

# Supply Chain Management Practices, Customer Satisfaction and Customer Loyalty

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## Abstract

In competitive business environments companies have identified the need to redesign their supply chain management practices to increase customer satisfaction and customer loyalty. This study sought to determine the effects of supply chain management practices on customer satisfaction and loyalty in selected supermarkets in Kenya. The study used systems thinking theory and it employed a survey research design. The target population was a total of 1,208 managers and procurement officers in the selected supermarkets. Stratified random sampling was used to select a sample of respondents. Findings indicated that strategic supplier partnership, supply postponement, customer relationship and information sharing had significant and positive effect on customer satisfaction which also increases customer loyalty. The study concludes that supply chain management practices enhances customer satisfaction in the supermarkets. The study recommends that there is need for companies to work jointly with suppliers in order to improve customer satisfaction and improve performance.

**Keywords:** Supply chain management; customer satisfaction; customer loyalty.

## INTRODUCTION

Businesses are experiencing pressures to improve the efficiency and effectiveness of the supply chain, seeking to deliver the best value to the ultimate consumer whilst remaining competitive. (Ritchie & Brindley, 2000). The competitive edge of a company over its rivals depends heavily on its ability to cope with multiple challenges to rein in cost, enhance product quality and offer superior customer service (Lei, 2007). A very compelling reason for this is attributed to the fact that the competition is now being waged between or a cross supply chains, and not confined to only between companies anymore (Seth *et al.*, 2006).

Customers are important stakeholders in organizations and their satisfaction is a priority to management. Customer satisfaction has been a subject of great interest to organizations and researchers alike. In recent years, organizations are obliged to render more services in addition to their offers. The quality of service has become an aspect of customer satisfaction. It has been proven by some researchers that service quality is related to customer satisfaction (Jenet, 2011). Customer satisfaction attempts to match the level of expectations and perception of customers. However, it is essential to note that the degree of expectation of any customers will depend on their own behaviors' (Walidin, 2007; Waskita, 2007). Meeting a customer's pre-purchase expectations is an important aspect of customer satisfaction that has been described in the marketing and services operations management literature. Supply chain relationships play an important role in achieving the firm's goals (Hendriks, 1997).

Supply Chain Management (SCM) is the process of planning, implementing and controlling the operations of the supply chain with the purpose to satisfy customer requirements as efficiently as possible (Chopra *et al.*, 2002). SCM is the coordination of materials, information and financial flows between and among all participating enterprises. Many organizations have started recognizing SCM as an important key for building sustainable competitive edge for their products and services in global market with crowded customers (Jones, 1998). SCM practices includes the set of activities undertaken by an organization to promote effective management of its supply chain (Kohet *et al.*, 2007). Li *et al.*, (2006), identify five aspects of SCM practice through factor analysis: strategic supplier partnership, postponement, customer relationship, level of Information sharing and quality of information sharing.

In Kenya the supermarket sector has grown at an annual rate of 19% over the past few years (Kenya National Bureau of Statistics, 2012). Kenya is the second most advanced country in terms of presence of supermarkets in sub Saharan Africa, after South Africa. Kenya has over 406 supermarkets and 20 hypermarkets (Economic Survey, 2010). In the last ten years, the formal food and necessities retail sector has undergone massive transformation, with traditional retailers, including small shops and public markets, losing a significant proportion of the market share to supermarkets. The large supermarkets include Nakumatt, Uchumi, Tuskys and Naivas. Kenya's advancement in supermarkets is evident from the fact that it's top five cities (Nairobi, Mombasa, Nakuru, Eldoret, and Kisumu) have at least 165 supermarkets and 13 hypermarkets (Economic Survey, 2010).

Previous studies on Kenyan supermarkets have addressed effectiveness of electronic inventory systems on customer service delivery and strategic responses to changes in external environments. Hague & Islam (2013) did a research on SCM practices on customer satisfaction on pharmaceutical firms in Bangladesh. The great benefit of supply chain management is that when all of the channel members including suppliers, manufacturers, distributors and customers, behave as if they are part of the same company, they can enhance performance

significantly across the board (Copacino, 1996). Better performance of the supply chain increases customer satisfaction levels.

One major problem is the relative lack of empirical evidence supporting the benefits attributed to supply chain management. Likewise, most of the research related to strategic relationships is dynamic in nature. It describes primarily how two companies can improve their relationships, but it seldom includes an actual supply chain. Similarly, most of the research concerning supply networks is operational nature and have been based on case examples of focal companies such as Benetton, Toyota and Nissan (Stock *et al.*, 2010). Lamming *et al.*, (2000), pointed out that a problem is that these studies concentrated on a particular industry, typically the automotive industry. Thus, managers in other industries lack theoretical foundation for managing their particular businesses since networks vary not only between industries but along range of other aspects. This study was designed to determine the effect of supply chain management (SCM) practices on customer satisfaction and customer loyalty in the supermarkets in Kenya.

## **THEORETICAL REVIEW**

The systems thinking theory was used to support the influence of supply chain management practices on customer satisfaction. Systems thinking theory is a management approach which enables the leadership to see the company as a unified part. According to Senge (1990), system thinking theory calls for addressing various parts of a system from a holistic viewpoint and not in isolation of each other. In doing so, in tackling the problems in their entirety, the theory advocates for greater understanding of the problems or issues at hand through gauging patterns or the interrelationships that are at play among various entities of a system (Rubenstein-Montano *et al.*, 2001). Such interrelationships or the evolving properties at work in the whole system, Senge (1990) argues, would, however, go missing, if and when the whole is broken into parts. This theory is thus tailored toward systematically explicating the dynamics that characterize the SCM practices. For instance, the strategic supplier partnership, postponement, customer relationship and information sharing that are in place within and across supply chain should be all taken into account for a sound understanding of these practices. The primacy of taking such an integrated approach is paramount as the lack of which would not ensure whether all the vital components are adequately looked into (Tsoukas, 1996; Schlange, 1995). The systems thinking theory thus sheds insight into the efficacy of various SCM enablers on organizational outcomes, such as customer satisfaction.

### **Customer Satisfaction**

Customer satisfaction is a measure of a firm's customer base in terms of size, quality and loyalty. Customer loyalty and product repurchase are as a result of customer satisfaction among the several ways that an organization can employ to service its customers are through information management and customer collaboration (Eckert, 2007). Satisfaction according to Eckert (2007), refers to the quality of the products, services, price performance ratios as well as when a company meets and exceeds the requirements of the customer. Organizations may identify customer satisfaction in terms of on time delivery as well as customer specification needs. Variables such as customer needs, having the products immediately and on hand to satisfy the customers' needs, vendor partnerships, that is; sharing of information regarding sales, sales forecast as well as amount of inventory and data integrity which assist in overall inventory management (Lee & Kleiner, 2001). Satisfaction is the consumer's fulfillment response. It is a judgment that a product or service feature, or the products of service itself, provided or is providing a pleasurable level of consumption-related fulfillment, including levels of under or over-fulfillment. Attaining a high level of customer satisfaction usually requires more than providing a high-quality product. Hendricks (1997) suggest that meeting a customer's pre-purchase expectations is an important aspect of customer satisfaction that has been described in the marketing and service operations management literature.

It has been proven by authors that an organization that consistently satisfies its customers, enjoy higher retention levels and greater profitability due to increase customer loyalty (Wicks & Roethlein, 2009). For this reason every company works hard daily to win the hearts of customers by satisfying them in order that they become loyal customers to their brands in order to increase sales and profit. When customers have good perception about a brand, they will always choose to go for the brand, because consumers form their preferences relative to perceptions and attitudes about the brands competing in their minds (Larrece, 1998).

Thus customers will always prefer a product or service that gives them maximum satisfaction (Hague & Islam, 2013). Customer satisfaction is the main concern of business sectors of today, their researchers are always conducting research about the customers especially on what relates to their satisfaction. Moreover, because this problem of satisfaction concerns the most unpredictable stakeholder in the business environment; the customers, who remains the main character that keeps the business in operation; and because satisfaction varies and changes among individuals, there is a need for continuous research in this area. Although there are other factors such as price, product quality other than service quality that determine customer satisfaction. Firms must respond to the

changing customers' needs in the increasing competitive environment (Zhang, 2005). Zebrine *et al.*, (2007) assets that, customer satisfaction is one of a firm's milestones towards profitability. The main focus of companies today is to satisfy the customer which has an impact competitiveness of an enterprise. Customers' expectations are largely dependent on the flexibility of the supply chain partners (Rad, 2008).

### **Supply Chain Management Practices**

Stock and Boyer (2007) reviewed 173 definitions of SCM across a multiplicity of journals and books. They not only argue that too many definitions exist, but also that the lack of a single definition has significant negative impact for both practitioners and researchers. SCM has been defined as the design, planning, execution, control, and monitoring of supply chain activities with the objective of creating net value, building a competitive infrastructure, leveraging worldwide logistics, synchronizing supply with demand and measuring performance globally (Harland, 1996). The supply chain encompasses organizations and flows of goods and information between organizations from raw materials to end-users (Handfield & Nichols, 2002).

According to Ayers (2001), supply chain is knowledge movement that includes all activities related to the back flow of product from customers back up to the chain in the form of product return, reuse, and recycling. Ayers' definition suggests that every single company depends on other businesses to deliver its products or services to its customers. Supply chain as a set of three or more entities organizations or individuals directly involved in the upstream and downstream flows of products, services, finances, and/or information from a source to a customer.

Owing to the fact that SCM practices are a key to firm performance, this concept has attracted a great deal of interest among academicians and practitioners alike over the past two decades (Narasimhan & Kim, 2007). As effective SCM provides benefits that transcend across the entities on both upstream and downstream sides, firms are realizing the potential of integrating their external supplier-firm-customer relationships and internal operational practices with a view to enhancing their level of competitiveness and performance as well as customer satisfaction (Ou *et al.*, 2010). A sound understanding of SCM practices thus assumes utmost importance in coping with the global competition and sustained profitability (Power *et al.*, 2001; Moberg *et al.*, 2002). This study focused on four basic supply chain practices by Suhong, *et al.* (2009), which include strategic supplier partnership, postponement, customer relationship and information sharing.

**Strategic supplier partnership** relationship activities play an important role in SCM (Wisner, 2003). Through close relationship supply chain partners are willing to share risks and reward, and maintain the relationship on long term basis (Cooper & Ellram, 1993; Stuart, 1993; Thatte, 2007). Long-term perspective between the buyer and supplier increase the intensity of firm-supplier integration. Customer relations related to the company's ability to communicate to the delivery of appropriate products and services to customers locally and globally in the right time, right place, and appropriate of quantity and quality. Customer linkage especially sharing product information with customers, receiving customer orders, interact with customers to manage demand, after placing the order system, share the status of orders with customers on scheduling orders, and product delivery stage (Lee *et al.*, 2007). Qu *et al.*, (2010) argued that a long term relationship with supplier facilitates in garnering positive results in an array of activities reflected in superior product quality, diminished lead time, and agile customer service leading to customer satisfaction.

*H0<sub>1</sub> Strategic supplier partnership leads to increased customer satisfaction*

**Supplier Postponement** is the practice of moving forward one or more operations or activities; making, sourcing and delivering to a much later point in the supply chain (Van, 1998; Beamon, 1998; Johnson & Davis, 1998; Naylor *et al.*, 1996; Van & Voss, 1999). Postponement allows an organization to be flexible in developing different versions of the product in order to meet changing customer needs, and to differentiate a product or to modify a demand function. Two primary considerations in developing a postponement strategy are: to determining how many steps to postpone, and determining which steps to postpone (Beamon, 1998). Postponement needs to match the type of products, market demands of a company, and structure or constraints within the logistics system (Fisher, 1997; Pagh & Copper, 1998).

In general, the adoption of postponement may be appropriate in the following conditions: innovative products (Fisher, 1997); products with high monetary density, high specialization and wide range; markets characterized by long delivery time, low delivery frequency and high demand uncertainty; and manufacturing or logistics systems with small economies of scales and no need for special knowledge (Pagh & Copper, 1998). Postponement allows an organization to be flexible in developing different versions of the product in order to meet changing customer needs, and to differentiate a product or to modify a demand function thus leading to customer satisfaction (Wallin, *et al.*, 2006). Li *et al.* (2006) showed that postponement may not be a strong indicator of SCM practice compared to the other four dimensions. This can be true as the implementation of postponement is dependent on a firm's market characteristics and the type of the products and therefore may not be applicable in all the situations.

*H0<sub>2</sub> Supply postponement leads to increased customer satisfaction*

**Customer Relationship** practices can generate the organizational success in supply chain management efforts as well as its performance (Ellram, 1991; Turner, 1993). The success of supply chain management encompasses customer integration at the downstream and supplier integration at the upstream, considering that each entity in a supply chain is a supplier as well as a customer (Thatte, 2007). In the competitive business, better relationship management with customers is crucial for organization success. Good relationship with business partners, including key customers are important role to success of supply chain management practiced by organizations. Customer relationship is recognized as an internal component of an organization's marketing strategy to increase sales and profits. Close customer relationship allow product differentiation from competitors, help sustain customer satisfaction and loyalty, and elevated the value provided to customer (Thatte, 2007).

The global markets offer a variety of products of different quality and cost. As a result, companies are always competing and trying to reduce costs and improve quality. Customers look for more choices, better service, higher quality, and faster delivery. The relationship with customers has turned a strategic issue for today's companies. Singh and Power (2009), who observe that organizations would derive better results if they remain, engaged in collaborative relationship with customers. The endeavor on the part of the companies in forging relationships with those in the supply chain translates into an enhanced customer satisfaction.

*H<sub>3</sub> Customer relationships lead to increased customer satisfaction*

**Information sharing** provides the access to private data between business partners thus enabling them to monitor the progress of products and orders as they pass through various processes in the supply chain (Simatupang & Sridharan, 2002). Information shared in a supply chain is of use only if it is relevant, accurate, timely, and reliable (Simatupang & Sridharan, 2005; Thatte, 2007). Information sharing with business partners enables organizations making better decisions and making action on the basis of greater visibility (Davenport, *et al.*, 2001; Thatte, 2007). Landeros *et al* (1989) considers sharing of information as one of the five building blocks that characterize a solid supply chain relationship. According to Stein & Sweat (1998), supply chain partners who exchange information regularly are able to work as a single entity. Together, they can understand the needs of the end customer better and hence can respond to market change quicker.

Many studies have reported that information sharing can bring many benefits both to suppliers and buyers, such as inventory reduction, and reduced manufacturing costs. The empirical findings from Narasimhan & Nair (2005), reveal that information sharing can increase the operational synergy amongst supply chain partners. The impact of information sharing on SCM depends on what information is shared, quality on shared information, and companies' capability in using and translating the information into a supply chain strategy and operational activities (Lee & Whang, 2000; Moberg *et al.*, 2002). Organizations need to view their information as a strategic asset and ensure that it flows with minimum delay and distortion so as to achieve customer satisfaction (Suhong, *et al*, 2009).

*H<sub>4</sub> Information sharing leads to increased customer satisfaction*

### **Customer Loyalty**

Customer loyalty is the act of customers buying current brands repeatedly as opposed to choosing those of competitor it shows that customer's satisfaction leads to customer retention which in turn generates a loyal customer base in an organ. Customer loyalty requires that company's delivers on their customers' expectations fully in a predictable and an ongoing relationship (Wyse, 2012). Customers often judge the quality of services that they receive using their perceived expectations which often lead to customer satisfaction and loyalty (Colburn, 2013). According to Cacioppo (2000), an increase in customer loyalty by five percent can lead to an increase in company's profits by 25 to 85 percent.

Loyal customers according to Eckert (2007) are six times more likely to purchase or to recommend the purchase of a company's products and services to someone else. Various studies have also shown that dissatisfied customers are likely to tell nine other people while satisfied customers are likely to tell five other people about the good service and treatment that they have received (Cacioppo, 2000). Company's need to provide customer purchase satisfaction before and after the purchase since this is likely to lead to customer brand loyalty (Agarwal, 2007).

Customer loyalty is often manifested in repeat purchases (Allen & Wilburn, 2002). Tuli & Bhardwaj (2009) observes that satisfied customers are likely to adapt behaviour of increase in purchase as well as a continuous purchase from the firm. Agarwal (2007) asserts that provision of customer purchase satisfaction before and after a purchase results in repeat purchases. Provision of satisfaction before the actual purchase by the customer would include aspects such as provision of quality products, fair pricing of products as well as flexibility. Post purchase customer satisfaction on the other hand would include activities such as provision of repair services and efficient operations of reverse logistics.

According to Wallin (2006), customers are more satisfied if the time taken to deliver their products is less than the time they have placed their products order. Flexibility is paramount in meeting the delivery deadlines (Gunasekara, 2001) and therefore information sharing is required to enable the members of the supply

chain to meet specified delivery dates by the customer (Ellram, 1999). A study carried out by Yin-mei (2013), shows that effective customer delivery influences customer satisfaction and service quality. Customers are said to be satisfied if their suppliers are able to meet and fulfill their orders within the required time.

*H05 Customer satisfaction leads to customer loyalty.*

### Conceptual Framework

The present study adopted Suhong, *et al's*, (2009) framework and focused on four dimensions of supply chain management practices; Strategic supplier partnership, postponement, customer relationship and information sharing. The overall objective of the study was to assess the effect of supply chain management on customer satisfaction and loyalty. The conceptual framework below depict the relationships of the variables.

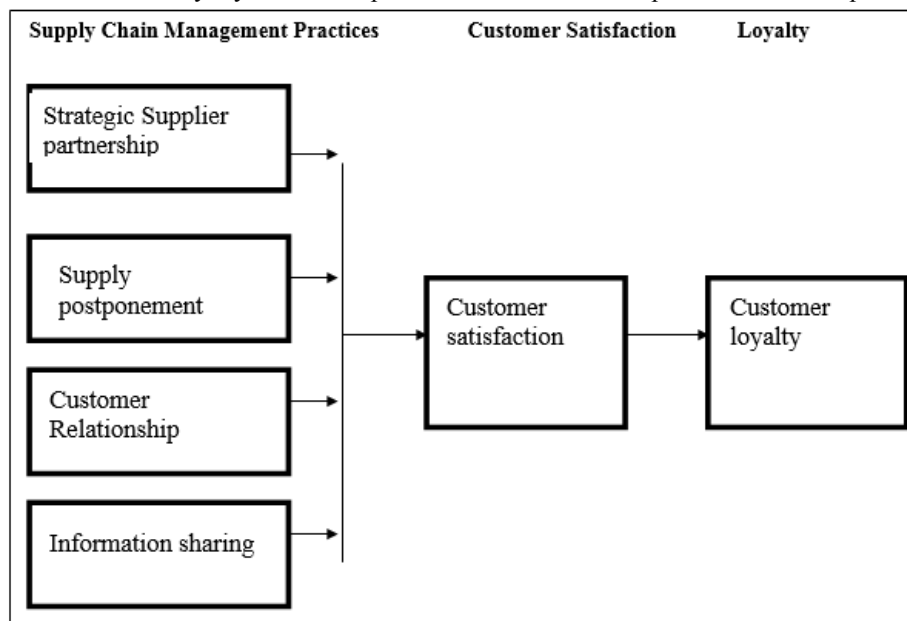


Figure 1

### RESEARCH METHODOLOGY

Survey research design was used in the study. The study was cross-section in that it examine a sample of the population at a specific time (Ary, *et al*, 2002). The study was conducted in major towns in Kenya, which including, Nakuru, Eldoret, Kisumu, Nairobi and Mombasa. The target population of the study was limited to the four supermarkets being the largest supermarkets chains in Kenya with modern stores throughout the country. These supermarkets are Tuskys, Nakumatt, Uchumi and Naivas. These supermarkets serve the industry with almost similar products and services as competitors thus can enable a suitable generalization of the study.

From the target population of 1208, Taro Yamane (1973) sample size formula was used to select a sample size of 300 managers and procurement team members. The study used simple random sampling in selecting the various branches of the supermarkets especially in Nairobi where the supermarkets have many branches. Primary data was collected by use of a questionnaire which was administered to management and procurement officers of the selected supermarkets. The questionnaire comprised of a structured five point Likert scale. The questionnaire items were adopted from previous studies and improved to suit the study.

Ethical considerations were observed through all the steps in the conduct of this study, for example, informed consent, voluntary participation, withdrawal at any time, anonymity, respecting participants views and privacy so that participants' confidentiality was not breached. The participants' consent declaration was sought before the interview due to ethical reasons and as it involved voluntary participation. Confidentiality was observed in protecting all data collected within the scope.

### FINDINGS

The questionnaires were distributed to the selected supermarkets were 300. However 257 questionnaires were returned correctly filled and the remaining 34 were either returned or incorrectly filled. A response rate of 86% was achieved in the study and it was found adequate for analysis. All the four supermarkets in the study were represented by 32% (83) for Nakumatt 25%(62) for Naivas, Tuskys for 27% (70) and Uchumi 16%(42). The respondents were 38% managers while 62% were the procurement officers. There were 55% male and 45% female which indicates that both genders were fully involved in the study. 43% (111) of the respondents reported

to having served for over 10 years, 30.9% (79) of the respondents have worked for between 1-5 years and 26.1% (67) of the respondents have worked for 6-10 years. Since majority of the respondents have worked for 6 years and above, they are considered ideal for the study since they have knowledge on supply chain management practices that is sought for by the study.

The level of education of the respondents were majority being undergraduate at 43%, Diploma holders were represented by 36% while high school certificate holders were represented by 13% and 8% of the respondents were represented by 8% of the respondents. In regards to the age of employees, 42.5% (109) of the respondents noted that they are between 41-50 employees, 33.3% (86) of the respondents stated that they are between 31-40 years, 22.7% (58) of the respondents reported that there are over 50 employees, 1% (3) of the respondents stated that there are below 20 employees and 0.5% (1) of the respondent stated that there are between 21-30 employees.

### Descriptive Statistics on Variables

The study sought to establish the four dimensions of supplier chain management; strategic supplier partnership, supplier postponement, customer relationship, and information sharing in the selected supermarkets. Customer satisfaction and customer loyalty were also measured in the selected supermarket chains. Factor analysis was then conducted to determine if all items loaded properly on their respective constructs given the minor adaptations were made for this study. All items loaded greater than .50 on their respective constructs. The Kaiser-Meyer-Olkin measure of sampling adequacy was greater than 0.60 and a significant Barlett's test of sphericity (Tabachnick and Fidel (1989) indicated an adequate sample. All Cronbach's Alphas were greater than the minimum 0.70 suggested by Nunnally (1978). Skewness and Kurtosis statistics for the variables were all between -1 and +1.

### Correlation Results

Pearson Correlations results in table 4.8 showed that strategic suppliers partnership was positively and significantly correlated to customer satisfaction ( $r=0.560$ ,  $p<0.01$ ). Supply postponement was the second component to be positively related with customer satisfaction ( $r = 0.148$ ,  $p<0.05$ ) an indication that supply postponement had 14.8% significant positive relationship with customer satisfaction. Customer relationship was also positively and significantly associated with customer satisfaction as shown by ( $r = 0.550$ ,  $p<0.01$ ) implying that customer relationship had 55% positive relationship with customer relationship. Information sharing was most highly and positively correlated with customer satisfaction ( $r = 0.554$ ,  $p<0.01$ ). Findings provided enough evidence to suggest that there is a linear relationship between strategic suppliers' partnership, supply postponement, customer relationship, and level of information sharing and customer satisfaction. Customer satisfaction also had a positive and significant relationship with customer loyalty ( $r = 0.323$ , significant at  $\alpha = 0.01$ ).

**Table 1: Correlation Results**

		1	2	3	4	5	6
1	Customer Satisfaction	1					
2	Strategic Supplier s Partnership	.560**	1				
3	Supply Post-ponement	.148*	0.062*	1			
4	Customer Relationship	.550**	.472**	0.02*	1		
5	level of information sharing	.554**	.432**	-.172**	.336**	1	
6	Quality of information sharing	.466**	.366**	.124*	.218**	.461**	1
	** Correlation is significant at the 0.01 level (2-tailed).						
	* Correlation is significant at the 0.05 level (2-tailed).						
	Source: Survey Data, 2014						

### Regression Analysis

Multiple regression analysis was done to establish the influence of the SCM practices on customer satisfaction. The results showed that all the four predictors (Information sharing, supply postponement, customer relationship, strategic suppliers' partnership) explained 55.9% (R squared =0.559, Durbin-Watson 1.597) variation on customer satisfaction. The ANOVA indicated that the coefficient of determination was significant as evidence of F ratio of 63.633 with p value 0.000 <0.05 (level of significance). Thus, the model was fit to predict customer satisfaction using strategic suppliers' partnership, supply postponement, customer relationship, and the level of information sharing.

Strategic suppliers partnership has a significant effect on customer satisfaction,  $\beta_1= 0.212$  ( $p$ -value = 0.000). This indicates that for each unit increase in the positive effect of strategic suppliers' partnership, there is 0.212 units increase in customer satisfaction. Furthermore, the effect of strategic suppliers partnership was stated by the t-test value = 4.113 which implies that the standard error associated with the parameter is less than the

effect of the parameter. Supply postponement has a significant effect on customer satisfaction,  $\beta_2 = 0.163$  (p-value = 0.000). This implies that for each unit increase in supply postponement, there is up to 0.163 unit increase in customer satisfaction. Also the effect of supply postponement is shown by the t-test value of 3.706 which implies that the effect of supply postponement surpasses that of the error by over 3 times.

Customer relationship has a significant effect on customer satisfaction,  $\beta_3 = 0.307$  (p-value = 0.000). This indicates that for each unit increase in customer relationship, there is up to 0.307 units increase in customer satisfaction. The effect of customer relationship is stated by the t-test value = 6.358 which point out that the effect of customer relationship is over 6 times that of the error associated with it. Information sharing has a significant effect on customer satisfaction,  $\beta_4 = 0.315$  (p-value = 0.000). This suggests that there is up to 0.315 unit increase in customer satisfaction for each unit increase in level of information sharing. The effect of level of information sharing is more than 5 times the effect attributed to the error, this is indicated by the t-test value = 5.999.

The rule of thumb was applied in the interpretation of the variance inflation factor. From the table, the VIF for all the estimated parameters was found to be less than 4 which indicate the absence of multi-colinearity among the independent factors. This implies that the variation contributed by each of the independent factors was significant independently and all the factors should be included in the prediction model.

**Table 2 Coefficient of Estimates**

	Unstandardized Coefficients		Standardized Coefficients			Co linearity Statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	1.106	0.2		5.525	0.000		
Strategic Suppliers Partnership	0.152	0.037	0.212	4.113	0.000	0.661	1.512
Supply Postponement	0.066	0.018	0.163	3.706	0.000	0.906	1.104
Customer Relationship	0.239	0.038	0.307	6.358	0.000	0.756	1.324
level of information sharing	0.224	0.037	0.315	5.999	0.000	0.636	1.573
R = .748		F = 63.633					
R2 = 0.559		Sig = .000					
Durbin-Watson = 1.597							

a Dependent Variable: Customer Satisfaction

Source: Survey Data, 2014

### Conclusions and Recommendations

From the study findings, it was found that strategic supplier partnership enhances customer satisfaction. Therefore there is need for supermarkets to consider quality as their number one priority in selecting suppliers. Also, there is need to solve problems jointly with suppliers and help suppliers to improve the quality of their product. Further, continuous programs that include key suppliers are of essence if customer satisfaction is to be increased.

In line with the findings, Ou *et al.* (2010) echoes that a long term relationship with suppliers facilitates superiority of product quality diminished lead time, agile customer service leading to customer satisfaction. It was also established from the findings that problems are solved jointly with the suppliers and the supermarkets have helped the suppliers to improve their product quality. Concurrently, through close relationship supply chain partners are willing to share risks and reward, and maintain the relationship on long term basis (Landeros & Monczka, 1989; Cooper & Ellram, 1993; Thatte, 2007). Thus, through the close relationship in the supply chain management, SCM partners are able to interact with customers to manage demand hence enhancing customer satisfaction.

The study also finds strong support for the argument that supply postponement plays a key role in enhancing customer satisfaction. Thus, there is need to design products for modular assembly and delay final product assembly activities until the last possible position or nearest to customers in the supply chain. In line with findings, Wallin, *et al.*, (2006) reported that postponement allows an organization to be flexible in developing different versions of the product and in this way, the organization is able to meet changing customer needs, and to differentiate a product or to modify a demand function hence enhancing customer satisfaction. On the contrary, Li *et al* (2006) asserts that supply postponement may not be a strong indicator of SCM practice since it largely depends on the firm's market characteristics and the type of product hence it might not be applicable in all situations.

It was also established that customer relationship has a positive and significant effect on customer satisfaction. Therefore, there is need to frequently interact with customers to set reliability, responsiveness and other standards for use. Also it is important to frequently measure and evaluate customer satisfaction, determine future customer expectations and periodically evaluate the importance of the relationship with customers.

Previous research by Tan *et al.*, (1999) and Thatte, (2007) indicate that the success of supply chain management encompasses customer integration at the downstream and supplier integration at the upstream. Consequently, each entity in the supply chain is a supplier as well as a customer and the coexistence enhances customer satisfaction.

Moreover, the better relationship with customers heightens organization success and plays a key role in enhancing customer satisfaction (Moberg *et al.*, 2002; Tathee, 2007). Concurrent to findings, customer relationship is an important market strategy that increases sales and profits and at the same time increases customer satisfaction (Bommer *et al.*, 2001; Thatte, 2007). Further, close customer relationship allows for product differentiation from competitors hence enhancing customer satisfaction and loyalty (Thatte, 2007). In the same way, Singh and Power (2009) observe that organizations derive better results the moment they engage in collaborative relationships with customers. Thus, whenever organizations offer a wide array of choices for customers, better services, high quality and faster delivery they will be more satisfied and loyal.

The study shows that information sharing plays a contributory effect to customer satisfaction. Consequently, there is need for the information exchange between trading partners to be timely, complete, accurate, adequate and reliable. Further, organizations need to view their information as a strategic asset and ensure that it flows with minimum delay and distortion so as to achieve customer satisfaction.

Findings also showed that information sharing has a positive and significant effect on customer satisfaction. Cognate to findings, Simatupang & Sridharan (2002) report that information sharing pertaining to key performance metric and process data improves the supply chain visibility hence enhancing customer satisfaction. In the same way, sharing available data with other parties within the supply chain enhances customer satisfaction and the same time is a source of competitive advantage (Monezka *et al.*, 1998). Furthermore, supply chain partners who exchange information regularly are able to work as an entity and together they can understand the needs of the customers hence making it possible for customers to be satisfied (Stein & Sweat, 1998). Moreover, immediate feedback to members of the chain optimizes chain performance to meet emerging customer needs and heighten competitive advantage (Allmendinger, 2005). Nonetheless, the impact of information sharing on SCM largely depends on the kind of information shared, quality of shared information and also the organizations' capability in using and translating the information into a supply chain strategy and operational activities (Lee & Whang, 2000; Moberg *et al.*, 2002).

Based on the findings that customer satisfaction enhances customer loyalty, there is need for firms to improve the quality of their services, products and treat customers as their number one priority so that they become loyal to the firm and also recommend the firm's products/services to others. Study findings affirmed that customer satisfaction has a significant effect on customer loyalty. Specifically, customer satisfaction leads to customer retention which in turn generates a loyal customer base which is an added advantage to a firm. Concurrently, Wyse, (2012) opines that there is need for companies to fulfill customer's expectations fully in a predictable and ongoing relationship so as to enhance customer loyalty.

Prior studies by Colburn, (2013) have also shown that customers judge the quality of services that they receive using customers' perceived expectations hence enhancing both satisfaction and loyalty. Further, Cacioppo, (2000) was of the opinion that dissatisfied customers are likely to tell nine other people while satisfied customers are likely to tell five other people about the good service and treatment that they have revealed. Consequently, when customer satisfaction is enhanced, customers are more likely to be loyal.

From the study findings, it was that supply chain management practices enhances customer satisfaction and customer loyalty. Therefore there is need for supermarkets to consider developing strategic supply practices, supply postponement programs, customer relationships and information sharing practices. Basing on the fact that customer satisfaction enhances customer loyalty, there is need for firms to improve the quality of their services, products and treat customers as their number one priority so that they become loyal to the firm and also recommend the firm's products/services to others. This study addressed the effect of supply chain management practices on customer satisfaction and loyalty in Kenya. This study recommends that another study be done in another setting as there are differences purchasing behavior of the consumers.

## REFERENCES

- Agarwal, V. (2007). "Contemporary Issues in Supply Chain Management", A Case Study of Marico Industries, Supply Chain Management. *New Century Publication. New Delhi.*
- Allen, D.R. & Wilburn, M. (2002). "Linking Customer and Employee Satisfaction to the Bottomline", *A Comprehensive Guide to Establishing the Impact of Customer and Employee Satisfaction on Critical Business Outcomes.* ASQ Quality Press. USA
- Allmendinger, G. (2005), "Four strategies for the age of smart services", *Harvard Business Review*, Vol. 83 No. 10, pp. 131-45.
- Ary, D., Jacobs, L. C., & Razavieh, A. (2002). *Introduction to Research in Education* (6th ed.). Belmont: Wadsworth.



- Ayers, James B. (2001). "COSTS: Getting to the ROOT CAUSES," *Supply Chain Management Review*, 7(6), 24-30.
- Beamon, B. M., (1998). "Supply chain design and analysis: models and methods". *International Journal of Production Economics* 55(3), 281-294.
- Cacioppo, K. (2000). "Measuring and Managing Customer Satisfaction", *Quality Digest*.
- Chopra, Sunil & Peter Meindi, (2002). "Supply chain management; Strategy, planning and operations, Delhi: Pearson Education.
- Colburn, R. (2013). "Determining the Effect of Return management Experience on Customer Satisfaction", University of Tennessee Honours' thesis project
- Cooper, M. C. and Ellram, L. M., (1993). "Characteristics of supply chain management and the implications for purchasing and logistics strategy". *International Journal of Logistics Management*, 4, 13-24.
- Copacino, William C., (1996). "A Seven Supply-Chain Principles", *Traffic Management*, 60.
- Davenport, T. H., Harris, J. G., De Long, D. W., & Jacobson, A. L. (2001). "Data to Knowledge to Results: Building an Analytic Capability", *California Management Review*, 43, 117-139.
- Ebrahim Karimi & Mahmoud Rafiee., (2014). "Analyzing the Impact of Supply Chain Management Practices on Organizational Performance through Competitive Priorities (Case Study: Iran Pumps Company)". *International Journal of Academic Research in Accounting, Finance and Management Sciences* 4, (1), 1-15.
- Eckert, S.G. (2007), "Inventory Management and Its Effects on Customer Satisfaction". *Journal of Business and public Policy*.(1), 1-2
- Economic Survey (2010), Government Printers, Nairobi
- Ellram, L. M., (1991). "Supply Chain Management: The Industrial Organization Perspective", *International Journal of Physical Distribution and Logistics Management*, 21(1), 13-22.
- Ellram.(1999), "Retail Logistics", *International Journal of Physical distribution & Logistics Management*.(29), 477-449
- Fisher, M. L., Hammond, J. H., Obermeyer, W. R., & Raman, A. (1997). "Making supply meet demand in an uncertain world". *Harvard Business Review* 72(3), 83-93.
- Fuller JB, O'Connor J., (1993). "Rawlinson R. Tailored logistics: the next advantage". *Harvard Business Review*; 71(3), 87-98.
- Gunasekaran, A., Patel, C., & Tirtiroglu, E. (2001). "Performance measures and metrics in a supply chain environment". *International Journal of Operations and Production Management* 21(1/2), 71-87.
- Handfield, R. B., & Nichols, E. L., (2002). *Introduction to Supply Chain Management*, New Jersey: Prentice-Hall, Inc.
- Haque, M., & Islam, R. (2013). "Effects of Supply Chain Management Practices on Customer Satisfaction: Evidence from Pharmaceutical Industry of Bangladesh". *Global Business and Management Research: An International Journal*, 5 (2&3).
- Harland C., (1996). "Supply network strategies – The case of health supplies". *European. Journal. Purchase, Supply, Management*, 2(4)183-192.
- Hendrick, T. E., (1997). "Purchasing Contributions to Time-based Strategies (Tempe: Center for Advanced Purchasing Studies)".
- Jenet Manyi Agbor, (2011). "The Relationship between Customer Satisfaction and Service Quality: A study of three Service sectors in Umeå".
- Johnson M E, Davis T., (1998). "Improving supply chain performance by using order fulfillment metrics". *National Productivity Review*, 17(3)3-16.
- Jones, C. (1998). Moving beyond ERP: Making the missing links. *Logistics Focus*, 6 (7), 2-7.
- Journal of Operations Management, Vol. 23, pp. 618-641.
- Kenya National Bureau of Statistics. 2012. Economic Survey Report. Nairobi, Kenya
- Koh S, Demirbag M, Bayraktar E, Tatoglu E, Zaim, S., (2007). "The impact of supply chain management practices on performance of SMEs". *Ind. Manage Data. Syst.*, 107(1)103-124.
- Lamming, R., Johnsen, T., Zheng, J. & Harland, C., (2000). "An initial classification of supply networks". *International Journal of Operations & Production Management*, 20 (6), 675-691.
- Landeros, R., Monczka, R.M., 1989, Cooperative buyer-seller relationships and a firm's competitive posture. *Journal of Purchasing and Materials Management*, 9-18.
- Larreche, J. Boyd, H. W., Walker, O. C., (1998). *Marketing management*. Boston: Irwin McGraw-Hill.
- Lee, H. L. et al. (2007). "The Value of Information Sharing in a Two-Level Supply Chain", *Management Science*, 46(5), 626.
- Lee, H. & kleiner, B. (2001). "Inventory Management in Women's Retail Clothing Industry". *Management Research News*. (24), 40-45
- Lee, Hau L. & Seungjin Whang., (2000) "creating value through supply chain integration, supply chain

- integration". *Supply chain management Review*.
- Lei, Li. (2007), "Incorporating uncertainty into a multi criteria supplier selection
- Li S, Rao S, Ragu-Nathan T & Ragu-Nathan B., (2006). "Development and validation of a measurement instrument for studying supply chain practices", *Journal of Operations Management*, 23(6), 618–641.
- Moberg, C. R., Cutler, B. D., Gross, A. & Speh, T.W., (2002). "Identifying antecedents of information exchange within supply chains", *International Journal of Physical Distribution & Logistics Management*, 32, (9)755-770.
- Monczka RM, Petersen KJ, Handfield RB, Ragatz GL., (1998). "Success factors in strategic supplier alliances: the buying company perspective. *Decision Science* ", 29(3)55-53–77.
- Narasimhan, R. & Nair, A., (2005), "The antecedent role of quality, information sharing and supply chain proximity on strategic alliance formation and performance", *International Journal of Production Economics*, Vol. 96, No. 3, pp.301-313.
- Narasimhan, R. and Kim, S. W. (2007). "Effect of supply chain integration on the relationship between verification and performance: evidence from Japanese and Korean firms", *Journal of Operations Management*, Vol. 20, pp. 303-323.
- Ou, C. S., Liu, F. C., Hung, Y. C. & Yen, D. C. (2010), "A structural model of supply chain management on firm performance", *International Journal of Operations & Production Management*, 30 (5) 526-545.
- Pagh J.D. & Cooper MC., (1998), "Supply chain postponement and speculation strategies: how to choose the right strategy". *Journal of Logistics Management*, 19(2)13–33.
- Power, D. J., Sohal, A. & Rahman, S. U., (2001), "Critical success factors in agile supply chain management: an empirical study", *International Journal of Physical Distribution and Logistics Management*, 31( 4),247-265.
- problem", Doctoral dissertation, University of Washington, USA, UMI Number
- Rad, M.H. (2008). "Lead Time Reduction. A Case Study of BEAB Etikett & System AB."
- Ritchie B., Brindley C, (2000). "Disintermediation, Disintegration and Risk in the SME Global Supply Chain". *Management Decision*, 38 (8), 575-583.
- Rubenstein-Montano, B., Liebowitz, J., McCaw, D., Newman, B. & Rebeck, K., (2001). "The knowledge management methodology team: A systems thinking framework for knowledge management", *Decision Support Systems*, 31, 5-16.
- Schlange, L. E. (1995), "Linking future research methodologies: an application of systems thinking and metagame analysis to nuclear energy policy issues", *Futures*, 27(8), 823-839.
- Senge, P. M., (1990). *The Fifth Discipline*, Doubleday Currency, New York, NY
- Seth, N., Deshmukh, S. G. and Vrat, V. (2006), "A conceptual model for quality of service in the supply chain", *International Journal of Physical Distribution & Logistics Management*, Vol. 36, No. 7, pp. 547-75.
- Simatupang, T. M. & Sridharan, R. (2002). "The Collaborative Supply Chain", *International Journal of Logistics Management*, 13(1), pp. 15-30.
- Singh, P.J., & Power, D. (2009). The nature and effectiveness of collaboration between firms, their customers and suppliers: a supply chain perspective. *Supply Chain Management: An International Journal*, 14(3), 189-200. <http://dx.doi.org/10.1108/13598540910954539>.
- Stein T, & Sweat J. Killer. (1998). Supply chains. *Information week*, 708 (9), 36–46
- Stock J. & Boyer S., 2007. "Developing a consensus definition of supply chain management: A qualitative study", *International Journal of Physical Distribution & Logistics Management*, 39(8), 690–711.
- Stock, J. Stefanie L. Boyer, S. & Harmon, T., (2010). Research opportunities in supply chain management. *Journal of the Academy of Marketing Science*, 38 (1), 32–41.
- Stuart FI., (1993). Supplier partnerships: Influencing factors and strategic benefits. *International Journal of Purchasing and Materials Management*, 29(4)22–8.
- Suhong, Li., Subba Rao, S., Ragu-Nathan, T.S., & Ragu-Nathan B. (2009). Development and Validation of a Management instrument for Studying Supply Chain Management Practices.
- Tan, K. C., Kannan, V. R. and Handfield, R. B., (1998). "Supply chain management: supplier performance and firm performance", *International Journal of Purchasing and materials management*, 34,( 3), 2-9.
- Thatte A.A., (2007). "Competitive advantage of a Firm through Supply Chain Responsiveness and Supply Chain Management Practices", *Published PhD Dissertation. University of Toledo*.
- Tsoukas, H., (1996). "The firm as a distributed knowledge system: a constructionist approach", *Strategic Management Journal*, 17,( Winter),11-25.
- Tuli, K. & Bharadwaj.G.S. (2009). "Customer Satisfaction and Stock Returns Risk". *Research Collection Lee Kong Chian School of Business. Singapore Management University*
- Turner, J. R., (1993). "Integrated Supply Chain Management: What's Wrong With This Picture?" *Industrial Engineering*, 25(12), 52-55.
- Van Hoek R.I., B. Vos and H.R. Commandeur., (1999). "Restructuring European supply chains by implementing

- postponement strategies, long Range planning”, 32(5).
- Walidin, Astari, (2007). “A Market Study of Consumer Satisfaction with City Cars: The Link between Consumer Behavior and Customer Satisfaction”, *undergraduate thesis, Faculty of Business Administration, Swiss German University, Banten, Indonesia.*
- Wallin, C., Johnny, Rungtusanatham, M. and Rabinovich, E. (2006). “What is the “right” inventory management approach for a purchased item?” *International Journal of Operations & Production Management*, 26, 1.
- Waskita, Egah Sari (2007), “Customer Satisfaction and Business Improvement: A Case Study of Smiley’s Café”, *undergraduate thesis, Faculty of Business Administration, Swiss German University, Banten, Indonesia.*
- Wicks, A. & Roethlein, C., 2009. “A satisfactionbased definition of quality,” *Journal of Business and Economics Studies*, Vol.15, No.1, pp.8297
- Wisner, J. and Tan, K.C. (2003), “Supply chain management and its impact on purchasing”, *Journal of Supply Chain Management*, 36(4)33-42.
- Wyse, S.E. (2012). “Customer Satisfaction and Customer Loyalty”.
- Yamane, T. 1973. *Statistics: An Introductory Analysis*. 2nd ed. New York : Harper and Rows
- Yin-Mei, Huang & Wei-Chi & Tsai, (2013). “Mechanisms Linking Employee effective delivery and Customer Behavioral Intentions”.
- Zerbini, F., caru, A. & Cugini, A. (2007). “The Cost of Customer Satisfaction: a Framework for Strategic Cost Management in Service Industries”. *European Accounting Review*, (16), 499-530.
- Zhang, Q. (2005). “Logistics Flexibility and it’s impact on Customer satisfaction”. *International Journal of Logistics Management*, (16), 71-95.