers get value for their money and also reduce the level of uncertainty in the industry

### **References**

Altekar, R., (2005). *Supply chain management: Concepts and cases*. Eastern economy edition. Prentice Hall: New Delhi.

Anatan, L. (2013). *Information Sharing Amongst Supply Chain Partners: The way o Solve the "Bullwhip Effect"* In Supply Chain Management: Retrieved on 8<sup>th</sup> August 2013 from: [http://www.academia.edu/2579479/INFORMATION\\_SHARING\\_AMONGST\\_SUPPLY\\_CHAIN\\_PARTNERS\\_THE\\_WAY\\_TO\\_SOLVE\\_BULLWHIP\\_EFFECT\\_IN\\_SUPPLY\\_CHAIN\\_MANAGEMENT](http://www.academia.edu/2579479/INFORMATION_SHARING_AMONGST_SUPPLY_CHAIN_PARTNERS_THE_WAY_TO_SOLVE_BULLWHIP_EFFECT_IN_SUPPLY_CHAIN_MANAGEMENT)

Anderson, S. (2006). *production and operations for competitive advantage: life cycle approach*. (3<sup>rd</sup> ed). Irwin: Boston

Ballow, R.H. (2004). *Business Logistics/supply chain management. planning, organizing and controlling the supply chain.* (5<sup>th</sup> ed). Pearson Prentice Hall, USA

Buller, M. (1999). *Managing change and competition.* (4<sup>th</sup> ed). Prentice Hall: England.

Bryman, A., & Bell, E. (2003), *Business Research Method.* New York: Oxford University Press.

Chan, S., & Chan, K. (2005). The future trend on system-wide modeling in supply chain studies, *International Journal of Advanced Manufacturing Technology*, 25 (6), 820 – 832.

Chase, R., Jacobs, F. & Aquilano, J. (2006), *Operations Management for competitive advantage.* (11<sup>th</sup> ed). Boston: McGraw Hill/Irwin.

Christopher, M. (2008). *Logistics and supply chain management: Creating value adding Networks.* (3<sup>rd</sup> ed). London: Prentice Hall.

Cudahy, G. (2003). *The impact of pricing on supply chains in Gattorna: Gower Handbook of Supply Chain Management.* (5<sup>th</sup> ed). Gower

David, J. (2009). *Guide to Supply Chain Management: How Getting It Right Boosts Corporate Performance.* (1<sup>st</sup> ed). London: Bloomberg Press

Davis, T. (1993). *Effective supply chain management: Sloan Management Review.*

De Beer, A., Kasoma, P., Megwa, and Steyn, E. (2005). *Global journalism: Survey of international communication in "Sub-Saharan Africa".* (3<sup>rd</sup> ed). New York: Longman Publishers.

Dempsey, B. (2006). *Research Methods.* (4<sup>th</sup> ed). Mason, NJ: Pearson Publishers.

Dobler, W., & Burt, N. (2006). *Purchasing and supply management.* (6<sup>th</sup> ed). McGraw-Hill: London

Ekinci, Y., & Sirakaya, E. (2006), *An examination of antecedents and consequences of customer satisfaction.* Cambridge, MA. CABI publishing.

Hanman, M. (2007). *Supply chain management: Logistics catches up with strategy.* (2<sup>nd</sup> ed). Chapman Hall: London

Hines, P. (2004). *Integrated Materials Management: The Value Chain Re-defined, International Journal of Logistics Management* 4(1), 13-22

Hoek, R. V. (2006). "Reconfiguring the supply chain to implement postponed manufacturing: *International Journal of Logistic Management*, 41 (9), 95-110.

Hoekstra, S., and Romme, J. (2001). *Integral Logistics Structures: Developing Customer Oriented Goods Flow.* McGraw-Hill: London.

- Ikiara, M. (2009). The role of supply chain approach in streamlining printing industry. *Journal of small and medium manufacturing firms in Kenya*. (48), 110-122
- Kenyan printing firms Directory [KPFDF]. (2012).
- Kothari, C.R. (2006). *Research Methodology: methods & techniques*. (1<sup>st</sup>ed). New Age: Nairobi
- Lamming, R. (2006). Squaring lean supply with supply chain management. *International Journal of Operations & Production Management*, 16 (7), 183-196.
- Lee, H., & Whang (2000). *Information Sharing in a Supply Chain*. *International Journal of Technology Management*, 20 (3/4), 373-387
- Leong, K., Tan, C., & Wilsner, J. (2011). *Principles of Supply Chain Management: A Balanced Approach*. Retrieved on 11<sup>th</sup> March 2014 from: <http://www.amazon.com/Principles-Supply-Chain-Management-Balanced/dp/053847548X>
- Lysons, K. and Brian, F. (2007). *Purchasing and supply chain management*. (7th ed.) Prentice Hall:London.
- Mattila A. & O'Neill J. (2005). Relationship between hotel room pricing, occupancy and guest satisfaction. A longitudinal case of midscale hotel in the United States. *Journal of hospitality and tourism research*, 27(3), 328-341
- Mugenda & Mugenda, (2009). *Research methodology*; (3<sup>rd</sup> ed). Longman publishers: Nairobi
- Mugenda, O. & mugenda, A. (2003). *Research Methods: Qualitative and Qualitative Approaches*. Acts press: Nairobi.
- Mugenda & mugenda (1999). *Research methodology*; (3<sup>rd</sup> ed). Longman Publishers: Nairobi.
- Mutua, R. (2004). Analytical review of the printing industry in Kenya. *A journal of Aviq printers*. 49 (7), 33-37.
- Naylor, J. (2009). *Introduction to operations Management*. (2<sup>nd</sup>ed). Prentice Hall: London
- Orodho, C.R. (2009). *Elements of education and social Science Research Methods*. (2nd ed). Keneza publishers: New- Delhi.
- Opondo, S. (2010). *The status of printing industry and scope*. *A journal of Government printing Press*, 22, 170-178.
- Patel, R. (2011). The pain of being a printer in Kenya. *A journal of printing industry overview*. 10 (2), 201-207.
- Paton, M. (2002). *Qualitative Research and Evaluation methods*. (3<sup>rd</sup>ed). Sage

Publications: London

Serekan, U. (2003). *Research methods for Business: A Skill building Approach*. (4<sup>th</sup> ed). John Publishers. London

Slack, N., and Chambers,S. (2005). *Operations management* . (2<sup>nd</sup> ed). Pitman publishing: London.

Slack , N., Stuart ,C, & Robert ,J. (2007).*Operations Management*. Prentice Hall: London

Witt,Y. & Meyer, R. (2005).*Supply chain excellence for competitive advantage*.(1<sup>st</sup> ed).Youngstown: New York.

Xu, K. and Dong, Y. (2004). Information Gaming in Demand Collaboration and Supply performance. *Journal of Business Logistics*, 25 (1)

Zhang, Q. (2005). Logistics Flexibility and it's impact on Customer satisfaction. *International Journal of Logistics Management*, (16), 71-95

Zinbarg, M. (2005).*Research Methods*.(1<sup>st</sup> ed). Pearson publishers: New Delhi