



The Strategic  
**JOURNAL of Business & Change**  
MANAGEMENT

ISSN 2312-9492 (Online), ISSN 2414-8970 (Print)



[www.strategicjournals.com](http://www.strategicjournals.com)

Volume 4 Issue 2, Article 2

**DETERMINANTS OF DISTRIBUTION MANAGEMENT IN MANUFACTURING INSTITUTIONS IN NAIROBI COUNTY, KENYA**

**VINCENT MOENGA MOMANYI, DR MAKORI MORORNGE**

**DETERMINANTS OF DISTRIBUTION MANAGEMENT IN MANUFACTURING INSTITUTIONS IN NAIROBI COUNTY,  
KENYA**

<sup>1</sup> Vincent Moenga Momanyi, <sup>2</sup>Dr Makori Mororange

<sup>1</sup>Jomo Kenyatta University of Agriculture (JKUAT), Kenya

<sup>2</sup> Jomo Kenyatta University of Agriculture (JKUAT), Kenya

**Accepted: April 3, 2017**

**ABSTRACT**

*The research was aimed at establishing the factors that affect efficiency in distribution management in an organization. The research project sought to address two objectives which were packaging and inventory management in distribution management efficiency. The rationale of the study came up due to late deliveries, damages on goods and customer dissatisfaction. The researcher targeted plastic Manufacturers Ltd as the target population and a stratified sampling technique was used by having both primary and secondary data collection. The objectives were to determine the effects of Packaging products and to establish the effects of Inventory management on distribution management efficiency. Questionnaires were used to collect primary data while for secondary data, internet, journals and media was used. The data used descriptive method comprising of both quantitative and qualitative methods where the results were presented using tables, pie charts, percentages and explanations. The target population consisted of 100 employees and the sample size was 79, stratified sampling techniques were used to analyze data quantitatively and qualitatively. The Analysis tool used was SPSS- statistic packages for social science software version 24. Out of the 79 employees, 60 questionnaires which made up 76% the total employees were returned for analysis. 50 % of the respondents disagreed that quality was being enhanced in the institution that implied that the quality at the moment is not adhered to in packaging process, 58 % were in agreement that packaging determines the efficiency of distribution management. According to the findings 42% disagreed that JIT had not been practiced effectively, and this calls for implementation to ensure efficiency in inventory system. From the findings of the study, packaging and inventory management have an impact in the efficiency of distribution Management. It was also concluded that improvement is required to ensure efficiency in the performance of distribution management. The researcher made various recommendations including need for quality packaging and proper inventory management systems.*

**Key Words:** Packaging, Inventory Management, Distribution Management

## Introduction

In a global marketplace an increasingly huge competition forces companies striving to find Strategies that give them competitive advantage over the competitors as observed by Christopher (2008). In any organization, distribution is one of the key enablers for business improvement since it is a function made up of many sub functions and many sub-systems which are being treated as distinct management operation in many organizations. Parallel to the growth in the importance of distribution in the number of associated names and different definitions that are used including; physical distribution, logistics, business logistics, materials management and demand chain Management. Ruston A, Baker P, Croucher, (2006) saw no realistic true & no true definition that should be pedantically applied because products differ, organizations differ at the same time systems vary, he however defined distribution as the tasks of ensuring that the goods and services produced by the organization are transported from the place of production to the point of consumption as efficiently and economical as possible. Zhang (2009) defined distribution in the rational economy regions, to refer to the activities for goods, such as selection, processing, packaging, separation, assembling, according to customer's requirements, and delivering goods to the designated places on time.

Satish, (2006) argued that distribution Management and Physical Distribution is a distinct but integral part of business logistics, involving all those activities relating to the physical movement of goods from the factory to the consumer. Recently,

the concept has been expanded to supply chain management which enables better customer relationship with smooth supply of goods. Gupta (2009) defined Distribution management as the systematic management to optimize the efficiency of overall activities of movement of goods from supplier or manufacturer to point of sale. Ruston A, Baker.P, Croucher. (2006) contributed that the aspect of distribution has evolved over time and has undergone several stages in the development. In 1950's and 1960's, distribution systems were unplanned and unformulated, manufacturers manufactured, retailers retailed and in some way or the other goods reached shops.

In 1960's and 1970's the concepts of physical distribution was developed with gradual realization of the dark continent a valid are for managerial involvement which consisted the recognition of interrelated physical activities such as transport, storage , material handling and Packaging being linked efficiently. 1970's the development of the distribution concept took a major change since there was recognition of distribution in the functional management structure in the organization. In 1980's there was a fairly rapid cost increase and the clearer definition of true costs of distribution contributed to the significant increase in professionalism within distribution and hence came a move towards longer term planning and attempts to identify and pursue cost saving measures such as centralized distribution, severe reductions in stock holding and the use of computers to provide improved information control.

In the 1980's and early 1990's there was advanced information and organization which began to broaden their perspective in terms of the function that could be integrated. In the 1990's the process was developed even further to encompass not only the key function within the organization's own boundaries but also those function outside that

contributed to the provision of a product to the final customer. In the year 2000 and beyond business organizations faced many challenges as they maintain their position against those of their competitors in terms of introducing new products to the market and in increasing profitability of their operations. Distribution Management basically encompasses advertisement, sales, physical distribution and customer satisfaction. Ferrell, (2009) elucidate that Physical distribution logistics form a pivotal part of the marketing task to meet the needs of both supply chain and customers. It is physical distribution that confers place-utility and time-utility to a product by making it available to the user at the right place and at the right time thereby it maximizes the chance to sell the product and strengthen the company's competitive position. According to Ruston A, Croucher.p,(2006) if any product made in any place could be consumed entirely at the very place of production and at the very time of production, there would be no need for physical distribution of that product. But such products are very rare. In practice, almost every product gets consumed at places and times that are different from those of their manufacture. They have to be carried to places of consumption, they have to be stored, and they have to be distributed. Where Production Locations and Markets are distanced, Physical Distribution becomes more crucial. In some cases, production locations are totally dictated by considerations like proximity to sources of raw material. As a result, the points of production might be far away from the markets for the product. In some cases, huge production capacities get established at a given location on consideration of technology and economies of scale. In all such cases, the product has to be marketed over an extended territory; it has to be transported over long distances, stored for a considerable length of time and sold. As per Ferrell,(2009), there are products, which are

impacted by the seasonality factor either production is continuous but demand is seasonal, or demand is continuous but production is seasonal. For this case, physical distribution becomes particularly crucial. It has to perform the balancing act between production and consumption, it therefore helps build clientele since it determines the customer service level to a large extent, as a result, it serves as a vital tool in building clientele / market for the product.

Today in most countries distribution management has become an issue of public attention and debate and has been subjected to reform, restructuring rules and regulations. According to Thomason & Kagendo, (2005) public bodies have been always big purchasers dealing with huge budgets Trionfetti, (2004) also reiterated that distribution management represents 18.42% of the world GDP. In developing countries distribution in management increasingly recognized as essential in service delivery and its account is high proportion of total expenditure.

Plastic Manufacturers Ltd is a private company situated in Kenya along Mombasa Road near pride logistic company area. Plastic Manufacturers Ltd. was established in Nairobi (Kenya) in 1976 and is one of the largest dealers of Polythene, polypropylene tubes and bags. The company is one of the largest importers and exporters of polythene and polypropylene products in East Africa. A manufacturer of High and Low density Polyethylene and Polypropylene bags, sheeting's, tubing's supplying to all East African countries and all Garment manufacturing companies based in the Export Processing Zones in Mombasa, Kenya.

### **Statement of the problem**

In order for a manufacturing firm to be competitive there is need for the firm to produce products that are distinct with quality features in order to satisfy its customers. Various problems have been facing

most manufacturing firms including stock outs, longer lead times, and low standard materials as well as increased cost of manufacturing.

During the last 20 years, plastic Manufacturers Ltd being one of the leading manufacturers of polybags and plastic products has been efficient and effective in meeting customer’s expectations. However recently the company has been experiencing conflicts with the customers arising from the fact they were receiving their orders later than the promised dates schedule and at times the orders were not complete thus half delivery is done, some also complained that they were being delivered goods with damages and thus increased costs as well as loses to both company and customers.

Within the organization the major problem was also the timing and scheduling of fleet to various locations since in some scenarios more than one vehicle was allocated to same route which increased fuel consumption, damages due to poor packaging and poor inventory management. Rushton A, Baker P, Croucher. (2006) dwelt on factors including the channels of distribution and the inbound co-ordination of the physical distribution warehousing, and information. Thus this study therefore sought to fill the gap by investigating the other factors that influence distribution management in an organization.

**Objectives of the Study**

The general objective of this study was to establish the factors affecting distribution management at plastic Manufacturers Ltd. Specific objectives were:

- To determine the effects of Packaging products on distribution management.
- To establish the effects of Inventory management on distribution management.

**LITERATURE REVIEW**

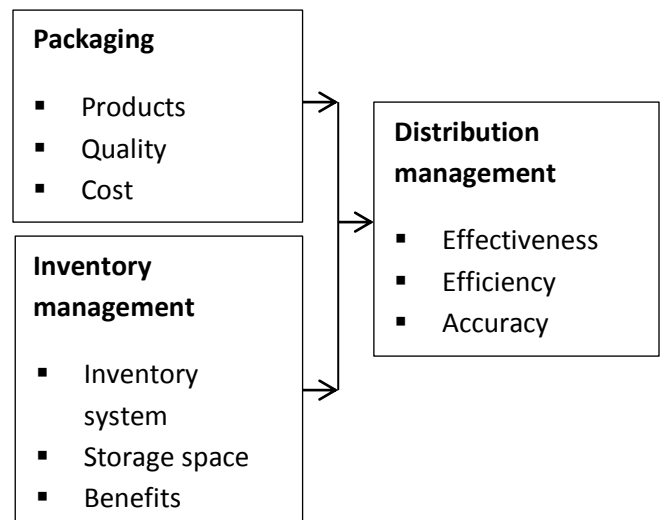
**Theory of Channel coordination**

According to Kumar (2006) the theories Channel coordination (or supply chain coordination) aims at improving supply chain performance by aligning the plans and the objectives of individual enterprises. It usually focuses on inventory management and ordering decisions in distributed inter-company settings. Channel coordination models may involve multi-echelon inventory theory, multiple decision makers, asymmetric information, as well as recent paradigms of manufacturing, such as mass customization, short product life-cycles, outsourcing and delayed differentiation. The theoretical foundations of the coordination are based chiefly on the contract theory.

**The Agency theory**

Agency theory examines the relationship between the owners of the business and the managers of the business. While management has the responsibility for acting as the agent for the stockholders in pursuing their best interest, the key consideration is how they perform this role Pandey,(2005) the owners of the business organizations have employed workers to run the business but how well they do it depend on the managerial skills of the owner

**Conceptual framework**



Independent variables

Dependent variables

### Figure 1: Conceptual framework

#### Packaging

Packaging is very much a part of the total logistics function, and the design and use of packaging has an impact to other functions such as production, marketing and quality control, as well as for the total logistics cost and performance. The other important form is the unit load, where use of a unit load enables goods and packages to be grouped together and then handled and transported more efficiently using mechanical equipment. Distribution and logistics is largely structured around the concept of a load unitization and the choice of a unit load, which are determined by the type and size. It is vital for the effectiveness and economics of a logistics operation, because choosing the most appropriate type and size of a unit load minimizes the rate of material movement. Moreover the right unit load allows the standard storage and handling to be used with optimum equipment utilization. It also minimizes loading and unloading times and improves product protection, security and stock aging as per (Alan *et al.* 2009)

Considering the packaging that should enhance the logistical operation in any occasion on the way in the supply chain and should not be in any circumstances an obstacle to the linked operations. Metso MAC DC Europe has set clear requirements for the packages that are been launched and introduced to the suppliers. The visual guidelines, which is a report designed to emphasize the new packaging requirements to Met so MAC items, introduce the new era of the packaging in the company's history, giving a clear message of the high quality and strong brand. The boxes, which are to be launched, are designed to be as clear, clean

and consistent as possible. The only graphical elements on the packages in addition to the brand elements are the handling symbols and the packaging marks for SSCC lists according to (Toni, 2011). These symbols enhance the processes in the transportation phase since they indicate how the packages should be handled in the different circumstances.

The symbols are vital when the transported products require double handling, since for example in the ports the transit times are kept minimal and this might have an impact in the way the packages are handled. This requires also that the packages are strong enough to handle the rough conditions in the warehousing and transportation. With these new designed packages new possibilities are available. The follow up of the shipments might get easier and this could intensify the tracking. With strong packages, which have clear symbols how they should be handled, could decrease the amount of mistakes in the way. Using this type of packaging might also have an impact to the throughput times during pit stops in the supply chain, which would also decrease the overall lead time. Over all these would enable to allocate the scarce resources of the company and enhance the total service level. One of the most important factors is not yet brought up, which is the cost. What kind of an impact this kind of a packaging would have in the final cost of the product? There are several hidden costs in the supply chain and every time the packages are received and again dispatched additional costs occur. These costs require managing and like mentioned in the logistics chapter, if one element of the supply network fails, the impact might be tremendous according to Alan *et al.* (2009).

#### Inventory Management

Inventory management is pivotal in effective and efficient organization. It is also vital in the control of materials and goods that have to be held (or stored)

for later use in the case of production or later exchange activities in the case of services. The principal goal of inventory Management involves having to balance the conflicting economics of not wanting to hold too much stock. Thereby having to tie up capital so as to guide against the incurring of costs such as Storage, spoilage, pilferage and obsolescence and, the desire to make items or goods available when and where required (quality and quantity wise) so as to avert the cost of not meeting such requirement. Inventory problems of too great or too small quantities on hand can cause business failures. If a manufacturer experiences stock-out of a critical inventory item, production halts could result. Moreover, a shopper expects the retailer to carry the item wanted. If an item is not stocked when the customer thinks it should be, the retailer loses a customer not only on that item but also on many other items in the future. According to Wild (2007) inventory management refers to all the activities involved in developing and managing the inventory levels of raw materials, semi-finished materials (working-progress) and finished good so that adequate supplies are available and the costs of over or under stocks are low. Khan et.al, says: "The cost of maintaining inventory is included in the final price paid by the consumer. Good in inventory represents a cost to their owner. The manufacturer has the expense of materials and labor. The wholesaler also has funds tied up". Therefore, the basic goal of the researchers is to maintain a level of inventory that will provide optimum stock at lowest cost. Mercado (2007) stressed that inventory management in its broadest perspective is to keep the most economical amount of one kind of asset in order to facilitate an increase in the total value of all assets of the organization – human and material resources. Keth *et al.*, (2006) in their text also stated that the major objective of inventory management and control is to inform managers how much of a good to re-order, when to re-order

the good, how frequently orders should be placed and what the appropriate safety stock is, for minimizing stock outs. Thus, the overall goal of inventory is to have what is needed, and to minimize the number of times one is out of stock.

The conclusion one might draw is that effective inventory management can make a significant contribution. Inventory Management manufacturing industries. Because of the relative largeness of inventories maintained by most firms, a considerable sum of an organization's fund is being committed to them. It thus becomes absolutely imperative to manage inventories efficiently so as to avoid the costs of changing production rates, overtime, sub-contracting, unnecessary cost of sales and back order penalties during periods of peak demand. Drury (2006) argued that Economic Order Quantity (EOQ) Model and the Chi-square method is the answer to the fundamental question of how best an organization which handles inventory can be efficiently run is provided for in the analysis and findings of the study. Consequently, recommendations on the right quantity, quality and timing of material, at the most favorable price conclude the research study company's profit as well as increase its return on total assets. It is thus the management of this economics of stockholding, that is appropriately being refers to as inventory management. The reason for greater attention to inventory management is that this figure, for many firms, is the largest item appearing on the asset side of the balance sheet.

Financial analysts have sounded enough warning on the danger expose to the long run profitability as well as continuity of business concern when its inventories are left unmanaged. First, a company, which neglects it management of inventory, runs the risk of production bottlenecks and subsequently unable to maintain the minimum investment it requires to maximized profit. Second, inventories

that are inefficiently managed may apart from affecting sales create an irreparable loss in market for companies operating in highly competitive industry. Invariably, a company must neither keep excess inventories to avoid an unnecessary tying down of funds as well as loss in fund due to pilferage, spoilage and obsolescence nor maintain too low inventories so as to meet production and sales demand as at when needed. Therefore, the mere fact that ineffective inventory management affects virtually the organizational objectives necessitates this type of research work. Inventory Model: The Economic Order Quantity (EOQ) Model Undoubtedly, the best-known and most fundamental inventory decision model is the Economic Order Quantity Model. Its origin dated back to the early 1900s. The purpose of using the EOQ model in this research is to find out the particular quantity, which minimize a total inventory cost that is the total ordering and carrying costs

### **Measurement of efficiency of distribution management**

According to Bowersox (2006) few business areas impact an organization in as many places as do logistics and distribution evaluation. The measurement of efficiency includes Inputs, outputs (including quantity and quality), productivity, and level of service, transport costs, ration of staff, response time, cycle time and amounts of backlog.

### **Empirical review**

### **Packaging of products and distribution management**

Packaging has become much more than it used to be since today a package is not only designed to contain, preserve and transport the products; it also acts as an interface between the seller and the buyer. This means that the package requirements

have escalated. The package should not only protect but also inform for example about the requirements that need to be clear when transporting the products. The package is the first thing that the customer sees when he or she receives the ordered product and therefore it should send a message about the qualities and values that the company represents and furthermore it should sell. Alan *et al.* (2009) states that when talking about the physical nature of a product it is rarely seen in a logistics function in its primary form. The typical forms, which the final products are consisting in a logistics chain, are packages and unit loads. Hence, these two elements are bound to any relationship of the product and logistics. Alan *et al.* (2009) broadly defined packaging as a product promotion or product protection. The latter function is particularly relevant to logistics. There are also other important factors that need to take under consideration when making the decision of the design of the packages for logistics purposes. In addition to product protection, packages should be simple to handle, convenient to store, promptly identifiable, secure and the shape should enhance the best use of space. Usually the cubical design is the most preferred form (Alan *et al.*, 2009). It is important to understand that in logistical operation the package is the product that is stored and transported which means that in every possible occasion it should rather help than to be an obstacle to the logistical operation.

Packaging is very much a part of the total logistics function, and the design and use of packaging has an impact to other functions such as production, marketing and quality control, as well as for the total logistics cost and performance. The other important form is the unit load, where use of a unit load enables goods and packages to be grouped together and then handled and transported more efficiently using mechanical equipment. Distribution



and logistics is largely structured around the concept of a load unitization and the choice of a unit load, which are determined by the type and size. It is vital for the effectiveness and economics of a logistics operation, because choosing the most appropriate type and size of a unit load minimizes the rate of material movement. Moreover the right unit load allows the standard storage and handling to be used with optimum equipment utilization. It also minimizes loading and unloading times and improves product protection, security and stock aging as per (Alan *et al.* 2009)

Considering the packaging that should enhance the logistical operation in any occasion on the way in the supply chain and should not be in any circumstances an obstacle to the linked operations. Metso MAC DC Europe has set clear requirements for the packages that are been launched and introduced to the suppliers. The visual guidelines, which is a report designed to emphasize the new packaging requirements to Met so MAC items, introduce the new era of the packaging in the company's history, giving a clear message of the high quality and strong brand. The boxes, which are to be launched, are designed to be as clear, clean and consistent as possible. The only graphical elements on the packages in addition to the brand elements are the handling symbols and the packaging marks for SSCC lists according to (Toni, 2011). These symbols enhance the processes in the transportation phase since they indicate how the packages should be handled in the different circumstances.

The symbols are vital when the transported products require double handling, since for example in the ports the transit times are kept minimal and this might have an impact in the way the packages are handled. This requires also that the packages are strong enough to handle the rough conditions in the warehousing and transportation. With these

new designed packages new possibilities are available. The follow up of the shipments might get easier and this could intensify the tracking. With strong packages, which have clear symbols how they should be handled, could decrease the amount of mistakes in the way. Using this type of packaging might also have an impact to the throughput times during pit stops in the supply chain, which would also decrease the overall lead time. Over all these would enable to allocate the scarce resources of the company and enhance the total service level. One of the most important factors is not yet brought up, which is the cost. What kind of an impact this kind of a packaging would have in the final cost of the product? There are several hidden costs in the supply chain and every time the packages are received and again dispatched additional costs occur. These costs require managing and like mentioned in the logistics chapter, if one element of the supply network fails, the impact might be tremendous according to Alan *et al.* (2009).

### **Inventory Management and distribution management**

According to Wild (2007) inventory management refers to all the activities involved in developing and managing the inventory levels of raw materials, semi-finished materials (working-progress) and finished good so that adequate supplies are available and the costs of over or under stocks are low. Khan *et.al.* says: "The cost of maintaining inventory is included in the final price paid by the consumer. Good in inventory represents a cost to their owner. The manufacturer has the expense of materials and labor. The wholesaler also has funds tied up". Therefore, the basic goal of the researchers is to maintain a level of inventory that will provide optimum stock at lowest cost. Mercado (2007) stressed that inventory management in its broadest perspective is to keep the most economical amount of one kind of asset in order to

facilitate an increase in the total value of all assets of the organization – human and material resources. Keth *et al.*, (2006) in their text also stated that the major objective of inventory management and control is to inform managers how much of a good to re-order, when to re-order the good, how frequently orders should be placed and what the appropriate safety stock is, for minimizing stock outs. Thus, the overall goal of inventory is to have what is needed, and to minimize the number of times one is out of stock.

Inventory management is pivotal in effective and efficient organization. It is also vital in the control of materials and goods that have to be held (or stored) for later use in the case of production or later exchange activities in the case of services. The principal goal of inventory Management involves having to balance the conflicting economics of not wanting to hold too much stock. Thereby having to tie up capital so as to guide against the incurring of costs such as Storage, spoilage, pilferage and obsolescence and, the desire to make items or goods available when and where required (quality and quantity wise) so as to avert the cost of not meeting such requirement. Inventory problems of too great or too small quantities on hand can cause business failures. If a manufacturer experiences stock-out of a critical inventory item, production halts could result. Moreover, a shopper expects the retailer to carry the item wanted. If an item is not stocked when the customer thinks it should be, the retailer loses a customer not only on that item but also on many other items in the future.

The conclusion one might draw is that effective inventory management can make a significant contribution. Inventory Management manufacturing industries. Because of the relative largeness of inventories maintained by most firms, a considerable sum of an organization's fund is being committed to them. It thus becomes absolutely

imperative to manage inventories efficiently so as to avoid the costs of changing production rates, overtime, sub-contracting, unnecessary cost of sales and back order penalties during periods of peak demand. Drury (2006) argued that Economic Order Quantity (EOQ) Model and the Chi-square method is the answer to the fundamental question of how best an organization which handles inventory can be efficiently run is provided for in the analysis and findings of the study. Consequently, recommendations on the right quantity, quality and timing of material, at the most favorable price conclude the research study company's profit as well as increase its return on total assets. It is thus the management of this economics of stockholding, that is appropriately being refers to as inventory management. The reason for greater attention to inventory management is that this figure, for many firms, is the largest item appearing on the asset side of the balance sheet. Essentially, inventory management, within the context of the foregoing features involves planning and control. The planning aspect involves looking ahead in terms of the determination in advance:(i) What quantity of items to order; and (ii) How often (periodicity) do we order for them to maintain the overall source-store sink coordination in an economically efficient way? (ii) How often (periodicity) do we order for them to maintain the overall stock coordination in an economically efficient way? The control aspect, which is often described as stock control involves following the procedure, set up at the planning stage to achieve the above objective. This may include monitoring stock levels periodically or continuously and deciding what to do on the basis of information that is gathered and adequately processed Effort must be made by the management of any organization to strike an optimum investment in inventory since it costs much money to tie down capital in excess inventory. In recent time, attention was focused on the development of

suitable mathematical tools and approaches designed to aid the decision-maker in setting optimum inventory levels.

Economic order quantity model (EOQ) has thus been developed to take care of the weaknesses emanating from the traditional methods of inventory control and valuation, which to some extent has proved useful in optimizing resources and thus, minimizing associated cost. Financial analysts have sounded enough warning on the danger expose to the long run profitability as well as continuity of business concern when its inventories are left unmanaged. First, a company, which neglects its management of inventory, runs the risk of production bottlenecks and subsequently unable to maintain the minimum investment it requires to maximize profit. Second, inventories that are inefficiently managed may apart from affecting sales create an irreparable loss in market for companies operating in highly competitive industry. Invariably, a company must neither keep excess inventories to avoid an unnecessary tying down of funds as well as loss in fund due to pilferage, spoilage and obsolescence nor maintain too low inventories so as to meet production and sales demand as at when needed. Therefore, the mere fact that ineffective inventory management affects virtually the organizational objectives necessitates this type of research work. Inventory Model: The Economic Order Quantity (EOQ) Model Undoubtedly, the best-known and most fundamental inventory decision model is the Economic Order Quantity Model. Its origin dated back to the early 1900s. The purpose of using the EOQ model in this research is to find out the particular quantity, which minimize a total inventory cost that is the total ordering and carrying costs

### **Measurement of efficiency of distribution management**

According to Bowersox (2006) few business areas impact an organization in as many places as do logistics and distribution evaluation. The measurement of efficiency includes Inputs, outputs (including quantity and quality), productivity, and level of service, transport costs, ration of staff, response time, cycle time and amounts of backlog.

### **RESEARCH METHODOLOGY**

The research design adopted descriptive study design. The population is the total number of people in a specific geographic area according to Sekaran (2006) the research used a total population of 100 employees. In this study the researcher surveyed the whole population of 100 and obtained a big sample size of 79. The research was limited to plastic manufacturer's Ltd where stratified random sampling was employed to obtain a suitable unit of representative analysis. The main research instrument used to collect primary data included a questionnaire so that the researcher could obtain original data that has been collected for the purpose of mind and it's first hand. The data collected was classified systematically since descriptive analysis is an appropriate method of data analysis the data was collected, presented and analyzed both quantitatively and qualitatively using tables, pie charts, percentages and explanations.

### **RESEARCH FINDINGS AND DISCUSSION**

A total of 79 questionnaires were distributed proportionately, 60 were filled and returned which stood at a response rate of 76 % and this facilitated the analysis which is qualified for population validity and reliability of results. 19 were not returned which is equivalent to 24% of the total issued. Gender was keenly observed as among the homogenous departments the majority of the respondents were female (58%) and Male (42%). Majority of the respondents were between the ages classes of 20-35. This means that these people were still young, energetic, mature and well connected

with current information. Age 20-25 had 17%, 26-30 (25%), 31-35 (50%) 36 and above 8%. Most employees at plastic Manufacturers were college/ Diploma graduates because of the highest percentage of 43, Primary level were the lowest with 3%, 27% secondary level, and 27% university level and above, this depicts that majority are literate hence understood the essence of operation being run in the organization. 42% had worked for the organization for a period between 11-20 years, 33% had worked for 0-10 years and 25% were those who had worked over 20 years. This implied that majority of employees had served for a longer service and had experience in their operations.

Majority of the respondents were from the production department with 37%, distribution were 23%, Purchasing 12%, finance 10%, Marketing 8% and 5% for both ICT and Human Resource, this implies that the major departments were captured which validated the results. 67% of the respondents were operations staff, 16% were supervisors, and 12% were Middle level Managers and 5% at the top management. This clearly depicts that majority of the respondents were those on the ground and understood the challenges faced in various departments where they forwarded upwards to management levels

### **Packaging**

The respondents were asked whether quality packaging was enhanced in distribution management in the organization. 50% of the respondents disagreed that quality packaging enhanced distribution management, 25% neither disagreed nor agreed, 17% were in agreement, 5% strongly agreed and 3% strongly disagreed. This clearly indicates that half of the respondents depicts that quality is not enhanced in packaging which resulted in more damages and mishandling of product and poor distribution management.

On whether there were high costs in distribution management, 58% of the respondents strongly agreed that there were high costs involved in packaging / repackaging to enhance distribution, 33% were in agreement, and 7 % were Neutral while 2% disagreed. From the above analysis it is evident that majority believed there were high costs incurred in packaging of products in managing distribution.

On whether packaging played a role in distribution management, the respondents were asked whether packaging played a role in customer satisfaction where majority of the respondents at 42% strongly agreed to it, while 40% of the respondents were in agreement, 10% were neutral and a minority of 8% disagreed. The respondent was asked whether packaging affects distribution Management. Majority of the respondents (58%) strongly agreed that it affects, while 35% of the respondents were in agreement, 5% were neutral and a minority of 2% disagreed.

### **Inventory Management**

Respondents were asked whether Inventory Management system is used in the institution. 45% of the respondents disagreed that there is inventory management system in the institution, while 20% agreed, 15% strongly disagreed, while 10% were neutral and 5 % strongly agreed. The respondents were asked if Inventory Management accrue benefits to an organization. The respondents opinions were clearly stated where majority were in agreement that inventory management brings about benefits to an institution where 52% agreed, 35% strongly agreed, 9% were neutral 3% Disagreed and 1% disagreed. The respondents were asked whether there was sufficient storage space for inventory. 47% of the respondents disagree that the organization has sufficient space for storage, 21% agreed, 16% strongly disagreed, 11 % were neutral, and 5% strongly agreed. This depicts that the

intuition did not have sufficient space for storage of inventory. The respondents were asked whether JIT in Inventory Management was implemented. Majority of the respondents 42% disagreed that JIT inventory system was practiced, 20% agreed that JIT was practiced, 17 % were not sure while 13% strongly disagreed, as 8% strongly agreed, this depicts that JIT was not well implemented in the institution.

### **Efficiency in distribution Management**

The respondents were asked whether there is efficient Distribution Management at this organization. Majority of the respondents disagreed that there was efficient distribution management in the organization, where 42% disagreed, 15% disagreed, 17 % were in agreement, 13% were neutral while 13% strongly agreed.

### **SUMMARY, RECOMMENDATION AND CONCLUSIONS**

From the questionnaires issued to the respondents, it clearly showed that Packaging aspect and Inventory Management were the greatest factors affecting Distribution Management in the organization.

On response whether quality packaging was enhanced in distribution management, 50 % of the respondents disagreed; this implies that the quality at the moment is not adhered to in packaging process. On response whether the organization incurred high costs in distribution management, 58% strongly agreed, this depicts that the organization is spending more on costs of packaging and had more customer complaints. On response whether packaging played a role in customer satisfaction, majority at 42% were in agreement meaning that indeed it plays a role in ensuring customers are satisfied. On whether packaging of products affects distribution management performances, 58 % were in agreement implying

that packaging determines the efficiency of distribution management, whether good or poor.

On inventory management system, the findings implied that it is not being used in the organization by 45% of the respondents. On the issue of Inventory management accruing benefits to the organization, majority believed that it accrue benefits registering 52%. The findings on the storage space depicts that there is no sufficient storage space for products by 47% who disagreed, this means that the organization needs to expand their warehouses to accommodate goods awaiting production or sale. According to the findings 42% disagreed that JIT had not been practiced effectively, and this calls for implementation to ensure efficiency in inventory system.

The research study broadly sought to answer the questions by collecting data, analyzing and drawing conclusion thereof. From the study it can be concluded that the respondents understood the questionnaires since majority of the staff were literate and had an idea about distribution. Besides they agreed that the organization had challenges facing them despite efforts made to achieve efficiency. From the response, the factors mentioned and analyzed in detail affected distribution management thus need for a strategic, tactical and operational planning from top management downwards. From the study it is also clear that quality is not fully implemented which played a role in packaging to necessitate proper distribution. It was also found out that proper inventory management accrued benefits to the organization and thus consideration be taken on storage space expansion and implement JIT to necessitate order processing.

The study recommendation were that training was necessary to impact knowledge on employees, plastic Manufacturers' top Management should arrange for workshops, seminars for staffs in order

to improve on their operations so as to utilize on company resources and minimize costs. Ensuring that there were proper channels of communication and a clear organizational structure to necessitate staff to know what the management expects them to do , also to ensure quick response to external entities e.g. customers, suppliers ,intermediaries etc.

The management should ensure all dispatched goods are properly packaged, and protected on transit against damages, spillage, and theft which can be done by unitization/ containers, this enhances security and reduction of cases of lost items. The purchasing and distribution department should enhance supply chain Management practices are employed including JIT, Customer Relationship Management, and Supplier Relationship Management and other modern

technologies to enhance efficiency. The management should ensure proper inventory management, by timely replenishment, keeping stock records to avoid stock outs & customer complaints due to delays in delivery. The purchasing department should ensure quality purchases/ input to enhance quality output leading to customer satisfaction

From the findings of this study, future scholars can identify more factors and solutions necessary in enhancing performance in distribution management. The study closely covered the factors affecting distribution management thus calls for further research on more factors which directly or indirectly affect distribution management in organizations and ways to improve on packaging and inventory management.

## REFERENCES

- Allan R, Baker P, Croucher. P (2006) *Logistics and distribute on management 3<sup>rd</sup> edition*, Great Britain publisher.
- Bowersox, D. J & Closs, D. J. (2006) *Logistically Management*, McGraw – Hill Companies Inc. New York
- C.R. Kothari (2007) *Research Methodology 5<sup>th</sup> edition*, New age international publishers New Delhi
- Christopher M. (2007) *logistics and supply Chain Management, strategies for reducing cost and improving service, 3<sup>rd</sup> edition* Pitman Publishers
- Cooper Donald R, Schindler Pamela S. (2013) *Business Methods, 12<sup>th</sup> Edition*, McGraw – Hill Education Publishers
- Cooper M.C, L.M Ellaram (2006) *Characteristics of Supply Chain Management and the implication in Purchasing and Logistics Strategy*
- Drury C. (1996) *Management and Cost Accounting, 7<sup>th</sup> Edition*, International Hausan press publishers London
- Gujarati D.N. (2007) *Basic Econometrics, 4th Edition*, New Delhi, India, Tata McGraw- Hill Inc. USA
- Keth L, A. Muhlemen, J Oakland (2006) *Production and Operations Management*, Pitman Publishers London
- Khan M.Y, Jain P.K (2007) *Financial Management, 5thEdition*, Tata McGraw-Hill Publishing Company
- Kotler P, Armstrong G, (2009) *Marketing Management, 10<sup>th</sup> edition* Prentice Hall Publishers

*Kumar, N., Surendra Rajiv and Abel Jeuland (2010) Effectiveness of Trade promotions, Marketing science, 20 (4), 382-404*

*Kumar S. & Kropp J. (2006) studying the Operational Efficiencies of a multiproduct supply Chain using excel Spreadsheet Model Vol 26 issue 10, PP 1186-1200*

*Mercado ED C. (2007) Hands on inventory Management, 3rd edition, Published by Taylor and Francis Group L.L.C*

*Mugenda O.M. and Mugenda, A. G. (2005) Research Methods; Quantitative and qualitative Approaches Acts Press Nairobi*

*Pandey I.M. (2005) Financial Management, 9<sup>th</sup> Edition, Vikas publishing house Limited*

*Rajan Suri (2010) The competitive Advantage of quick response manufacturing, 1<sup>st</sup> edition productivity press*

*S.L Gupta (2009) Sales and Distribution Management, 12<sup>th</sup> edition, published by Anurag Jain for excel books new Delhi*

*Satish K., Kapoor, Purva K. (2008) Basics of Distribution Management, 3<sup>rd</sup> edition, New Delhi Prentice hall of India*

*Sekaran U. (2006) Research Methods for Business, 4<sup>th</sup> edition, John Wiley & sons Publishers India*

*Shamoo A.E, Resnik B. R. (2006) Responsible Conduct of Research, 5<sup>th</sup> edition, Oxford University press*

*Wild Tony (2009) Best Practice in Inventory Management, 2<sup>nd</sup> edition, published by Elsevier Science Ltd, Great Britain*

*Zhang Y., & Wildemuth B.M. (2009) Qualitative analysis of content, 2<sup>nd</sup> edition, published by Westport CT libraries limited.*