# Integrating Logistics Management through Warehousing and Inventory Management to Spawn High Market Share and Profitability

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**Abstract**
In a fast and continuously dynamic competitive business environment as is the situation in the manufacturing sector, manufacturing firms are expected to give more consideration to their logistics management applications in order to have higher production efficiency and achieve better competitive advantage. Thus, this study empirically examined the relationship between logistics management and performance of 122 selected firms within Rivers State, Nigeria. The data from the questionnaire were analyzed through the use of mean, Pearson's moment correlation and t-statistics to test the relationship between the variables of the study. The findings showed that logistics management has an influence on the rate of production output, market share and profitability. More so, inventory and warehouse management helps in eliminating production short-outs; enhances effectiveness of the production system and improves performance of manufacturing firms. Therefore, firms should reorganize their warehousing and inventory systems to suit specific needs of product demand to involve sustainable increase production output, sales and market share.
**Keywords:** Inventory, Logistics, Market share, Performance, Profitability and Warehousing

## 1. Introduction

Firms adopt different strategies to enhance their performance. Xiang (2014) observed that proper logistics management can be one of those strategies crucial for firms to obtain higher performance. More so, effective logistics management can provide major source of competitive advantage to a company by ensuring that the firm is able to continually respond faster and more efficiently than competitors to its customers' requirement (Somuyuwa, Odepidan, and Dosunmu, 2016).

In modern competitive environment, it is not enough to offer products that meet customers' requirements rather the way of its delivery is also very important. The efficiency and effectiveness of the logistics operation has a considerable influence not only on the business performance of manufacturing firms but also on the customer's perception of the quality of the products and services provided by the firms (Somuyuwa, et al. 2016). Without proper logistics management, value created in products and services will come to a halt. Kotler and Armstrong (2008) posited that distributional strategy enables goods and services to be moved into the market, facilitates exchanges and makes the consumption of goods and services easy. An effective product and service delivery system gives a firm competitive advantage over rivals in same industry.

Also, Fugate, Mentzer and Stank (2010) observed that in highly competitive market, logistics plays an important role, making the availability of products or services to customers at the right time and the right place which in turn promotes higher levels of efficiency and effectiveness that leads to better result. Logistics management is a strategic vector in organizations that influences their performance measurement indices, in terms of market share, profitability and the overall effectiveness (Ellinger, Daugherty and Keller, 2000).

Considerable interest in logistics is evident by the efficiency of logistics activities to speed up the movement of products from the organization to the final consumer. However, nowadays we have a situation where manufacturing firms incurs wastages of materials and other resources which have brought about man-hour loss, low productivity and poor customers service which in turn affect negatively the performance of the organization (Taniguchi, Thompson and Yamada, 2003).

Autry and Daugherty (2003) reported that, very poor management of logistics is imposing difficult constraints on the ordering process and inventory management which affects the performance of the firms. The activities performed in manufacturing firms (ordering process, inventory management and warehousing management), have their problems, due to the fact that most of the products transported are by nature heavy, bulky or highly perishable and as such, need to be transferred with adequate efficiency from areas of production to areas of consumption with the least delay, cost and safety (Bayles, 2000).

Furthermore, in this present dynamic and globalized economy, organizations need to find processes and methods that enable the development of more efficient logistics strategies with better results. It is against this background that this paper sets to examine the relationship between warehousing management and inventory management on market share and profitability of selected firms in Rivers State, Nigeria.

## 2. Literature Review

### 2.1 Logistics Management

Logistics Management is defined as part of supply chain that plans, implements, controls the efficient and effective forward and reverse flow, storage of goods, services and related information between the points of origin and point of consumption in order to meet customer's requirement (Stevenson, 2007). Thus logistics management represents a collection of activities that guarantee the availability of the right products in the right quantity to the right customers at the right time. It therefore, provides activities that serve as a link between production and consumption and provide a bridge between production and market locations or suppliers separated by a distance and time (Canci, 2003). Furthermore, logistics is responsible for the movement of materials and products through the use of equipment, labour, in meeting due date deliveries.

The components of logistics system include logistics services, information systems and infrastructure/resources according to Chang (1998). Logistics services involve the movement of materials and products from inputs through production to consumers, as well as associated waste disposal and reverse flows. It includes activities such as inventory control at a manufacturer's plant and the operations of external service providers: transport, storage, supply chain design, freightage negotiations. More so, the information systems component comprises modelling and management of decision making, and more important issues such as tracking and tracing. The infrastructure component includes human resources, packaging materials, financial resources, and communications.

The close relationship between logistics management and customer service, and its effect on a firm's competitiveness dictate that firms needs to handle their logistics function prudently so as to achieve its full potential as a source of competitive advantage. More so, shortage of logisticians and information system support capabilities has become hurdles to logistics management (Hong and Liu, 2007). The inadequate logistics infrastructure coupled with lack of skilled workers and management is blamed for the high level of loss, damage and deterioration of stocks experienced, especially for perishable products (Bowersox, Closs and Cooper, 2002).

Furthermore, Gillingham (2002) observed that logistics management plays a key role in the firm in terms of delivering the product to the target market on time, providing customer satisfaction, and ensuring that the costs thereof are minimized to ensure that the firm is competitive and profitable. Also, the management of logistics activities has become a valuable way of securing competitive advantage and improving organizational performance (Li, Ragu-Nathan, Ragu-Nathan, and Rao, 2006; Roth, Cattani and Froehle, 2008).

Logistics strategy has three main objectives; cost reduction, capital reduction and service improvement (Hai and Yirong, 2002). More so, the increased in the variety of goods, globalization of marketing and seasonal variations is among the major challenges of logistics system which leads to the necessity of developing effective logistics strategies (Bosona and Gebresenbet, 2013).

### 2.2 Warehousing Management

Warehousing is the activities involving the storage of goods on a large-scale in a systematic and orderly manner and making them available conveniently when needed (Tsige, 2013). It creates time utility by bridging the time gap between production and consumption of goods. Also, minimizing travel time between point of supply locations and demand destinations can greatly improve productivity. However, to achieve this increase in efficiency, manufacturing firms must develop processes to regularly monitor picking travel times and storage locations (Bartholdi and Hackman, 2011).

More so, warehouse layout is one important factor affecting job order assignment schedule in the warehousing management. Caron, Marchet and Perego (2000) found that the warehouse layout has a considerable effect on order picking travel distance. Bartholdi and Hackman (2011) pointed out the layout design has an effect of more than 60% on the total travel distance, and also that there is a relationship between warehouse layout and order picking travel distance.

The way an organization manages her warehouse says a lot about the organization. Efficient and effective warehouse management and high productivity rates portray the organization as an entity that values their customers because if the organization is running on inefficient warehouse and suffering from poor productivity levels, it may be sending wrong message to its customers. Inefficient warehouse management can lead to shipping delays, processing errors, and more complications that could negatively impact on the rate of customer satisfaction. For instance if a customer calls to inquire about the status of his or her order and the organization cannot give the customer straight answers, the customer is not likely to be happy and it may affect the repurchasing behavior of the customer in the future.

Furthermore, the functions of warehousing is to store products in distribution centres as to ship orders timely in the way desired by the customers (Asli, Ozalp and Nilufer, 2013). To solve this problem and to maximize efficiency, most firms adopted distribution channels in minimizing total shipment cost and ensuring optimum utility to consumer. Also, effective warehouse management can help firms increase their market share by eliminating inefficiencies so that their products can get to the customers' on-time (Koste and Malhotra, 1999).

## 2.3 Inventory Management

Manufacturing firms in Nigeria had witnessed a lot of handicaps due to poor executive judgments ranging from facility location and poor inventory management, where goods are produced merely on the available resources irrespective of the demand for the product. Thus, proper coordination of production activities based on the expected demand, available inventory profile, lead time, given capacity, and other related variables is of utmost importance (Bagshaw, 2003).

Sethi and Thompson (2000) refer to inventory management as the stock of items used within the production system such as basic raw materials, supplies of components or work-in-progress and finished goods as inventory. Good inventory management occurs when an organisation place a right order at the right time, right quantity, right quality and produce just enough material to satisfy customers' needs without over extending the sale cost of the product (Tsige, 2013).

Furthermore, Graman and Magazine (2006), argued that the cost of holding inventory and the risk of obsolescence, especially in rapidly changing markets, make the expense of holding large inventories of finished goods exceeding the normal. More so, inventory management approaches are a function of product, operational and demand related variables such as delivery time, obsolescence, coefficient of variation of selling cost and inventory turnover (Wanke and Zinn, 2004).

However, demand fluctuations occur and therefore, production is independent on demand. In such a situation, there is a deliberate policy of management to have inventory of products that will cushion the ups and down effect of demand fluctuation on production levels and this inventory level is called the safety stock (Bagshaw, 2015). If there is an increase in the demand for an item, more than the production outputs, then stock out will be avoided by drawing from the safety stock to satisfy the additional demand. It also follows that if the lead time is greater than expected such that delivery cannot be made at the appropriate time, the safety stock will be used to meet such demands (Bagshaw, 2015).

Also, there is a push-pull effect just in time inventory management system according to Graman and Magazine (2006). The just in time system is based on the pull from the market, and this pull on production will likely result in short, slim production line with the shortest possible production lead time, which allows the firm to respond to the fluctuating orders from the market. Furthermore, good inventory management in any manufacturing organization saves the organization from poor quality production process where short-outs as a result of ineffective line balancing due to poor inventory input in the production process result in the inability to meet up customers' demand and loss of profit (Johnson, 2008). Also, increase in profitability has been proven to depend on the level of inventory management practices (Panigrahi, 2013). More so, Eckert (2007) examined inventory management and role it plays in improving market share, that a positive relationship exists between customer satisfaction, supplier partnerships, education and training of employees, and technology to improve market share.

## 2.4 Market Share

Market share refers to the total percentage of sales a particular firm controls in the industry it operates (Slack, Johnston and Chambers, 2004). It is that share of the market commanded by a firm's product or brand. In most cases, market share mean shares of the actual sales of a product in a given period and in a given geographical area; that is, sales performance of a product class in the market, rather than a collection of buyers for the product (Cooper and Nakanishi, 2010). Market share is the percentage of a market (defined in terms of either units or revenue) accounted for by a specific firm (Hermann, Frank and Frank, 2006). Market shares command the attention of business managers as key indices for measuring the performance of a product or brand in the market place. This has led many managers to keep close watch over day-to-day changes in market shares, so much so that market-share movement to them is almost synonymous to market information (Cooper and Nakanishi, 2010). The proper understanding of an organizational market share enables the organization to judge not only the total market growth or decline but also trends in customers' selections among competitors. Thus, losses in market share can signal serious long-term problems that require strategic adjustments. Firms with market shares below a certain level may not be viable. Similarly, within a firm's product line, market share trends for individual products are considered early indicators of future opportunities or threats.

Indentifying appropriate measure of the market share, Slack, Chambers and Johnston (2004) argued that it helps managers evaluate both primary and selective demand in their market. That is, it enables them to judge not only total market growth or decline but also trends in customers' selections among competitors. Losses in market share can signal serious long-term problems that require strategic adjustments. Firms with market shares below a certain level may not be viable.

## 2.5 Profitability

According to Griffith and Carrol (2001) profits are indicators of business good performance resulting from its operations. Lipsey, Kenneth, Carlaw and Richard (2003) defined profitability from the view point of economist

as the ability of the firm to maximize revenues and minimize cost. Also, profitability is the ability of the firm to maximize revenues and minimize cost (Lipsey, et al, 2003). Profits is the driving force that maintains the continuity of the firm and it is true that a non profitable firm is not likely to continue for long (Balunywa, 1992). Profitability of a firm is affected by factors such as cost of goods sold; stock level, consumer spending, economic performance and technological changes. More so, cost of goods directly affects profit because the money used to produce the product is deducted from the money taken from sales. Also if a company stock too much of a product, the cost of goods may over weigh the total sales while too few of an item means that cost is reduced of a product. In the same vein, the trend of how much consumer spends on a product primarily affects the profit of the firm.

Furthermore, for an organization to achieve higher profitability it must be able to operate under a cost advantage policy by identifying and analysing where operation costs are incurred. The major cost categories are staffing, facilities that include technology and equipment costs, and materials. The proportions vary between these categories but generally a firm spends around 55% of its costs on materials, 30% on facilities and 15% on staffing according to Greasley (2006). So focusing on reducing the cost of materials will have the biggest impact on reducing costs which will affect profitability, hence the proper management of warehousing and inventory.

## 3. Methodology
This study adopts survey research design using quantitative research methodology to empirically assess the relationship between logistics management and performance of firms in Nigeria. The sample of the study is made up of 135 selected firms in Rivers State, Nigeria. The research questionnaire was designed to elicit information from managers of the selected firms to examine the relationship of the study variables.

## 4. Analysis of Data
This section involves the analyses of the data obtained from the research instrument that was distributed. However, 122 questionnaire were properly filled and returned hence, 122 became the sample size for which the analysis was done. The data was analyzed using percentages, means, standard deviation, Pearson's moment correlation coefficient and the t-statistic used to test the hypotheses with a significance level of 0.05.

### 4.1 Item Scores on each of the Variables
This covers warehousing management, inventory management, market share and profitability.
**Item Scores on Warehousing Management**
Four measurement items A1, A2, A3 and A4 were used to collect data on warehousing management and the response scores presented in Table 1.

**Table 1: Item scores on warehousing management**

| | | A1 | A2 | A3 | A4 |
|---|---|---|---|---|---|
| | Item Scores (Statistics) | | | | |
| N | Valid | 122 | 122 | 122 | 122 |
| | Missing | 0 | 0 | 0 | 0 |
| Mean | | 2.57 | 2.31 | 4.40 | 4.20 |
| Median | | 2.50 | 2.00 | 4.00 | 4.00 |
| Mode | | 2 | 2 | 4 | 4 |
| Std. Deviation | | 1.090 | 1.013 | .492 | .399 |
| Minimum | | 1 | 1 | 4 | 4 |
| Maximum | | 4 | 4 | 5 | 5 |
| Sum | | 314 | 282 | 537 | 512 |

*Source: Field Survey Data, 2017.*

**Items Scores on Inventory**
Four measurement items A5, A6, A7 and A8 were used to collect data on inventory management and the response scores presented in Table 2.

**Table 2: Item scores on inventory management**

|  |  | A5 | A6 | A7 | A8 |
|---|---|---|---|---|---|
| N | Valid | 122 | 122 | 122 | 122 |
|  | Missing | 0 | 0 | 0 | 0 |
| Mean |  | 3.31 | 4.10 | 4.10 | 4.31 |
| Median |  | 4.00 | 4.00 | 4.00 | 4.00 |
| Mode |  | 4 | 4 | 4 | 4 |
| Std. Deviation |  | 1.186 | .536 | .299 | .465 |
| Minimum |  | 1 | 3 | 4 | 4 |
| Maximum |  | 5 | 5 | 5 | 5 |
| Sum |  | 404 | 500 | 500 | 526 |

*Source: Field Survey Data, 2017*

**Items Scores on Market Share**

Four measurement items B5, B6, B7 and B8 were used to collect data on profitability and the response scores presented in Table 3.

**Table 3: Item Scores on Market Share**

Item Scores (Statistics)

|  |  | B5 | B6 | B7 | B8 |
|---|---|---|---|---|---|
| N | Valid | 122 | 122 | 122 | 122 |
|  | Missing | 0 | 0 | 0 | 0 |
| Mean |  | 3.20 | 4.10 | 4.60 | 4.20 |
| Median |  | 3.00 | 4.00 | 5.00 | 4.00 |
| Mode |  | 2 | 4 | 5 | 4 |
| Std. Deviation |  | .985 | .299 | .492 | .602 |
| Minimum |  | 2 | 4 | 4 | 3 |
| Maximum |  | 5 | 5 | 5 | 5 |
| Sum |  | 390 | 500 | 561 | 513 |

*Source: Field Survey Data, 2017*

**Item Scores on Profitability**

Four measurement items B1, B2, B3 and B4 were used to collect data on profitability and the response scores presented in Table 4.

**Table 4: Item scores on profitability**

Item Scores (Statistics)

|  |  | B1 | B2 | B3 | B4 |
|---|---|---|---|---|---|
| N | Valid | 122 | 122 | 122 | 122 |
|  | Missing | 0 | 0 | 0 | 0 |
| Mean |  | 3.80 | 4.58 | 3.70 | 3.40 |
| Median |  | 4.00 | 5.00 | 4.00 | 3.50 |
| Mode |  | 4 | 5 | 4 | 4 |
| Std. Deviation |  | .746 | .666 | .641 | .915 |
| Minimum |  | 2 | 3 | 3 | 2 |
| Maximum |  | 5 | 5 | 5 | 5 |
| Sum |  | 464 | 559 | 451 | 415 |

*Source: Field Survey Data, 2017*

The data in Table 1 to Table 4 showed that the respondents agreed on all items on warehousing management, inventory management, market share and profitability with a mean score greater than 3 respectively. This indicates that respondents agreed that for a firm to improve its market share and profitability, the firm should adopt effective and efficient logistics management vis a vis proper warehousing and inventory management.

**4.2 Relationship between the Variables**
**Relationship between Logistics Management and Performance**
**Table 5: Correlation Analysis showing the relationship between Logistics Management and Performance**

|  |  | Logistics Management | Performance |
|---|---|---|---|
| Logistics Management | Pearson Correlation | 1 | .939** |
|  | Sig. (2-tailed) |  | .000 |
|  | N | 122 | 122 |
| Performance | Pearson Correlation | .939** | 1 |
|  | Sig. (2-tailed) | .000 |  |
|  | N | 122 | 122 |

**. Correlation is significant at the 0.05 level (2-tailed).

   From Table 5 above, it shows that the correlation coefficient (r) is 0.939. This indicates a very strong positive relationship between logistics management and firm performance. This means that direct relationship exist between the two variables and further improvement in logistics management will result in the enhancement of performance of the firms studied.

**Relationship between Warehousing Management and Market Share**
**Table 6: Correlation analysis showing the relationship between warehousing management and market share**

|  |  | Warehousing Management | Market Share |
|---|---|---|---|
| Warehousing Management | Pearson Correlation | 1 | .936** |
|  | Sig. (2-tailed) |  | .000 |
|  | N | 122 | 122 |
| Market Share | Pearson Correlation | .936** | 1 |
|  | Sig. (2-tailed) | .000 |  |
|  | N | 122 | 122 |

**. Correlation is significant at the 0.05 level (2-tailed).

**Relationship between Warehousing Management and Profitability**
**Table 7: Correlation Analysis showing the relationship between warehousing management and profitability**

|  |  | Warehousing Management | Profitability |
|---|---|---|---|
| Warehousing Management | Pearson Correlation | 1 | .808** |
|  | Sig. (2-tailed) |  | .000 |
|  | N | 122 | 122 |
| Profitability | Pearson Correlation | .808** | 1 |
|  | Sig. (2-tailed) | .000 |  |
|  | N | 122 | 122 |

**. Correlation is significant at the 0.05 level (2-tailed).

**Relationship between Inventory Management and Market Share**
**Table 8: Correlation analysis showing the relationship between inventory management and market share**

|  |  | Inventory Management | Market Share |
|---|---|---|---|
| Inventory Management | Pearson Correlation | 1 | .974** |
|  | Sig. (2-tailed) |  | .000 |
|  | N | 122 | 122 |
| Market Share | Pearson Correlation | .974** | 1 |
|  | Sig. (2-tailed) | .000 |  |
|  | N | 122 | 122 |

**. Correlation is significant at the 0.05 level (2-tailed).

**Relationship between Inventory Management and Profitability**

**Table 9: Correlation analysis showing the relationship between inventory management and profitability**

| | | Inventory Management | Profitability |
|---|---|---|---|
| Inventory Management | Pearson Correlation | 1 | .929** |
| | Sig. (2-tailed) | | .000 |
| | N | 122 | 122 |
| Profitability | Pearson Correlation | .929** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 122 | 122 |

**. Correlation is significant at the 0.05 level (2-tailed).

From the data presented in Table 6 to Table 9, the correlation coefficient (r) are all greater than 0.800 with probability value (PV) of 0.000 which is less than ($<$) 0.05 (level of significance). This indicates a very strong positive relationship between the variables of the study and that there is significant relationship between warehousing management, inventory management as dimensions of logistics management and market share and profitability respectively.

**Test of Hypothesis 1**

*There is no significant influence of Logistics management on Performance of firms*

**Table10: Summary of regression analysis result showing the effects of logistics management on performance**

| Variables | Coef. | t-cal | sig. t | t-tab (0.05, 120) | R | $R^2$ | F-cal | F-tab (0.05, 1, 121) | sig f |
|---|---|---|---|---|---|---|---|---|---|
| Constant | 2.207 | 2.241 | 0.000 | 1.96 | 0.939 | 0.882 | 900.743 | 3.92 | 0.000 |
| Predictor | 0.996 | 30.012 | 0.000 | | | | | | |

Dependent Variable; Criterion

Criterion Variable= $a_o$+ $a_1$P + $U_1$

CV= 2.207 + 0.996P

T-values        = (2.241) (30.012)

Table 10 above reveals that the coefficient of correlation is 0.939. This shows a very strong positive relationship exists between logistics management and firms' performance. Also, the Coefficient of Determination ($R^2$) = 0.882. It implies that 88.2% variation in firm performance is explained by variations in logistics management. The F-cal = 900.743 > F-tab $_{(0.05, 1, 121)}$ =3.92 with a corresponding significant f-value of 0.000. Hence, there is a significant influence of logistics management on firm's performance.

**Test of Hypothesis 1A**

*There is no significant influence of* **warehousing and inventory management on market share**

**Table 11: Summary of regression analysis result showing the effects of warehousing and inventory management on market share**

| Variables | Coef. | t-cal | sig. t | t-tab (0.05, 119) | R | $R^2$ | F-cal | F-tab (0.05, 2, 121) | sig f |
|---|---|---|---|---|---|---|---|---|---|
| Constant | 2.182 | 6.355 | .000 | 1.96 | 0.980 | 0.960 | 1586.735 | 3.07 | 0.000 |
| WM | .201 | 5.826 | .000 | | | | | | |
| IM | .709 | 15.732 | .000 | | | | | | |

Dependent Variable; Market Share

MS= $a_o$+ $a_1$WM + $a_1$IM +U1

MS= 2.182 + 0.201WM + 0.709IM

T-values        = (6.355) (5.826) (15.732)

Table 11 above reveals that the coefficient of correlation is 0.980. This shows a very strong positive relationship exists between warehousing; inventory management and market share. Coefficient of Determination ($R^2$) = 0.960. It implies that 96.0% variation in market share is explained by variations in warehousing and inventory management. F-Cal = 1386.735> F-tab $_{(0.05, 1, 111)}$ =3.07 with a corresponding significant f-value of 0.000. Hence, there is a significant influence of warehousing and inventory management on market share.

**Test of Hypothesis 1B**
*There is no significant influence of* warehousing and inventory management on profitability
**Table 12: Summary of regression analysis result showing the effects of warehousing management and inventory management on profitability**

| Variables | Coef. | t-cal | sig. t | t-tab (0.05, 119) | R | $R^2$ | F-cal | F-tab (0.05, 2, 121) | sig f |
|---|---|---|---|---|---|---|---|---|---|
| Constant | 8.190 | 8.887 | .000 | | | | | | |
| WM | .309 | 3.341 | .000 | 1.96 | 0.935 | 0.874 | 413.747 | 3.07 | 0.000 |
| IM | 1.747 | 14.451 | .000 | | | | | | |

Dependent Variable; Profitability

$$P = a_o + a_1 WM + a_1 IM + U1$$
$$P = 8.190 + 0.309 WM + 0.736 IM$$

T-values        = (8.887) (3.341) (14.451)

Table 12 above reveals that the coefficient of correlation is 0.935. This shows a very strong positive relationship exists between warehousing; inventory management and profitability. Also, the Coefficient of Determination ($R^2$) = 0.874. It implies that 87.4 % variation in profitability is explained by variations in warehousing and inventory management. F-cal = 413.747> F-tab $_{(0.05, 1, 111)}$ =3.07 with a corresponding significant f-value of 0.000. Hence, there is a significant influence of warehousing and inventory management on profitability.

## 5. Discussion of Findings

### 5.1 Relationship between Logistics Management and Performance

From Table 5 and Table 10, it was found that Logistics management affects business performance positively and directly in the firms studied. In the same vein, Li, Ragu-Nathan, Ragu-Nathan, and Rao (2006) opined that the management of logistics activities has become a valuable way of securing competitive advantage and to improve organizational performance. Also, Gillingham (2002) observed that logistics management plays a key role in the firm in terms of delivering the product to the target market on time, providing customer satisfaction, and ensuring that the costs thereof are minimized to ensure that the firm is competitive and profitable. Logistics management plays an extremely important role in customer satisfaction. It hold the key to a major part of quality service for the customer, including elements such as order placement and processing, and the delivery of the product on time, in good order and at the correct destination (Stock and Lambert, 2001) and logistics management increased organizational profitability (Roth, Cattani and Froehle, 2008)

### 5.2 Relationship between Warehousing Management and Market Share

From Table 6 and Table 11, it was discovered that warehousing management significantly and positively affect the market share of the firms studied. To further buttress the above relationship, Koste and Malhotra (1999) observed that effective warehouse management can help firms eliminate inefficiencies so that their products can get to the customers' faster which help to increase the market share of the firm.

More so, today's customers expect to receive their products quickly. If the firm cannot deliver the products into the hands of customers in reasonable timeframe, the customer is likely to look elsewhere for alternate product that will give him or her satisfaction. For this reason, it is imperative that firms increase efficiency of their warehouse so that they can deliver products to customers in a timely manner that will help to increase market share. Customer service failings at the warehouse level can have significant impacts on firms in terms of market share (Sanders and Ritzman, 2004).

### 5.3 Relationship between Warehousing Management and Profitability

From Table 7 and Table 12, it was discovered that warehousing management significantly and positively affect the profitability of the firms studied. Emmett (2005) also agreed on the above result who opined that warehousing plays a significant role in the growth and survival of an organization in the sense that ineffective and inefficient management of warehousing will mean that the organization loses customers and sales will decline and ultimately affects the profit of the firm. Prudent management of warehousing reduces depreciation, pilferage and wastages while ensuring availability of the materials as at when required which affect the profitability of the firm (Ogbad, 2009). The major functions of a warehouse are to store products in order to make an assortment for customers, to assemble customer orders, sometimes to add value to the orders by customization activities, organize transport to the customers, and ship orders timely, in the way desired by the customer in order to increase profitability (Asli, Ozalp and Nilufer, 2013).

## 5.4 Relationship between Inventory Management and Market Share

From Table 8 and Table 11, it was found that inventory management affects market share positively and directly in the firms studied. In the same vein, Rajeev (2008) observed that there is need for business enterprises to embrace effective inventory management practices in order to improve their market share. Similarly, Sushma and Phubesh (2007) in their study of 23 Indian consumer electronics industry firms established that business inventory management policies had a role to play in increasing the firm's market share. Also, Eckert (2007) examined inventory management and role it plays in improving market share. He found a positive relationship exists between customer satisfaction and supplier partnerships, education and training of employees, and technology to improve market share.

## 5.5 Relationship between Inventory Management and Profitability

From Table 9 and Table 12, it was discovered that inventory management significantly and positively affect the profitability of the firms studied. To further buttress the above relationship, Johnson (2008) observed that good inventory management in any manufacturing organization saves the organization from poor quality production, disappointment of seasoned customers and loss of profit. This is done by ensuring timely delivery of raw materials to the factory and distribution of finished goods to customers. If inventory management is not adequately maintained, production cannot meet the aspirations of customers which are loss of revenue to the organization. Also, Bagshaw (2003) stated that accurate planning leads to good inventory decision-making that results in lower inventory with an attendant increase in profit and better customer satisfaction in meeting the expected demand.

In the same vein, Eneje, Nweze and Udeh (2012) concluded that efficient inventory management has major role in increasing profitability of an organization. More so, an efficient management of working capital through proper and timely inventory management ensures a balance between profitability and liquidity trade-offs which is the cardinal aim of every firm (Aminu, 2012). Also, increase in profitability has been proven to depend on the level of inventory management practices (Panigrahi, 2013).

## 6. Conclusion

This paper covers broadly logistics activities to inventory management and warehouse management systems and attempts to determine the role they have on profitability and market share through extensive review. Hence, the findings of the study show that logistics management has an influence on the effectiveness of firms. More so, inventory management and warehouse management has a very strong positive influence on profitability and the market share of the studied firms respectively.

Furthermore, it was found that inventory and warehouse management enhances the effectiveness of the production system which improves the performance of the firms. This finding provides some implications in several aspects. Theoretically, it is supportive that effective logistics management is important to improve inventory and warehouse management effectiveness which immediately enhances firm performance.

Proper logistics management is a management approach that gives the organization an opportunity to have a competitive advantage. An efficient organization will ensure that materials are supplied at the right time, in their right conditions, in their right quantities and kept at the right place under safe conditions for the intended usage. However, insufficient storage and handling of materials if left unchecked can result in major deteriorating of the materials leading to vast amounts of valuable stock been ruined which ultimately leads to financial loss to the organization.

## 7. Recommendations

Based on the findings of the study, firms should reorganize their warehousing and inventory system to suit specific needs of production and product demand to involve a sustainable increase production output, sales and market share. Also, Operation managers in particular and firms in general should consistently monitor their inventory and warehouse system in such a way to sustain consistent production that will yield higher profit for the firm.

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