

---

**INFLUENCE OF LOGISTICS MANAGEMENT ON CUSTOMER SATISFACTION IN AGRICULTURAL SECTOR IN KENYA: A CASE OF AMIRAN KENYA LIMITED****MUNYOKI NANCY MWONI <sup>1</sup>, DR. GETUNO PAMELA <sup>2</sup>****<sup>1,2</sup> Jomo Kenyatta University of Agriculture and Technology****Abstract**

The objective of the study was to establish the effect of logistics management on customer satisfaction in the agricultural sector in Kenya. The specific objectives of the study were to establish the effect of delivery of goods, ordering processing, material handling, and inventory management on customer satisfaction at Amiran Kenya Ltd. The target population was 200 customers from five locations: Nairobi, Meru, Loitokitok, Narok and Eldoret. Through stratified random sampling, a sample of 100 customers was selected to take part in the study. A pilot study was conducted to test the validity and reliability of data collection instrument. Five distribution centers were subjected to pilot study where the Cronbach's alpha value of 0.9 was adopted. The five centres were part of the target population but not the sample size. Questionnaire was used as the main data collection instrument and the researcher administered questionnaires to 100 sampled respondents where only 83 filled and returned giving a response rate of 83%. The data analysis included descriptive and inferential statistics where the findings were presented in table and figures. The findings revealed that delivery and order processing were statistically significant. Delivery of goods and order processing had significant impact on customer satisfaction than material handling, order processing and inventory management. It was established that logistics service was associated with the right product, at the right time, at the right quality, in the right condition, and in the right place. The study revealed that delivery of goods somewhat affect customer satisfaction. The study also found that order processing had substantial effect on customer satisfaction. The study concluded that delivery of goods significantly affects customer satisfaction. The study also concluded that materiel handling lightly and significantly affects customer satisfaction. The study further concluded that order processing had substantial and significant effect on customer satisfaction. Finally the study concluded that inventory management has a great and significant effect on customer satisfaction. Based on the findings, the study recommends the following approaches to increasing logistics efficiency: encourage feedback, automate communication technologies, optimize transportation, and maximize storage. There is also a need for the company to improve its delivery service, material handling techniques and order processing. The study also recommends that the company should respond quickly to the customers queries as well as communicating to customers about change in delivery and transportation schedules.

**Keywords:** Customer Satisfaction, Inventory Management, Logistics Management, Material Handling, Order Fulfilment, Order Processing and Warehousing.

## Introduction

This section provides brief explanation of importance of logistics management and customer satisfaction. The section is divided into background of the study, statement of the problem, objectives of the study, research questions and significance of the study, limitations, and scope of the study. The background section describes and identifies logistics management challenges. The statement of the problem section provides brief description of effect of logistics management on customer satisfaction. The objectives section contains purposes of the study; the research questions section which provides the guidelines for the research study and the significance of the study that contains the contribution of the study to the literature of customer satisfaction and logistics management. The limitations section contains factors that influenced or effected the interpretation of the findings. Lastly, the scope of the study covers the location of the study.

From the viewpoint of a customer, customer satisfaction is the right product, at the right time, at the right quality, in the right condition, and in the right place. After a customer places an order, he/she will expect to receive the product on time. However, planning and coordination of order fulfilment, material handling, and delivery have positive or negative effect on lead time, thus leading to customer satisfaction or dissatisfaction (Dittmann, 2015). Aggressive distribution of items cannot be accomplished with inefficeint process for order fulfilment, material handling, and packaging. To optimize logistics management operations, the company needs to minimize paperwork, touches, and travel distance (Lisińska-Kuśnierz & Gajewska, 2014). Through automated systems, this may improve efficiency and at the same time, boost customer satisfaction in that items will be delivered at the right time, at the right quality, in the right condition, and in the right place.

Logistical efficiency is how effectively a company carry out its operations. Logistics is coordination and planning of movement of objects as well as vital information (Muraira, Garzafox & Villareal, 2014). A company with good logistics tracks shipment and move information/products quickly to the correct location. Agribusiness companies continue to face the challenge of storage, processing, handling, and moving of products from distribution centres/warehouse to consumers. The implementation, planning, and coordination of these activities are integral to the survival and success of the company. Agribusiness companies need to make the following decisions about their logistics: order processing, warehousing, inventory, and transportation. Barnard *et al.*, (2016) maintain that agribusisiness companies store finished products until they are sold since consumption cycles and production rarely match. Kotler and Keller (2012) argue that companies face the challenge of shortening the order-to-payment cycle, which is elapsed time between the receipt, delivery, and payment of an order. The order cycle is typified by steps such as payment receipt, inventory scheduling, and order entry. The longer the order cycle takes, the lower organization's profits and customers' satisfaction. Customer satisfaction is centered on inventory, transport, and location strategy, which make up the logistics strategy. The strategies are in tradeoff with each other. The location strategy, for instance, depends on how the inventories managed, which in determines the transportation service.

Amiran Kenya Ltd was founded in 1963 and it is a member of Balton CP group of companies which is based in the United Kingdom. Amiran deals with Agribusiness, trade of agricultural production. These includes seed supply, crop production (contract farming), and agrichemicals. Since its commencement, it has been the driving force behind floriculture and horticulture industries in Kenya as well as East Africa. The company has focused on small- and large-scale

projects using cutting edge technology to promote food security. Some of the food security projects are in Mwingi (415 acres), Pokot/Marakwet (500 acres), and Kulungu (100 acres) (Amiran Kenya Ltd, 2015).

### **Statement of the Problem**

Over the years, Agribusiness companies continue to face the challenge of planning ,controlling assembling, retrieving, and delivering completed orders (Kotler & Keller, 2012). There has been also dramatic change on customer satisfaction in terms of requirements of customers from the suppliers. In the past, customer satisfaction was typified by reliability and quality of the the products. The conformance on quality, however, is one of the elements of customer satisfaction and companies face the challenge of packaging, delivery, and shipment. Currently, the continued failure in meeting customers' demands in agricultural sector has been noted to be a big challenge and below the expectations and led to strained national budget without equivalent results (Prajapati, 2010). According to Barnard *et al.*, (2016), a logistics system which is efficient will facilitate smooth flow of goods. Efficiency in logistics operation is the ability to swiftly store, and take delivery of products as they come and deliver on time. The outcome will be increased customer satisfaction given that the customer can get what he/she wants and at the right time. According to Chiarini and Douglas (2015), poor coordination of requested orders, handling, and delivery of request items will result in customer dissatisfaction. This study therefore sought to establish the influence of logistics management variables such as delivery of goods, material handling ,order processing sand inventory management in meeting customer satisfaction specifically Amiran Kenya Ltd.

### **Objectives of the Study**

The main objective of the study was to establish the influence of logistics management on customer satisfaction in Kenya's agricultural sector. Specifically the study was guided by the following objectives

1. To determine the effect of delivery of goods on customer satisfaction at Amiran Kenya Ltd
2. To establish the effect of material handling on customer satisfaction at Amiran Kenya Ltd
3. To determine effect of order processing on customer satisfaction at Amiran Kenya Ltd
4. To examine the effect inventory management on customer satisfaction at Amiran Kenya Ltd

### **Theoretical Framework**

Sekaran and Bougie (2016) assert that theoretical framework shows how certain concepts or variables are linked to each other and expound why the variables are interlinked (theory). By integrating the beliefs with published research, this develops scientific basis for carrying out the research problem.

### **Theory of Constraints**

All the processes of logistics can be considered to be a chain of interlinked activities that can be improved as a whole by concentrating on total throughput time (Tulasi & Rao, 2012). In 1984, Eliyahu Moshe Godratt made a significant contribution to the way organization can view logistics processes based on the Theory of Constraints. According to Moynihan (2014), the Theory of Constraints can be used by an organization to determine change, how to implement it, and cause of the change. The theory postulates that a manageable system is typified by limitations/constraints which hinder accomplishment of goals. Godratt pointed out that there is always a constraint which can be determined by using the focus process and restructure the system (Moynihan, 2014). Theory of Constraints centered on the common phrase “a chain is no stronger than its weakest link”; this implies that a process is vulnerable since the weakest part can always break affecting overall results/output (Tulasi & Rao, 2012). The constraints are policies, equipment, information, supplies, or people and can be external or internal to an organization. After identifying the constraints/limitations and managing them, the outcome can be on time delivery and better control over logistics operations. This theory informs the specific objective number one which is delivery of goods and its effect on customer satisfaction.

### **Systems Theory**

Bertalanffy (1940) developed the systems theory, which is a multi-disciplinary abstract study of the organization. According to the theory, a system consists of variables, elements, and/or parts. A system is characterized by attributes, properties, or qualities. To sum it up, a system is a group of things/elements that affect each other in an environment and create a large part which is discrete from other parts. In the past, logistics operations focused mainly on minimizing cost of transportation to downstream customers. This approach worked until the mid-1900s after companies started thinking about logistics in the framework of systems theory (Cornell & Jude, 2015). The theory espouses managing an organization as an integrated whole for improved performance (optimum service level and lower costs) as opposed to controlling separate functions individually for optimal performance. A system is made up of interacting elements. From this theory, there is need to focus on the overall system’s effectiveness, and not effectiveness of the part of the system. By improving the output of part of the system, this will affect the overall output. The systems theory assists in analyzing the function of activities/organizations and can be used to new organizations. It is possible to understand the inter-relations in different functions, such as controlling, directing, organizing, and planning (Cornell & Jude, 2015). This theory informs all the specific objectives which are delivery of goods, material handling, order processing and inventory management and their effect on customer satisfaction.

### **Expectancy Disconfirmation Theory**

Expectancy disconfirmation theory is typified by satisfaction, disconfirmation, perceived performance, and expectations. Despite much effort by agribusiness companies to ensure that their systems of distribution are effectual, customers still experience inventory shortage and delayed deliveries implying that logistics management do not meet customer expectations. According to Su and Sampaio (2012), expectations of the customers are the anticipated performance of service/product. The theory points out on the events that occur during the purchase process. From the theory, the customer has his/her expectation regarding experience

with using specific service. For the new customers, they have no experience regarding the performance of the service. The expectation of these customers is based on feedback from mass media, other customers, or advertising. The perceived performance is the experience of the customer after using the service that could have been worse or better than customer's expectation. The difference between customer's observed actual performance and initial expectation is disconfirmation. When the service does not meet the expectation of the customer, the outcome will be negative disconfirmation thus customer dissatisfaction. If the service surpasses the customer's expectation, the outcome will be positive disconfirmation meaning the customer is satisfied. Conversely, when there is no difference customer's service performance and expectation, simple confirmation will occur where the customer will neither be satisfied or dissatisfied. This theory relates to the all variables where the customers have their expectations regarding specific service.

### Conceptual Framework

According to Gross (2015), conceptual framework is the ground for research model development on a study. Meiners, Pickett, and Cadenasso (2015) maintain that the conceptual framework is the guide to discussion and exploration of dependent and independent variables. According to Fortune, Reid, and Miller (2013), conceptual framework is typified by loose set of concepts and ideas derived from various sources from theory and research.

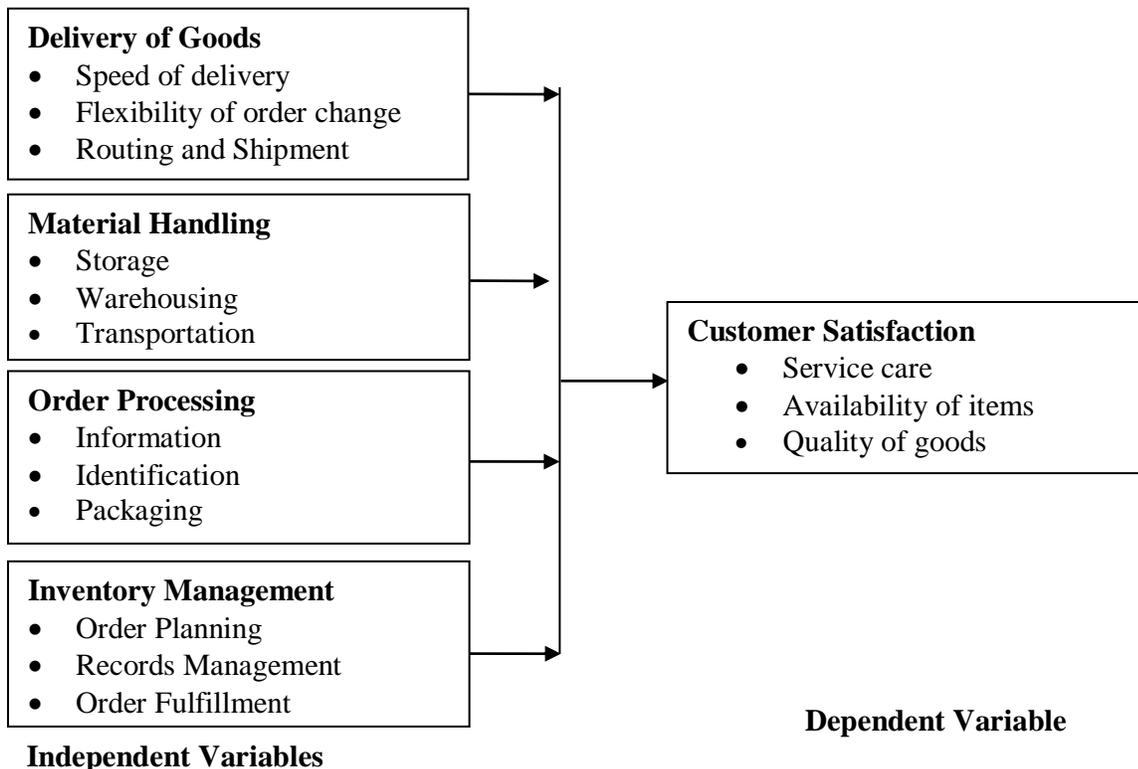


Figure 1: Conceptual Framework

## **Critique of Literature Reviewed**

Viera *et al.*, (2012) focused on the improvement of material handling in manufacturing companies. The researchers however did not study on the effects of material handling on customer satisfaction in the agricultural sector. Agboyi and Ackah (2015) investigated the effective of warehouse operations on customer satisfaction. The author argued that the way a company manages its warehouse says a lot about itself. The researcher did not, however, look at the effect of delivery of goods on customer satisfaction. Wassan and Nagy (2014) investigated different problem versions on vehicle routing. The study pointed out that there was a challenge in designing least cost vehicle routes terminating and originating at the warehouse to service customers based on distance and vehicle capacity. The author, however, did not focus on the effects of inventory management on customer satisfaction.

Huang and Liu (2015) provides insight on transportation (delivery of goods), but does not get into detail about order processing, material handling, and inventory management. Keitany, Wanyoike, and Richu (2014) provide acumen on effect material handling on customer lead time in a dairy company. The authors, however, do not mention about inventory management, order processing, and delivery of goods. Ramaa, Subramanya and Rangaswamy (2012) advocated for automating warehouse operations, but failed to focus on delivery of goods to customers (transportation). Giannikas *et al.*, (2013) also examined the effect of product intelligent applications on controlling and scheduling of storage location, but they did not focus on material handling and delivery of goods.

Ann, Victoria and Ukpere (2014) provide insight on effect of inventory management system (flexible administration) on organizational performance. The study, nonetheless, failed to clarify on delivery of goods and material handling. Kumar and Anas (2013) focus on inventory management, particularly, ABC-classification. The study did not make it clear on order processing and delivery of goods. Hanson, Ackah and Agboyi (2015) point out on the indicators of poor inventory management thus affecting customer satisfaction. The study, nevertheless, did not focus on material handling, order processing, and delivery of goods. Ali *et al.*, (2012), on the other hand, draw attention to the effect of inventory system on customer attention, but did not focus on material handling.

Craggs and Safron (2013) emphasize on the importance of customer satisfaction, which included order completeness, on-time delivery, and early delivery. The study, though, did not give insight on material handling, order processing, delivery of goods, and inventory management. In another study by Su and Sampio (2012), the focus was on effect of logistics services on customer satisfaction. The study advocated for good delivery system, but failed to address on material handling, order processing, and delivery of goods. Lastly, Chiarini and Douglas (2015) focused on logistics solutions, such as technology and reverse logistics, but then again did not clarify on material handling, inventory management, order processing, and delivery of goods.

## **Research Gaps**

Various studies relating to logistics management have been carried out. Huang and Liu (2015) examined vehicle routing problem with simultaneous delivery and pickup in a cross-docking environment, where products/goods are unloaded from an incoming truck or semi-trailer truck and loaded into outbound trailers or pick-ups with little or no storage. Chiarani and Douglas

(2015) examined how different logistics solutions affect customer satisfaction. The study involved using multi-case study approach where 12 large and medium sized manufacturing firms were selected for the study. Giannikas *et al.*, (2013) examined the effect of product intelligence on warehouse management. The authors maintained that there was need for customer oriented, flexible, and adaptable warehouse operations due to change in preferences of customer service. The above literature notwithstanding, it's clear that no detailed study has been carried out to specifically determine the influence of logistics management on variables such as Delivery of goods, Order processing, Material Handling and Inventory Management on customer satisfaction in Agricultural Sector in Kenya. None of the studies carried out so far have focused on influence of Logistics management on customer satisfaction more so the Agricultural Sector in Kenya. These constitute the research gaps that this research study investigated and quantified the influence of logistics Management on customer satisfaction in the Agricultural sector in Kenya.

### Research Methodology

The study embraced exploratory research design. According to Mugenda and Mugenda (2008) target population is the complete set of individuals with some common characteristics to which the researcher want so generalize the results of the study. Therefore the targeted population of this study was 200 Amiran customers.

A sample is a finite part of a statistical population whose properties are studied to gain information about the whole. According to Gay (2005), a good sample should be adequate and representative of the underlying population. Sampling is the act, process, or technique of selecting a suitable sample, or a representative part of a population for the purpose of determining parameters or characteristics of the whole population. Sekaran and Bougie (2010) assert that half of the accessible population is enough to give reliable information for generalization to take place. For this study stratified sampling was used, since the population was divided into strata.

**Table 1: Sampling Frame**

Location	Population	Sample-size 50%
Nairobi	60	30
Meru	40	20
Loitokitok	20	5
Narok	30	15
Eldoret	60	30
<b>Total</b>	<b>200</b>	<b>100</b>

Questionnaires were used in data collection. This study involved collection of both primary and secondary data. Primary data was collected through administration of questionnaires to the sampled respondents from the strata. The researcher administered the questionnaires physically to all the main major farmers in Nairobi while use of email and phone calls for follow up will be used for the farmers in Meru, Loitokitok, Narok, and Eldoret.

Pilot study was carried out to assess the reliability and validity of the research instruments as recommended by (Kothari, 2008; Zikmund *et. al*, 2010). The questionnaire which was the main instruments of data collection was tested through a pilot of five customers from each of the five

locations: Nairobi, Meru, Loitokitok, Narok and Eldoret. Data collected was coded, edited, organized and cleaned. It was then keyed in computer for analysis using Statistical Package for Social Sciences (SPSS) version 20. Descriptive statistics was used mainly in form of frequencies, percentages, mean scores and standard deviation. The findings were presented using figures and frequency tables. In addition, multiple regression analysis was used to test the relationship between the variables.

### **Research Findings and Discussions**

Data gathered was analysed using descriptive statistics and content analysis respectively and presented in graphs, frequency tables and in prose form. Out of the 100 questionnaires that were administered to customers in different distribution centers, 83 were returned giving a response rate of 83% which is within what Mugenda and Mugenda (2009) prescribed as a significant response rate. Mugenda and Mugenda (2003) postulated that a response rate of 50% is adequate, 60% and above as good, while a response rate greater than 70% is very good. In this study, construct reliability was determined using Cronbach alpha coefficients that test internal consistency of items on a scale. The results of the reliability analysis are presented in Table 2.

**Table 2: Reliability Analysis**

<b>Scale</b>	<b>Cronbach's Alpha</b>
Delivery of Goods	0.830
Material Handling	0.917
Order Processing	0.789
Inventory Management	0.865

The table shows material handling had the highest reliability ( $\alpha= 0.917$ ), followed by inventory management ( $\alpha=0.865$ ), delivery of goods ( $\alpha=0.830$ ), and order processing ( $\alpha=0.789$ ). This illustrates that all the four variables were reliable as their values exceeded the prescribed threshold of 0.7. All variables were considered reliable as the results showed that the Cronbach Alpha associated with the variables of the study were above the 0.70 threshold as recommended by Leach (2016) implying that the data collected had achieved a relatively high level of consistency and could be generalized to be representative of the target population and could be used for further analysis.

With factor analysis, the construct validity of a questionnaire can be tested (Pole & Lampard, 2010). If a questionnaire is a construct valid, all items together represent the underlying construct well. Exploratory factor analysis detects the constructs - i.e. factors that underlie a dataset based on the correlations between variables (in this case, questionnaire items) (Joppe, 2009). The factors that explain the highest proportion of variance the variables share are expected to represent the underlying constructs.

**Table 3: Component Matrix**

	Component				
	1	2	3	4	5
Change of orders	<b>.659</b>	.254	.624	.113	.078
Smaller shipment	<b>.876</b>	.084	.237	.281	.056
Quick response	<b>.898</b>	.072	.265	.171	.073
Communication-delivery	<b>.887</b>	.190	.240	.048	.025
Well-planned transportation	.382	.069	<b>.658</b>	.181	.327
Timely delivery	<b>.675</b>	.161	.329	.197	.388
Organized material handling	.310	<b>.899</b>	.191	.020	.098
Storage	.150	<b>.961</b>	.035	.000	.141
Equipment and tools	.274	.287	.253	<b>.653</b>	.121
Employees-move product	.418	<b>.601</b>	.006	.028	.575
Wide fleet	.150	<b>.961</b>	.035	.000	.141
Maintained fleet	.075	<b>.802</b>	.207	.116	.412
Order-FIFO	.213	.146	.144	.056	<b>.846</b>
Verify-orders	<b>.830</b>	.210	.077	.215	.241
Identified and packaged-warehouse	<b>.857</b>	.007	.214	.326	.037
High-packing	<b>.657</b>	.066	.258	.389	.425
Correct quantity	<b>.858</b>	.147	.157	.372	.072
Acknowledgement	<b>.886</b>	.162	.002	.368	.006
System-receive orders	<b>.878</b>	.035	.166	.270	.201
Orders-organized	<b>.821</b>	.032	.184	.265	.194
Review-Delay	.250	.171	.172	<b>.844</b>	.130
Acknowledgement-orders	.149	.105	.115	<b>.618</b>	.052
Correct requests	<b>.895</b>	.245	.191	.092	.073
Order fulfillment	.382	.069	<b>.658</b>	.181	.327

The initial component matrix was rotated using Varimax (Variance Maximization) with Kaiser Normalization. The above results allowed for the identification of which variables fall under each of the 5 major extracted factors. Each of the 24 variables was looked at and placed to one of the 5 factors depending on the percentage of variability; it explained the total variability of each factor. Pole and Lampard (2010) proclaim that one would want in general a variable to share at least 15% of its variance with the construct (factor) it is going to be used to help name. This means only using loadings which are about 0.40 or greater for interpretation purposes. The findings therefore show that all the parameters had high construct validity.

### Multiple Regression Analysis

In statistical modelling, regression analysis is a statistical process for estimating the relationships among variables. It includes many techniques for modelling and analyzing several variables, when the focus is on the relationship between a dependent variable and one or more independent variables (or 'predictors'). Multiple regression analysis was used to test the relationship between the variables where it shows how the dependent variable is influenced by the independent variables. Table 4 shows the model summary. The adjusted R<sup>2</sup> was used to establish the predictive power of the study model and it was found to be 0.628 implying that 62.8% of the

variations in customer satisfaction in Kenya’s agricultural sector is explained by changes in delivery of goods, material handling, order processing, inventory management leaving 37.2% unexplained. Therefore, further studies should be done to establish the other factors (37.2%) affecting customer satisfaction in Kenya’s agricultural sector.

**Table 4: Model Summary**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	0.804	0.646	0.628	0.244

a. Predictors: (Constant), Delivery of goods, Material handling, Order Processing, Inventory Management

The ANOVA tests whether the model is fit for data. The probability value of 0.003 indicates that the regression relationship was significant in determining how logistics management influences customer satisfaction in agricultural sector in Kenya. The F calculated at 5 percent level of significance was 35.589. Since F calculated is greater than the F critical (value = 2.4495), this shows that the overall model was significant.

**Table 5: ANOVA Test**

<b>Model</b>		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1	Regression	8.786	4	2.197	35.589	6.73E-17
	Residual	4.814	78	0.062		
	<b>Total</b>	<b>13.6</b>	<b>82</b>			

a. Dependent Variable: Customer satisfaction

b. Predictors: (Constant), Delivery of goods, Material handling, Order Processing, Inventory Management

The coefficients of determinants as indicated in table 5 shows that taking logistics management constant at zero, the customer satisfaction is 1.345. The findings presented also show that taking all other independent variables at zero, a unit increase in the delivery of goods would lead to a 0.654 increase in the score of customer satisfaction. This conforms to Ibrahim, Masudin and Saputro (2015) who noted that organizations still schedule the complex shipments through manual procedures, such as using spreadsheets, which are prone to errors.

Further it was found that a unit increase in the scores of material handling would lead to a 0.586 increase in the scores of customer satisfaction. This concur with Stephens and Meyers (2013) who said that material handling is the control, storage, protection, and movement of products and materials throughout distribution, warehousing, and manufacturing. Further, the findings show that a unit increases in the scores of order processing would lead to a 0.785 increase in the scores of customer satisfaction. This concurs with Gupta and Starr (2014) who maintained that the identification should be convertible to data for processing which help in stock control.

The study also found that a unit increase in the scores of inventory management would lead to a 0.674 increase in the scores of customer satisfaction. This was in agreement with Kotler and

Keller (2012) who said that effective inventory management is a significant function that helps to insure continued success of companies as well as manufacturing and distribution. Overall, All the variables were thus significant with their p- values less than 0.05.

**Table 6: Coefficients of Determination**

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
(Constant)	1.345	0.482		2.790	.0066
Delivery of goods	0.654	0.196	0.584	3.337	.0013
Material handling	0.586	0.273	0.539	2.147	.0349
Order Processing	0.785	0.248	0.672	3.165	.0022
Inventory Management	0.674	0.262	0.582	2.573	.0120

a. Dependent Variable: Customer satisfaction

## Conclusions

The study concluded that delivery of goods significantly affects the customer satisfaction. The study also concluded that there is a need for the company to improve its delivery service and that the company is able to change the customers' orders anytime they make changes. It was clear that the company communicates to customers about change in delivery and transportation schedules and that sometime the company fails to deliver on time as requested.

The study concluded that materiel handling lightly and significantly affects customer satisfaction. The study revealed that the distribution centre has a well-maintained storage facility and that the company has in place material handling equipment and tools such as forklifts and cartons. The study further concluded that the company relies on employee to move product instead of handling equipment and that the company has wide fleet of motor vehicles that transport goods to its customers.

The study concluded that order processing had substantial and significant effect on customer satisfaction. The study deduced that Amiran Kenya Ltd processes orders on first come first serve basis and that the company uses high quality packaging materials to safeguard products from damage. The study also concluded that the quantity of the package is always correct and that order processing is converting the customer order into viable information without creating errors and promptly thus avoiding service failure.

Finally the study concluded that inventory management has a great and significant effect on customer satisfaction. The study also concluded that Amiran Kenya Limited has a system of receiving orders from the customers and acknowledging them and the company reviews the orders received to ensure there are no delays. The study further concluded that orders received are acknowledged by the company and a copy is issued to the customer for records purpose.

## **Recommendations**

The study recommends that when it comes to logistics, there is need for continuous improvement to facilitate sustained growth. To implement a strategy that would successfully optimize the company's logistics operations, it is crucial to put into consideration strategies that would improve quality of customer experience and minimize costs. Based on the findings, the study recommends the following approaches to increasing logistics efficiency: encourage feedback, automate communication, optimize transportation, and maximize storage.

By implementing automated systems, this would improve efficiency and at the same time, boost customer satisfaction in that items will be delivered at the right time, at the right quality, in the right condition, and in the right place. Technology would also streamline the entire process from shipment, storage, and delivery. This will enable clear monitoring and administration of logistical operations and therefore enhancing the overall efficiency of the firm. The increasing cost of transportation/fuel contributes to increased prices in every industry. To reduce the cost, agribusiness company should put into consideration every aspect that might increase or decrease expenses. Firstly, the design of products and packaging for optimal weight and size. Proper delivery route planning and loading would ensure trucks carry full loads. Lastly, the company should determine and utilize the most cost effective shipping and packaging strategies for products.

By evaluating and implementing warehousing procedures, agribusiness company can ship, store, and move product more effectively. This could be achieved through well-trained warehouse staff and strategic sequencing (moving products minimum number of times). If the company can analyze the ordering patterns, this would ensure effective space utilization and quick product delivery. The study also recommends that the company should respond quickly to the customers queries as well as communicating to customers about change in delivery and transportation schedules. This can be done through installation of a proper customer care service which will keep constant contact with the customers as well responding to their calls and send mails. This will improve the customers confidence and trust with the company where the customers are able to voice their needs and give suggestions on how their needs can be met satisfactorily.

## **Areas For Further Research**

The logistics challenge is to underpin customer satisfaction by exceeding expectations of the customers through superior service quality. Future researchers should study how customer expectations impact logistics services from different agribusiness companies. In addition, the data was gathered at the single occasion which does not permit for any change in awareness about logistics service over time. Therefore, future studies should consider longitudinal approach to logistics services and customer satisfaction in agricultural sector.

## **References**

- Agboyi, M., & Ackah, D. (2015). The Impact of Warehousing on Customer Satisfaction. *World Wide Journal of Multidisciplinary Research and Development*, 1(5), 9-20.
- Ali, M. A., Hassan, F., Khan, U., Khan, S., Shahzad, Q., Khan, W., and Khan, J. (2012). Inventory Management and its Effects on Customer Satisfaction. *Economics of Knowledge*, 4(3), 11-22.

- Amiran Kenya Ltd. (2015). *Amiran Kenya*. Retrieved March 18, 2016, from <http://www.amirankenya.com/>
- Ann, O., Victoria, O., & Ukpere, W. (2014). The Impact of Effective Inventory Management on Organizational Performance: A Study of 7up Bottling Company Nile Mile Enugu, Nigeria. *Mediterranean Journal of Social Science*, 5(10), 109-118.
- Barnard, F., Akridge, J., Dooley, F., Foltz, J., & Yeager, E. (2016). *Agribusiness Management* (5<sup>th</sup> ed.). New York: Routledge.
- Chiarini, A., & Douglas, A. (2015). The Impact of Logistics Solutions on Customer Satisfaction: An Exploratory Qualitative Study of Manufacturing Companies. *Italian Journal of Management*, 33(97), 255-270.
- Cornell, C., & Jude, N. (2015). The Systems Theory of Management in Modern Day Organizations - A Study of Aldgate Congress Resort Limited Port Harcourt. *International Journal of Scientific and Research Publications*, 5(9), 1-7.
- Dittmann, P. (2015). The ABCs of DCs: *Distribution Center Management-A Best Practices Overview*. The Global Supply Chain Institute.
- Fortune, A., Reid, W., & Miller, R. (2013). *Qualitative Research in Social Work*. New York: Columbia University Press.
- Giannikas, V., Lu, W., McFarlane, D., & Hyde, J. (2013). Product Intelligence in Warehouse Management: A Case Study. *6th International Conference in Industrial Applications of Holonic and Multi-Agent Systems* (pp. 224-235). Berlin: Springer.
- Gross, P. (2015). *Growing Brands Through Sponsorship: An Empirical Investigation of Brand Image Transfer in a Sponsorship Alliance*. Hanover, Germany: Springer.
- Hanson, O.-Y., Ackah, D., & Agboyi, M. (2015). Assessing the Impact of Efficient Inventory Management in an Organization. *International Journal of Advanced Research in Computer Science and Software Engineering*, 5(8), 86-103.
- Lisińska-Kuśnierz, M., & Gajewska, T. (2014). Customer Satisfaction with the Quality of the Logistics Services. *Scientific Journal of Logistics*, 10(1), 13-19.
- Moynihan, G. (2014). Application of the Theory of Constraints for Capacity Requirements Analysis: A Case Study. *International Journal of Applied Science and Technology*, 4(2), 1-9.
- Mugenda, O. M., & Mugenda, A. G. (2008). *Research Methods: Quantitative and Qualitative*. Nairobi: Acts Press.
- Muraira, E., Garzafox, L., & Villareal, B. (2014). Increasing Customer Satisfaction Through Lean Distribution. *Proceedings of the 2014 International Conference on Industrial Engineering and Operations Management*, (pp. 3024-3030). Bali, Indonesia.
- Pigden, T. (2016). Missing from the Model: Orders, Drivers, Tractors and Trailers, and Non-Linear Loading. (pp. 1079-1084). GECCO.
- Sekaran, U., & Bougie, R. (2016). *Research Methods For Business: A Skill Building Approach*. Chichester, West Sussex: John Wiley & Sons Ltd.
- Su, A., & Sampaio, M. (2012). The Impact of Logistics Service Performance on Customer Satisfaction and Loyalty in Brazilian Chemical Industry . *International Conference on Industrial Engineering and Operations Management*, 1-6.
- Viera, G., Pasa, G., Borsa, M., Milan, G., & Pandolfo, A. (2012). Materials Handling Management. *Journal of Operations and Supply Chain Management*, 4(2), 19-30.