

**Effects of Outbound Logistics Transportation on Retail Marketing at Naivas Supermarket****Njenga Hellen Wambui\*, David Gichuhi, James Mwangi**

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**Abstract:** This study assessed the influence of outbound logistics on retail marketing at Naivas Supermarket. The purpose of the study was to rate and appraise the success of company's outbound logistics process by rating the success of transport logistic activity based on the supermarket retail marketing. The objective of the study was to assess how transportation affects outbound logistics of retail marketing at Naivas Supermarket. The study was informed by the organizational theory. The study utilized the descriptive research design. Purposive sampling was used to get a sample of 45 respondents who included the regional managers, branch managers, stock co-coordinators, floor supervisors and shelf stockers out of which 39 completed the study. The study collected both quantitative and qualitative data using both questionnaires and interviews. The research will collect and analyze both qualitative then quantitative data to get results of this research. Quantitative data was analyzed using descriptive statistics mainly frequencies, percentages, and the Pearson chi-square while qualitative data was analyzed using the thematic technique. Findings reveal that Naivas Supermarket generally employs a centralized transportation where the company is directly involved in managing logistic services rather than outsourcing this function to third parties. The analysis of outbound logistics transportation had an effect (mean=8.9667). The chi-square test established that outbound logistics transportation ( $X^2= 12.208, p= 0.043$ ). The study recommends that to improve retail marketing, the supermarket should automate the process of loading and offloading goods before and after transportation.

**Keywords:** Outbound, logistics, Transportation, Naivas Supermarket.

**INTRODUCTION**

Under this dispensation of economy and global village market, the intensity of competition and buyer behaviour has pushed the companies into a corner to engage in logistics operations to catch up with the changes within and not to lose focus of the strategic mandate and their core competences. The outbound logistics transportation has changed from traditional way into a designed logistical manner which is able to cut costs, redeem time and economies of scale which can be exploited and still maintain a strategic fit of the company.

The organizations are developing and seeking to device a complete logistic system that gratifies customer expectation at a realistic reduced price. The organization should invest and put resources on well-designed outbound logistics transportation, which will be sensitive on customer impact and controlling the operations variance [1]. The procedure of implementing and governing the cost operative flow, efficiency and loading and offloading products and related information from its point of source and to the point of end user is a major purpose of embracing customer satisfaction [2].

Outbound Logistics was formerly viewed as a classical function, which comprised of integrated relationships among transportation providers, suppliers, and customers, is emerging as a key cause of competitive advantage and a key reason for strategic alliance relationship between companies and their logistics providers. The mandate of outbound logistician has unrelenting to expand from total cost management to the integrated logistics operations and objectives. All these developments generally are functionally oriented, which mainly concentrate on service quality, customer satisfaction, responsiveness, variance reduction, life cycle support and improved customer relationship/value. We believe that outbound logistic industry will take place in the horizontal level of the value chain to enhance quality operating performance and arrangement [3].

A sign of coherence of logistics and marketing is a concept called marketing logistics. Marketing logistics is described as a system of development and locating the already ordered goods be provided on time, using convenient means of transport, in the quickest way and possibly the inexpensive [4]. Transportation of products must complement and

harmonize company's logistics. If the weight is on reduction of cost, inferior inventories, customer service, then products must transport in a way that is dependable [5]. The flow of the products must flow systematically. If it does not flow, then there is no supply chain. Instead, there will be imbalances of inventories with components and finished goods not being where they should be at the right time and place. The movement of goods may be extremely broad in geographical scope.

Moving products from point A to B is not enough. We must familiarize with their location. We must also know and understand when orders are coming in and when they essentially be distributed and bearing in mind their urgency. Accurate and timely information is very important for sober decision-making and synchronizing the whole process for the benefit of customer satisfaction. There is no shortcut in this. The flow of information identifies specific locations within the logistical system since the primary object must be achieved [6].

Recently outbound logistics and retail marketing was treated as separate entities. The reason was being traditional treatment and mechanical division. Porter [7] did not take into consideration that outbound logistics was gaining and maintaining a competitive edge. Logistics was treated and organized as a transportation showing off a role of logistic costs from the point of view of growth of company effectiveness and success. Cost approach was against marketing, market orientation, which caused separation of retail marketing function and logistics. Underestimation in practice of goods physical route management and its information conditions was the real issue in aspect of integrated marketing management (not long ago marketing management was restricted to products strategy, price, place and promotion; a marketing department was responsible for all aspects of integrated management in the sphere of transportation and delivery with conscious logistics including).

Satisfactory service is beyond just a delivery. Customer satisfaction is a major issue of competition that a customer takes into consideration. A retail industry needs to align itself with the company culture and logistics and integrate [8]. The wider scope of geographical area of vendors, suppliers, warehouses and customers, the most dangerous is the time factor. Reserve and distance means time and money. At any cost, delays are not acceptable. The impact of products and information must be felt.

The total cost is an anchor to reveal outbound logistics and efficiency. Notwithstanding the complete size of logistical expenditure, the eagerness about logistics is not limited to cost suppression or bargain [9]. The eagerness produced from thoughtful of how to

select company's logistics capability help to achieve competitive lead. Thereafter, the company must make sure that costs are minimal and manageable [10]. The important planned subject is how to outstrip competitors in a cost – actual manner. If a specific, product/item is not available when needed by the customer it may force the customer to look elsewhere resulting to lose of a potential customer. The profit impact of such failures can be avoided. The more important facility failure affects upon a customer the superior the precedence placed on error free logistical presentation.

Transportation is a perceptible part of outbound logistics. Customers are familiar to seeing Lorries and trains transporting products to business locations. Transportation also uses monetary resources; it starts from fuel, vehicle maintenance, labour and capital invested among others. Transportation strategies require responding to various external companies and its customers for it to be efficient and effective. The strategy entails whether you are going internationally or locally responding to customer needs is very important this will require the firm to select the effective mode of transportation that can be measureable and flexible [11]. The whole system of supply chain involves continuous movement of goods adjusting the capability network to house change in request and stock setup since customer needs are changing due to dynamic competitive environment. Wal-Mart Company is the world's largest supermarket by revenue and largest private employer around the globe. The company has employed 2.2 million people, being a family owned business controlled by Walton family its outbound logistics of their retail marketing is always on focus and every supermarket in the world including Naivas Supermarket wishes to follow its footpaths.

## **METHODOLOGY**

The researcher decided to settle on these key respondents comprising of regional managers, branch managers, floor supervisors, stock coordinators, and shelf stockers of Naivas Supermarket, the study obtained a sample size of 45 respondents from each of the 20 branches and 5 regional managers countrywide. This was done because the study is based on managerial operational issues.

Data was collected through the use of questionnaires and semi-structured interviews. Interviews were conducted with the regional and branch managers while questionnaires were distributed among the stock coordinators, floor supervisors, and shelf stockers. The Questionnaire was fully structured to facilitate quantitative analysis and to encourage respondents to complete all questions. It was divided into four sections with the first section comprising of questions regarding the respondents' demographics, the second section focus on transportation and its effect

on the supermarket. The interview sessions were semi-structured meaning that the researcher had the same set of initial questions for all the interviewees.

The researcher first sought to find from the respondents how the outbound logistic transportation activities at Naivas Supermarket are organized. Out of the 30 questionnaire respondents, 23 (76.7%) expressed that the transportation activities at the organization are highly centralized. A centralized model of organizing outbound logistic transportation activities is where most goods are purchased from a centralized position mainly national levels and distributed to all branches as opposed to each branch making its own purchases. When asked about the model of organizing transport activities during the interview, one of respondents clarified that the centralized approach is necessary mainly for goods that are purchased from overseas market or large manufacturers as it enables the supermarket to leverage on the economy of scale. Another interview reported that only small perishable goods such as vegetables are procured and transported at the branch level. The rest of the commodities are procured and distributed through a centralized system.

This finding is consistent, the study by Blanquart *et al.*, [12] where it was found that major supermarkets and hypermarkets in France have established central buying offices that undertake tasks such as product sourcing, handling customs and import formalities, and transporting and delivering products to retail outlets. Magretta [13] also found that most supermarkets in Nairobi had adopted a centralized transportation system in order to optimize vehicle utilization, capitalization of economies of scale in the management of transport fleet, and reduce carbon footprint. Regarding the limited used of outsourced transportation services, one of the interviewee explained that the supermarket prefers to use its own fleet in order to enhance reliability, efficiency, effectiveness and reduce cost.

### **Outbound Logistic Transportation at Naivas Supermarket**

The study also examined the modes of transport that are commonly deployed in the supermarket outbound logistics operations. Respondents were asked to rate the extent to which four models of transport (road, rail, air, and water) are deployed in the supermarket outbound logistics transportation activities on a scale of 1 to 10 (10 being the most utilized mode, road transportation received the highest average rating of 9 followed by rail transport. Water and air transportation received the lowest possible average rating of one suggesting that these modes are rarely used in outbound logistics transport operations.

When asked about this issue, most interviewees expressed that road is the most widely used mode of transport in the supermarket outbound logistic operations because the other modes of transport are not well developed in Kenya. Rail transportation is only available along the Mombasa-Nairobi-Kisumu routes but does not cover most other towns. One of the respondents highlighted that until the recent construction of the standard gauge rail between Mombasa and Nairobi, the rail system was very inefficient. Although air transportation is available, it is expensive while there is no infrastructure for inland water transportation in Kenya.

### **Effect of Outbound Logistics Transportation on On-Shelf Availability of Goods**

The study sought to establish how outbound logistics transportation practices adopted by Naivas supermarket affect on-shelf availability of goods. Respondents were asked to rate the extent to which they feel that the supermarket transportation strategies ensure that goods are in the right place at the right time. As the Table 4.5 illustrates, the majority of the respondents (16, 53.3%) agreed that outbound logistics transportation strategies in use at Naivas has increased reliability in the delivery of goods. This finding is consistent with the study by Meltzer and Kenneth [14] where it was found that one of the caveats of outsourcing transportation services to third parties is the reduction in the reliability of transportation. It was found that third parties were more likely to have trouble in meeting the logistic needs to a company than when the company uses its own fleet. Naivas Supermarket manages its own transportation fleet rather than outsourcing this service to other parties, which is a competitive advantage to them.

### **Effects of Outbound Logistics Transportation on Operating Costs**

The study also sought to find out how the outbound logistic transportation strategies employed by Naivas Supermarket affect operating costs and consequently the prices of goods and services. When asked about this issue, about 19 (63.3%) of the questionnaire respondents agreed that Naivas outbound logistic transportation strategies had assisted the supermarket to minimize costs. This finding is consistent with the study by Meltzer and Kenneth [14] where it was found that one of the caveats of outsourcing transportation services to third parties is the reduction in the reliability of transportation. It was found that third parties were more likely to have trouble in meeting the logistic needs to a company than when the company uses its own fleet. Naivas Supermarket manages its own transportation fleet rather than outsourcing this service to other parties, which is a competitive advantage to them.

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Wei [5] reflects this finding in the study where it was found that transportation logistics not only influence the quality of fresh foods in Europe but also determines the safety of fresh foods. With this recognition, most supermarkets in the continent have adopted innovative strategies for transporting fresh foods such as integrated distribution where different types of products are delivered to the branches using one refrigerated truck. Each branch purchases fresh products from local suppliers to shorten transportation time and reduce storage requirement.

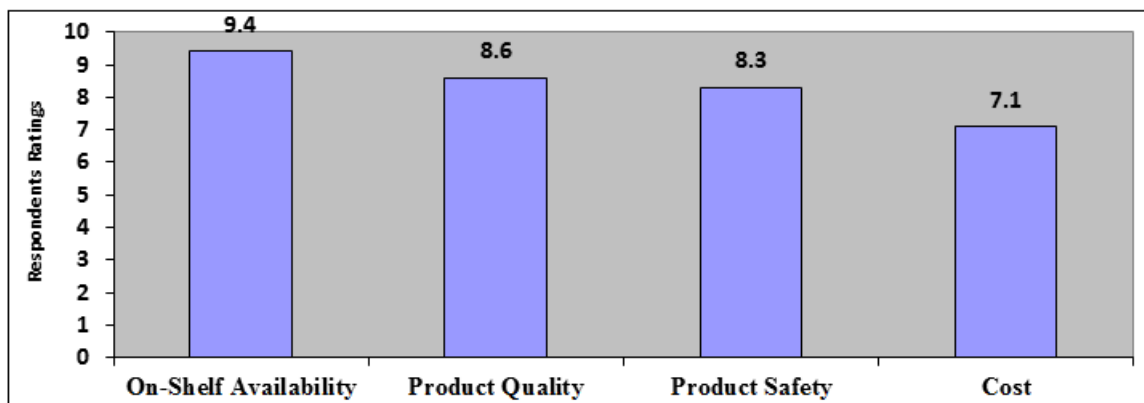
**The Processes at Naivas Outbound Logistics Transportation Operations**

Respondents were also questioned regarding the process used to load and offload goods before and after transportation. It was noted that loading and offloading process might have a significant impact on cost and timeliness of transportation as well as the condition of the goods. About 87% of the respondents reported that loading and offloading is mainly done manually as opposed to the use of automated equipment.

The issue of manual loading and offloading process was also brought out during the interviewees. The majority of the interviewees confirmed that the loading and offloading process at their branches were largely manual. The respondents expressed that manual processes tend to increases cost, since the branches has to employ extra laborers to do the loading and offloading. The manual processes also slow down the process of loading and offloading goods creating inefficiency within the transportation system. At times, the manual lifting causes damages to heavy equipment such as fridges and washing machine, which jeopardizes the quality of the products.

**Goals to Prioritize when Developing Outbound Logistics Transportation Strategies**

Lastly, the study sought respondents view regarding goals that should be given priority when developing outbound logistics transportation strategies for a supermarket. The questionnaire respondents were given a number of goals and asked to rate them on a scale of 1 to 10 with 10 indicating that the goal should be given the highest priority. Results are presented in Figure-1:



**Fig-1: Respondents Rating on Factors that should be Considered when Developing Outbound Transportation Strategies**

As illustrated above, On-shelf the questionnaire respondents rated availability as the highest consideration. This refers to the extent to which the transportation strategy is able to ensure that there is a continuous undisrupted supply of goods to customers. When asked about this issue, one of the

interviewee expressed that not all the other factors (product quality, product safety, and costs) would matter if the customer comes to the supermarket and find that the product he or she is looking for is available. Therefore, reliability of the transport system is extremely important. It also came out during the

interview that product quality is fairly an important consideration, as customers would rather pay higher for quality goods than pay low prices for defective or substandard commodities. Therefore, developing a transportation system that ensures that goods are delivered to customers in the right condition, right time, and right place is also of critical importance. Although product safety and costs came in third and last respectively, they received reasonably high rating suggesting that they are also important considerations.

**RESULTS AND DISCUSSIONS**

**Inferential Analysis**

The study sought to determine whether outbound logistics transportation have statistical significant effect on retail marketing specifically Naivas Supermarket. To realize this, respondents rating of the statements with the three point scale (1=disagree, 2= neither agree nor disagree, 3= agree) were summed to obtain a total score. The variable had four statements implying the scores ranged from a minimum of 4 (4 x 1 Disagree) to a maximum of 12 (4 x 3 agree). The table presents a summary statistics of scores of transportation.

**Table-1: Respondents rating on the Effect outbound logistics Transportation on Retail Marketing at Naivas Supermarket**

Variable	N	Mean	Std. Deviation	Min.	Max.
Effect of outbound logistic transportation on retail marketing	30	8.9667	1.82857	5.00	12.00

Outbound logistic transportation had a mean score of the 8.9667 implying that according to the respondents, transportation has an effect on retail marketing success. The Pearson Chi-Square test was used to examine whether the effect of transportation has an effect on retail marketing as rated by the respondents is statistically significant. As Wang [9] explain, the chi-square test determines whether there is a significant difference between the observed frequencies in one or more categories and the frequencies that would be expected if the null hypothesis is true.

The study sought to determine whether outbound logistics transportation have a statistical significant effect on retail marketing specifically Naivas supermarket. To realize this, respondents rating of the statements with the three point scale (1=disagree, 2= neither agree nor disagree, 3= agree) were summed to obtain a total score. Transportation had four statements implying the scores ranged from a minimum of 4 (4 x 1 Disagree) to a maximum of 12 (4 x 3 agree) as seen below.

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marketing success. The Pearson Chi-Square test was used to examine whether the effect of transportation had an effect on retail marketing as rated by the respondents is statistically significant. As Wang [9] explain, the chi-square test determines whether there is a significant difference between the observed frequencies in one or more categories and the frequencies that would be expected if the null hypothesis is true. In this case, the test seeks to determine whether there is a significant difference between the ratings awarded to each variable and the ratings that would be expected if the variable had no significant influence on retail marketing.

As Table shows, the chi-square value for the effect of outbound logistic transportation on retail marketing is 12.208 while the p-value is 0.043. Since the p-value is less than 0.05, it implies that the rating awarded to the effect of outbound transportation are statistically different from what would be expected if the null hypothesis was true as shown in Table below. This result leads to the conclusion that the effect of outbound transportation on retail marketing is statistically significant at the 0.05 level of significance.

**Table-2: Observed versus Expected Distribution of Respondents across Transportation Scores**

Transportation Scores	Observed N	Expected N	Residual
5.00	1	3.8	-2.8
6.00	1	3.8	-2.8
7.00	1	3.8	-2.8
8.00	7	3.8	3.3
9.00	9	3.8	5.2
10.00	5	3.8	1.3
11.00	4	3.8	0.2
12.00	2	3.8	-1.8
<b>Total</b>	<b>30</b>		

## SUMMARY

The objective of the study was to examine effect of outbound logistics transportation on retail marketing at Naivas Supermarket. Findings revealed that outbound transportation activities at the supermarket are highly centralized and rely on road transport. Loading and offloading processes are mainly done manually. The majority of the respondents expressed that these outbound transportation practices have increased on-shelf availability of products and minimize operating costs. However, the majority of the respondents were not sure whether the transportation practices particularly the manual loading and offloading of commodities were aiding in ensuring that goods are delivered to the customers in the right condition. It was also established that the use of manual system of loading and offloading goods increased operating costs by increasing the labour requirement for this task. Respondents were of the view that promoting on-shelf availability of product and maintaining product quality should be the most important consideration when developing outbound logistics transportation strategies. When respondents rating of the effect of outbound logistic transportation on retail marketing were summed up, this variable had a mean score of 8.9667 out of a maximum possible score of 12. Based on this score, the chi-square test established that outbound logistic transportation has a significant effect on retail marketing ( $X^2= 12.208$ ,  $p= 0.043$ ).

## RECOMMENDATION

The study has established that the process of loading goods into trucks before transportation and offloading them when the trucks arrive at the supermarkets is currently manual. The manual system is having a negative effect of the supermarket's performance as it increases labour cost as well as the risk of damaging goods. Automating loading and offloading processes would reduce labour requirement resulting in lower cost. It will also reduce the time required for loading and offloading resulting in lower turn-around time. It will also enhance the quality of product by minimizing physical damage.

It has also been found that the supermarket is heavily dependent on the road mode of transport for its outbound logistics transportation operations. This is quite understandable because the infrastructure for supporting other forms of transport is largely underdeveloped. However, there is significant progress being made in terms of improving the railway infrastructure. The supermarket should consider utilizing rail transport where the services are made available, as this will significantly reduce costs.

Future studies should consider examining outbound logistic transportation in other supermarkets to bring out the situation in the entire retail industry in Kenya. It should also explore how other outbound

logistics activities in supermarkets such as shelf placing and retail display in stores affect retail marketing and consequently the supermarket's performance.

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