

**APPRAISAL OF THE DISTRIBUTION SYSTEM
OF MADE IN NIGERIAN PAINTS**
(A STUDY OF THREE SELECTED PAINTS MANUFACTURING COMPANIES IN ONITSHA)

BY

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ENUGU STATE.**

OCTOBER, 2010.

TITLE PAGE

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**BEING A PROJECT REPORT SUBMITTED IN PARTIAL
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF
POSTGRADUATE MASTER OF BUSINESS ADMINISTRATION
(MBA) DEGREE IN MARKETING**

**DEPARTMENT OF MARKETING
FACULTY OF BUSINESS ADMINISTRATION
UNIVERSITY OF NIGERIA, ENUGU CAMPUS
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SUPERVISOR: PROF. IKECHUKWU E. NWOSU, *Ph.D*

OCTOBER, 2010.

CERTIFICATION

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To the best of my knowledge, this work is original and has not been submitted in part, or in full in this or any other University or Polytechnic for award of Degree or Diploma.

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DEDICATION

This project work is entirely dedicated to God Almighty whom in his infinite Mercy gave me the strength and good health, throughout the duration of my Masters Programme at UNEC.

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ABSTRACT

This research was conducted to appraise the distribution system of made in Nigerian paints, which was a study of three selected paints manufacturing companies in Onitsha, Anambra State. The three selected paint manufacturers include: Citizen Chemical Industries Nigeria Limited, Ages Enterprises Nigeria Limited and JACBON Industries Limited. This investigative research was carried out using questionnaire, interviews and personal observation. The sample size was determined using Bole's formula. In this research, one hundred and ninety six (196) customers/users of the three selected paint companies were sampled out of a population of three hundred (300). Also, all the thirty (30) distributors of the three selected paint Companies were administered with questionnaires since they are few. The data collected were classified and analyzed using percentage. Furthermore, hypotheses were tested using Z test statistical measurement. The major findings are as follows: The customers/users of the three selected paint manufacturing companies are not satisfied with their present distribution system; There is need for the introduction of effective and efficient physical distribution management policy by the selected paint manufacturing companies; Efficient physical distribution management increases profitability of companies; High cost of distribution of paint leads to high cost of paints in the market. Recommendations to readdress the problems were stated. These include: There should be effective management of physical distribution activities in the companies and other marketing logistics operations to satisfy the customers. The companies should be well equipped with all necessary facilities. The management should source for fund to procure raw materials for continuous production which will lead to constant availability of the products that will satisfy the customers. The system of distribution of the companies' product using mainly the distributors should be relaxed hence, it does not ensure adequate market coverage as the products do not get to the numerous customers scattered all over the town. An intensive distribution strategy (direct, indirect and integrated strategies) should be adopted. New delivery vans should be purchased and more salesmen employed by the companies to sell the products. The management of the companies should introduce many different sizes of paints products to take care of the different needs, purposes and uses of their customers. The management should adopt modern Inventory Control Measures such as the A-B-C Analysis; Two Bin Method and Economic Order Quantity. Also, adequate warehouses and depots should be constructed with Store Officers in-charge for proper inventory management.

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CHAPTER ONE

1.0 Introduction

1.1 Background of the Study

The distribution function is one of the marketing variables in the marketing mix. It is therefore, a marketing function, which aims at getting goods and services from the manufacturer to the ultimate consumer, transferring titles and physically moving the products in the process (Adirika, 2001:193). Distribution is the process of getting products and services from producers to consumer/user, when and where they are needed. It creates time, place and possession utilities and the transfer of ownership utility for the consumer or users to enjoy the form utility. It is often said rightly that production remains incomplete until goods or services concerned reach the final consumer. Again, unless products are

distributed and delivered in the right amount, at the right time, in proper conditions, buyers may be reluctant to buy (Achison, 2000:180).

The unprecedented growth witnessed in the paint industry in Nigeria since the last two decades has led many Nigeria paint manufactures to show more concern for the market of their products. Unless a product is properly channeled, it cannot reach its target market/customers, it cannot achieve the required sales volume, the planned market share and profit goals of the firm may not be realized too. It is the facilitation of this sort of accessibility that is the major function of a firm's channel of distribution.

Distribution system is a set of facilitating agency including order processing, material handling, warehousing, inventory management, clearing and forwarding companies and transportation used in the movement of products from producers to consumers and end users. Planning an efficient and effective distribution system can be a significant decision in developing an overall marketing strategy.

A company that places the right products in the right place, at the right time, in the right quantity and price and with the right support services is able to sell more than competitors who fail to accomplish these goals or objectives. These apart, distribution is an important variable in marketing strategy because it can decrease costs and increase customer satisfaction. Infact, speed of delivery along with services and dependability is often as important to buyers as price of products. In order to obtain better result, physical distribution activities should be integrated with marketing channel decision. This research work which is on the distribution system of some selected Made in Nigeria Paints in Onitsha, Anambra State was conducted with the objective of evaluating how paint manufacturers move their end products to the final consumer or users. The selected paint manufacturers which the researcher based on include Citizen Chemical Industries Nig. Ltd, Ages Enterprises Nigeria Ltd and Jacobon Industries Ltd. A survey

conducted by the researcher shows that the distribution of paints by the manufacturers in Anambra State is mostly through marketing intermediaries and channel members who constitute the distributors and retailers of the paint products. Such method of distribution makes the products to be available only at strategic locations in towns and industrial markets within Onitsha, Anambra State. This promotes competition, making the industry to be highly competitive. As a result, it becomes proper and necessary for every paint manufacturer to formulate and adopt a cost effective distribution system that will guarantee better customer patronage through improved customer services in order to secure vantage competitive edge over other competitors. The fundamental questions at this juncture are: Do these adopted means of distribution offer the best services to the customers? And how efficient are these in terms of total cost minimization?

Most paints producers came into existence sequel to the ban placed on importation of paints and allied products into the country. In addition, the introduction of Structural Adjustment Programme (SAP) and availability of the basic raw material gave an added impetus to the establishment of the industry.

The selected paint makers make the following kinds of paints: Duntop Coat, Gloss or Oil Paints, Textured Coating (Texcote), Emulsion Paints, and Wood Finishing. The three selected paints makers are: Citizen Chemical Industry Nig. Ltd. This was established in 1980~~s~~ and today has largest share of paint market in Onitsha ó Anambra State. The factory is located at KM2 Nkpor/Obosi Road Onitsha. Its products are Dunlop Coat, Citizen Gloss Paint, Citizen Texcote, Citizen Emulsion, Citizen Wood Vanish and Citizen Glue.

Ages Enterprises Nig Ltd is the producer of Home Pride Super, Delux Emulsion and Home Pride Executive. Its factories are located along

Enugu ó Onitsha Road near New Motor Parts Market, Nkpor, and Odume Layout Obosi.

Jacson Industries Ltd is the producer of Bonalux Paints and its factory is at Obosi Road, Onitsha.

With regard to the profile of these companies, one can see that they offer the same lines of products. The difference is only on the brand names. They are therefore, engaged in competing for customers patronage and for any of them to achieve competitive advantage over the others, it has to improve its distribution system strategy.

Therefore, the makers of paint products should gear efforts towards seeking information about the consumers needs, designing appropriate paints products of different sizes, properly packaged in the manner most acceptable to the consumer, promoted through appropriate media, get them to the points where the consumers will buy with ease using appropriate channels at a price agreeable and affordable to the potential consumers.

1.2 Statement of the Problem

In carrying out this study, some problems were identified from the background and they include: Inadequate provision of the customer services by paint manufacturing companies; There is problem of inadequate coverage of the target market; There is inadequate physical distribution network of paint companies; There is problem of low demand of the product and poor patronage; Inadequate application of Inventory Control Measures.

1.3 Objectives of the Study

1. To identify if the paint customers are satisfied with the product and distribution policy.

2. To evaluate the physical distribution strategy adopted in the marketing of paints by the companies of study.
3. To determine the physical distribution network of the three selected paint companies.
4. To determine the extent of demand of the paint products and patronage.
5. To know if the Inventory Control Measures are applied.
6. To make recommendations that will help to improve the distribution system and marketing of made in Nigeria Paints.

1.4 Research Questions

1. What type of Distribution Systems are adopted by the three selected paints companies?
2. Is the physical distribution network of the three selected paint companies efficient?
3. What is the level of demand and customers patronage of paints in the three selected paint companies?
4. Are the customers of the three selected paint companies satisfied with the products?
5. What are the Inventory Control measures used by the three selected paint companies?
6. How efficient is the distribution system of the selected paint companies?

1.5 Formulation of Research Hypotheses

The following hypotheses were formulated:

1. H_{01} : Efficient and effective distribution system does not lead to customers' satisfaction.

- H₁: Efficient and effective distribution system leads to customers' satisfaction.
2. H₀: The profitability of the paint business does not depend on the effective distribution network and marketing.
- H₁: The profitability of the paint business depends on the effective distribution network and marketing.
3. H₀: High cost of distribution does not lead to high cost of paints in the market.
- H₁: High cost of distribution leads to high cost of paints in the market.

1.6 Significance of the Study

The study will show whether it is advisable to paint manufacturers to continue with their present physical distribution system or to discard it. Efficiency in the distribution system of paint companies will bring about increase in the sale of paint products, which will result in increase in profit to the companies. This increase in profit may induce the companies to expand or lead to increase in the shareholders fund/dividend.

Increase in profit resulting from good physical distribution management will bring about increase in the workers salaries and entitlements and these will lead to high standard of living. This will in turn motivate workers to high performance and productivity. Efficiency in the physical distribution management of paint companies sought by this study will take care of the interest of the paint user by suggesting measures of setting any problem of unsteady supply of paint products caused by the present distribution system.

Moreover, efficiency in the physical distribution management sought by this study definitely, improves the economic development of Nigeria,

considering the wide spread of social and economic problems caused in the past when Nigeria were importing paints.

1.7 Scope of the Study

The study centres on the appraisal of the distribution system of Made in Nigeria Paints. And this is a study of three selected paint manufacturing companies in Onitsha, Anambra State.

1.8 Limitations of the Study

This study is limited to Onitsha, Anambra State, due to financial and time constraints. It is pertinent to mention here, that Onitsha is chosen because it is one of the major commercial cities in the country. For this reason, it is densely populated and this therefore makes it a good representative of paint manufacturers and users.

Furthermore, time for the submission for the project and other logistics arrangements did not permit the researcher to extend this study to other cities in the country.

1.9 Definition of Terms

- i. Production:** Production is the creation of goods and services which possess utility that are capable of satisfying human wants.
- ii. Industry:** An industry is a group of companies/organization that produces similar or identical goods and services. Example is the Paint Industry.
- iii. Utility:** Utility is the ability of goods and services to satisfy human wants. It can also be regarded as the quality of being useful.
- iv. Efficient:** This means performing duties well. According to Peter Drucker: Efficiency means doing things right.

- v. **Effective:** This means able to bring about the result intended. It also means able to do the right thing (Peter Drucker).

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CHAPTER TWO

2.0 *Review of Related Literature*

Production is not complete until the manufactured goods get to consumers for whom they are meant. A typical firm will discover that the customers of its products are scattered abroad. The firm's decision to distribute its products directly through its own sales outlets or indirectly through marketing intermediaries alone is not enough to get the goods to consumers. The time has to ensure that the products are actually available at or made available to the distribution outlets. Adequate care has to be taken of the products to minimize losses or damages and commensurate customer services have to be rendered in order to ensure customer satisfaction and increased patronage. In other words, there is the need for proper management of the flow of products from manufacturers to consumers in order to achieve consumer satisfaction and the commercial goals of the firm.

Distribution is the manner in which the products of an industry get to the various users. In other words, distribution can be said to be the transportation of goods from the point of original or intermediate production to the place of sale or the place of further fabrication, the storage of goods until they are needed, the merchandising display and advertising of goods and their actual sale or transfer into the possession of the ultimate buyer. It can also, in a broadest sense, be said to be a complete process from the time the finished product is ready for shipment until its delivery to the ultimate consumer. It embraces all activities, which have to do with the planning and execution of the physical flows of material inputs and finished goods from the owner to the user or ultimate consumer. In this sense, it includes a number of fields of specialized management such as sales, advertising, financing, traffic management and warehousing. All

these costs constitute the total cost of distribution. The attainment of the goals of distribution falls into the real of physical distribution aspect of marketing.

2.1 Importance of Physical Distribution

The aim of distribution is to get goods and services from the point of production to the point of consumption. Physical distribution is the term used to describe all the activities that have to do with planning and implementing the movement of goods from manufacturers or resellers to buyer. This involves not only the physical movement and handling of products, but the transfer of ownership as well. The activities involved in physical distribution include the processing of sales orders, materials handling, inventory service among others. Under physical distribution management, these activities are aligned in order to ensure the right types and quantity of products is made available to customers at the right place, time and condition at the lowest possible cost to the firm.

There is no consensus in marketing circles as to what the definition of physical distribution should be. According to Kotler (1995:585), physical distribution involves planning, implementing and controlling the physical flows of materials and final from points of origin to points of use to meet customer requirement at a profit.

Physical distribution, according to Stanton: (1984:351) consist of all the activities concerned with moving the right amount of the products to the right time. Physical distribution is taken to be concerned with the movement of the finished products from the point of production to the consumers for whom they are meant. According to Agbonifoh (1988:502), physical distribution or distribution logistics is defined as warehousing and physical movement of products from the producer or original owner to the ultimate consumer or user. Physical distribution has come to be known by

some as *“the other half of marketing”*. The advocates of this view see marketing as comprising two parts ó conventional marketing (market research, product development, pricing and promotion) and physical distribution. The physical distribution system consists of the following sub-system:

- (a) Fixed facilities such as warehouses and wholesale and retail outlets
- (b) Transportation
- (c) Inventory or stock
- (d) Logistical support

These components are connected by a series of integrated set of decision which seek to promote the economic interest of both the firm and customer. The economic interest of the producer is promoted by the execution of the physical distribution function at a minimum over all cost.

In any marketing strategy for industrial goods, distribution decisions are usually structured by several factors which include:

- (i) Organizational goods
- (ii) Marketing objectives
- (iii) Market opportunities
- (iv) The channels and middlemen participants

In this regard, Bullen (1965) cited by Achison (2000:183), maintains that the importance of physical distribution and its ultimate impact on marketing objectives depend on the products being marketed, the needs of the customer and the structure of the distribution channel.

Organizational goals and policy tend to determine all other marketing strategy planning. Physical distribution is considered when analyzing market opportunities. In this consideration, the firm has to identify and develop appropriate channel structures to reach customers. The direction of distribution considerations are also indicated by the wants, where, when and how to make the goods available to the firm. In this

respect, Woodruff (1976) cited in Achison (2000:183), maintains that the marketing is supposed to build and maintain a sound understanding of the market in order to manage selling activities, market performance and distribution of products. In addition, he should recognize and implant the objectives of the distribution system, that is, to bring about the physical movement of products at reasonable cost to the consumer or producers as the case may be and to maintain a reasonable level of consumer service.

2.2 *Channel of Distribution: Conceptual Overview*

Apart from producing the goods and services required by buyers, pricing and promoting them (i.e. informing buyers about them), marketers have to make these goods and services available to the buyers, that is, place them at his or her convenience in order to make them seen or perceived, admired, accepted, and purchased by them (Udeagha 1995:194). Producers of goods and services make them available to their customers through various avenues called channels of distribution or marketing channels. This term owes its origin, according to Zikmund et al, cited in Udeagha (1995:194) to a French word for canal, thus, suggesting a path through which something moves. Channels of distribution are therefore, the routes or paths through which goods and services pass as they move from their producers or manufacturers to their buyers. According to Stern et al (1982:3) they can be viewed as "sets of inter-dependent organization involved in the process of making a product or service available for use or consumption". Tate et al (1982:335) see a marketing channels as "the pipeline through which a product flows on its way to the ultimate consumer." Such a pipeline may consist of organization only or be a mixture of organization and individuals. This has been emphasized by Kotler (1983:354), who sees them as "sets of firms and individuals that take titles or assist in transferring title to the particular goods or services as it moves

from the producer to the consumer. We see that the term channels of distribution or marketing channels refers to the system of marketing institutions through which goods or services are moved from their producers to their consumers. In some cases, physical products transfers are involved, in others, an intermediate marketing institution may take title to the goods without handling them. Both the producer and the consumer or buyer of the goods or services are members of the channels of distribution. Subhash (1981:327) views these channels as "organized structures of buyers and sellers which bridge the gap of time and space between the manufacturer and the consumer". From daily experience, we also know that producers and manufactures sell their products and services direct to their buyers or consumers, who on their own part, sometimes seek out the suppliers to make some of their purchases themselves.

According to Modern (1987:324) channel of distribution is seen as the link between production or supply and consumption. Stanton (1981:351) defines channels of distribution for a production as, "the route taken by the title to the product as it moves from the producer to the ultimate consumer or industrial user". Suffice it to say that channels of distribution are both the internal and external structures used to pass ownership to a product from the producer/supplier to the user or buyer.

In the discussion of channels of distribution, the American Marketing Association see distribution channels as, "the structure of inter-company organization units and extra-company agents and dealers, wholesale and retail, through which a commodity, product or service is marketed". In this definition, the channels of distribution are divided into two distinct units. Those units or aspects owned by the organization, which they refer to as "inter-company organization units", and those aspect owned by outsiders (not directly under the control of the firm) which they referred to as "extra-company". This means that it is too difficult or impossible to

see any firm claiming to own all aspect of distributive network for its products. The usual practice is for organization to try as much as possible to own reasonable percentage of a distributive network, and to leave some aspects of the network in the care of outsiders. The degree to which an organization owns the distributive network for its products will determine the extent of the control the company have in order to determine the fate of its products along the channels.

2.3 *The Role of Channel of Distribution*

There is almost always a gap in time and space between production and consumption of goods. Contemporaneity in production and consumption of goods in any modern economy is highly improbably. Greater specialization and division of labour and advancement have made it convenient for point production and consumption to be differently located (Okeke 1993:105). Distribution is the business function that bridges the gap between production and consumption of goods and services. The specific functions that must be performed before goods produced by manufacturers are consumed by consumers are many. Baker (1979:183) cited by Okeke et al (1993:105) has identified five such essential functions which are:

- (a) Transfer of title to the goods involved.
- (b) Physical movement from the point of production to the point of consumption.
- (c) Storage functions
- (d) Communication of information concerning the availability, characteristics and price of the goods.
- (e) The financial of goods in transit, inventory and on the purchase.

Realizing that distribution functions create form, time, place and possession utilities, Kotler (1986:412) identifies eight key functions or tasks involved in the work of distribution. These include:

- (a) Research ó the gathering of information necessary for planning and facilitating exchange.
- (b) Promotion ó the development and dissemination of persuasive communication about the offer.
- (c) Contact ó the searching out and communicating with prospective buyers.
- (d) Matching ó the shaping and fitting the offer to the buyer's requirements. This includes such activities as manufacturing, grading, assembling and packaging.
- (e) Negotiation ó the attempt to reach final agreement on price and other terms of the offer so that transfer of ownership or possession can be effected.
- (f) Physical distribution ó the acquisition and dispersal of funds to cover the costs of the channels work.
- (g) Risk taking ó the assumption of risks in connection with carrying out the channel work.

The first function help consummate transaction; the last three help fulfill the completed transactions. There is no question as to avoiding the above enumerated functions. The issues are the extent to which the functions must be performed and the institutions that must perform them.

These two derive from the common characteristics of the functions, Kotler (1986:412) points out that the functions have three things in common. They use up scarce resources; they can often be performed better through specialization and they are shiftable among channel members. Using up scarce resource suggests that whoever performs the functions must incur costs (expend managerial effort and tie up capital). Being

amenable to specialization suggests that the functions singularly or collectively can be assigned to specialized institutions. The characteristics of shiftability ensure that many marketing institutions can perform the distribution function.

2.4 *Types of Distribution Channels*

The building blocks of a distribution channel are producers, wholesale, agents, retailers and consumers. Producers and consumers are automatic members of any distribution channels but the membership of the others is usually at the discretion of the producer whose responsibility is to select the channel.

Companies use direct, indirect or integrated channel of distributions to reach their target markets depending on the nature of the products and the market, the firm's financial strength, the characteristics of customers etc. The channel for consumer products is not the same with that of the industrial products. The distribution channels is direct when a producing firm or organization sells its goods or services direct to the buyer, to consumer or user without involving any intermediary or middleman at all. It is indirect channel when the organization or producer sells or an organization that functions as a wholesaler, or retailer, an agent or a broker. The major types of distribution channels available to a producer for the distribution of products are represented below:

Distribution channel available to a producer for the distribution of products are represented below:

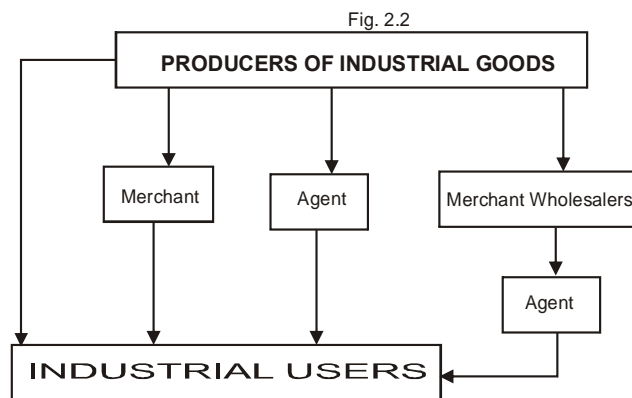
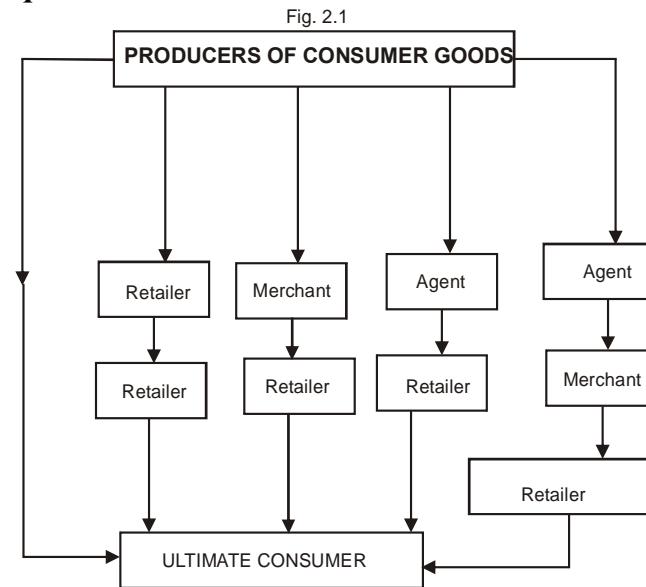


Fig. 2.1: Major Marketing Channels available to producers.
Source: William, S. J: Fundamental of Marketing (1984:338).

Fig 2.1 represents the major distribution channels, which a producer can use depending on whether he is dealing in consumer products or in industrial products. My major concern is the distribution channels for products of which there are give alternatives as shown in Fig 2.1 (a) from which the producer can choose. These alternatives are discussed below:

1. *Producer – Consumer*

The products flow from the producer to the consumer without involving an intermediary that is called zero-level channel or a direct marketing channel.

This is the most commonly used channel for industrial goods and may be used when.

- (i) The manufacturers and consumers are large enough to take large quantities of delivery direct from the manufacturers.
- (ii) Orders are made to specification of the user and are moved directly to the customers.
- (iii) Where manufacturers industry is located near the industrial customers, regular deliveries are made direct to the user or.
- (iv) Manufacturer distributes through its own sales-force or branch warehouse or depot (no physical distribution is performed as such by the sales force or representative of the manufacturer).

2. *Producer – Retailer - Consumer*

This is a one-level channel, which contains one selling intermediary. In consumer markets, this intermediary is typically a retailer. In industrial markets it is often a sales agent or a broker. This involves bulk purchase by large retailers from manufacturers to agricultural producer, the retailer then sells to the final consumer.

3. *Producer – Wholesale - Retailer - Consumer*

This is a two-level channel containing two intermediaries. In consumer markets, they are typically a wholesaler and a retailer. In industrial markets they may be industrial distributors and dealers. It is equally recognized as a "traditional" channel for consumer goods.

Many small retailers and small manufacturers find this channel as the only economic feasible choice. There are many users of the products.

4. *Producer – Agent - Retailer - Consumer*

Many manufacturers prefer to use a manufacturer's agents, a broker or some other agent middlemen to reach the retail market especially large scale retailers.

For instance, manufacturers of computers supply to dealers to distribute to users of company's make or brand of computer.

5. *Producer – Agent - Wholesale - Retailer - Consumer*

Manufacturers use agents, middlemen and wholesalers to reach small retailers.

2.5 *Distribution Management*

Distribution management is concerned with the entire process of setting up and operating the contractual organization that is responsible for meeting the firm's distribution objective. Distribution management policies and strategies must be developed and implemented before physical distribution management will follow. For instance, the comprehensive distribution strategy has to be planned, channel members have to be selected and persuaded to carry the products, negotiations have to be done in the areas of credit, payment procedures, inventory level to be maintained, the promotional support provision and the supervision and control of members planned before the actual physical distribution of the goods. In addition, to the above activities, we shall examine the following managerial functions under distribution management namely, channel design and

choice; determine channel objective and constraints; channel distribution strategies; channel management decision and evaluating channel members.

Channel Design and Choice

In designing marketing channels, producers have two alternatives to contend with, that is, what is ideal and what is available. Rosenbloom (1983:155) recognizes this view when he said that channel design entails "decision involving the development of new marketing channels where none had existed or the modifications of existing channels". This definition involves the setting up of new distribution channel by the producer to distribute his products. It also involves the modification channel by the producer to distribute his products. It also involves the modification of already existing channel to make it more efficient. This second option could be taken as a result of financial weakness or fear of unknown, inherent in new distribution channel.

Prudent and rational channel design and choice enables a producer to obtain differential marketing advantage over his competitor. The ability of marketing intermediaries in delivering these distribution advantages will determine the extent to which a producer will go in choosing any distribution option.

The starting point of effective distribution planning in the opinion of Kotler (1980:306) is determining the type of market the producer wants to reach. This will enable the producer to determine whether it can serve the market better with a given channel or not.

Determining Channel Objectives and Constraints

Well defined channel objectives will enable a manufacturer to market his products and reduce distribution costs to the minimum. Wrong definition of channel objective will result in wrong channel design;

consequently, the firm will suffer certain losses like loss of sales revenue, loss of customers who will switch over to other brands or outlets and as well incur back order costs (cost of placing special order for those customers who have agreed to wait for their order). The determination of channel objective has some certain factors expressed by Baker (1979:89) and Kotler (1986:423)

These factors are:

- (a) Company characteristics
- (b) Product characteristics
- (c) Middlemen's characteristics
- (d) Competitor's characteristics
- (e) Environmental characteristics
- (f) Market characteristics

(a) *Company Characteristics*

The financial strength, desire for channel control and ability of management influence the selection of a channel outlet. A firm with sound financial resources will prefer to sell its products through its own outlets so far the sales volume per period is large.

(b) *Product Characteristics*

Perishable products require more direct marketing because of the dangers associated with delays and repeated handling. Consumer goods generally require indirect channels of distribution. Convenience goods, for instance, must be placed at the convenience of a wide spectrum of buyers for easy access to them. This is a task that requires the use of a large network of retailers to be effective. Perishable agricultural goods are sold through the direct channel of distribution to avoid delays that could lead to decay or spoilage.

Shopping and specially goods are sold through middlemen except those that are produced on order. Industrial goods are mainly sold direct to their users. This is because in addition to being a high unit ó value product, they are bulky and require installation, technical or maintenance services.

(c) *Middlemen Characteristics*

The choice of middlemen is guided by the services provided by them. Such services included promotion, storage, negotiation, contact and credit, manufacturers avoid selling their goods and services through middlemen for reasons that included lack of co-operation, demand for every high margins and inefficiency.

(b) *Competitors Characteristics*

In a competitive environment, no company can choose its channels of distribution in isolation. It must be influenced by its competitorø channels. Producers may want to compete in or near the same outlets carrying the competitorø products. Thus, food processors want their brands to be displayed next to competitive brands, in other to compete with him. In other industries, the producers may choose to avoid the channels used by competitorø in other to create scarce potions in retails stores. Channel design and choice is influenced by the type of channel outlet ones competitorø are using.

(e) *Environmental Characteristics*

Environmental factors like the state of the economy, legal restrictions, technology and socio-cultural factors can constitute a threat or opportunity to the selection and development of efficient

distribution channel. When economic conditions are depressed, producers want to move their goods to market in the most economical way. This means using shorter channels of distribution and dispensing with non essential services that add to the final price of the goods. As a result of legal regulation and restriction, electricity is produced and distributed in Nigeria alone by NEPA.

(f) Target Customer Characteristics

Channel design is greatly influenced by customer characteristics. The number of potential customers, their geographical concentration and order size influence the choice of marketing channel and channel customer population. If the customers are few, a manufacturer may use his sales officer or sales branch, sales force to sell to individual buyers. The purchasing pattern (that is, the order size) customers buy will determine whether to use direct or indirect channel of distribution.

Channel Level Strategies

This refers to the decisions on the number of middlemen to use at each level. This means the intensity of distribution a manufacturer wants to employ at any given channel level. According to Kotler (1986:425), three levels of distribution strategies available to a manufacturer can be identified as follows:

(a) Exclusive Distribution Strategy

This strategy means that one particular agent or selected store is serving a given area and it is granted sole-right to carry a product line. A firm selects a channel that can provide maximum prestige for the product and which will be most likely to sell to a variety of

customers that the manufacturer has designed his products to reach. The choice of exclusive distribution would be quite logical if one distributor is clearly dominant in a market. This strategy is used in the distribution of high quality or unique products that customers seek out to purchase such as high quality watches and clothing items. Manufacturers make use of this strategy to serve another market segment.

Advantages of Exclusive Distribution Strategy

- (i) It promotes dealer loyalty, greater sales support and a higher degree of control over the market.
- (ii) It promotes better inventory and merchandising control. Company expects full co-operation and enthusiastic promotion of its product.
- (iii) It gives better forecasting.
- (iv) The dealer agent may be more willing to finance inventories and thus, bear a higher degree of risk than a more extensive dealer.
- (v) It gives the firm greater opportunity to provide dealer with promotional support.
- (vi) With fewer outlets, it is easier to control price margin.
- (vii) The dealer tends to be more willing to provide market information for planning, research and forecasting.
- (viii) It is very suitable for special products.

Disadvantages of Exclusive Distribution Strategy

- (i) There are risks of not having the product widely distributed enough to achieve maximum selling impact.
- (ii) Ill-will exists for refusing other prominent sellers the privilege of handling the product.

- (iii) Sales volume may be lost when one seller is depended on.
- (iv) A company places all its fortunes on a geographical area in the hands of one dealer or agent.
- (v) It is characterized by high price, margin and price inelasticity.

(b) *Selective Distribution Strategy*

In introducing the marketing channel, Bruce Mallen (1964) cited by Achison (2000:222), remarks that selective selling requires a well-planned system of selection of only the most desirable channel for reaching preferred customers. The firm tends to select only dealers or agents or outlets, which identify with a product class. This approach may reduce selling costs and increase sales by distributing only through institutions that will work closely with the firm in pushing particular products. It also helps a manufacturer to reduce the number of outlets in order to reduce competition.

This strategy should be limited by criteria that permit the firm to choose only those outlets that will make optimum contributions to the firms overall distribution objectives. These criteria consists of such considerations as show room space, service facilities used where a manufacturer requires a high caliber institution or agent to carry a full product line and provide the necessary (technical) service. It is best applied where high sales volumes can be generated by relatively few numbers of outlets. Shopping goods are examples of the class of goods distributed in this way.

The greater disadvantage is the risk of not adequately covering the market. To obtain complete coverage, the firm may consider having extra channel outlets to reach widely sectorred markets.

(c) ***Extensive/Intensive Distribution Strategy***

To obtain complete coverage of the market, a firm will generally require the use of more than one type of channel outlet. The company may wish to sell directly to its largest account and use indirect channels of wholesaler to reach his widely scattered customers. However, the nature of the product will determine the type of distribution channel to use.

Producers of convenience goods and common raw materials typically seek intensive distribution, that is, stocking their product in as many outlets as possible. These goods must have place utility. Cigarettes, for example, sell in over one million outlets to create maximum brand exposure and convenience.

Repair or maintenance parts and low priced and frequently used convenience products would be most suitably distributed with extensive or intensive distribution strategy. It would not serve the purpose of distribution of capital equipment that are used by industrial firms. A manufacturer of such supplied and replaceable parts adopts intensive distribution and can sell through its own sales force to cover various industrial estates that used his supplies. Intensive distribution strategy in industrial marketing is limited to low priced and frequently consumed supplies.

Since distribution strategies are primarily concerned with the flow of goods from the manufacturer to the customers, the markets should determine the best channel participants and best combination of distribution alternatives that are suitable to reach the marketing goals.

2.6 Distribution of paints compared with distribution of other related products such as shoe polish

Paints can be classified as an industrial or semi-industrial product while shoe polish could be classified as a consumer product. Apart from the fact that the objectives of consumer and industrial goods market differ substantially, the two can be distinguished on the basis of the following criteria.

(a) Channel Characteristics

The distribution channels in the industrial market are normally shorter and more direct. Paint manufacturers use distributors and sales representatives to sell their products to the end users whereas the manufacturers of shoe polish employ the long channel of:

Producer ó Wholesaler ó Retailer ó End User mode of distribution. The distribution channel is even longer in most occasions.

- (i) Most independent middlemen can be completely done away with the distribution of paints but for shoe polish.
- (ii) Middlemen in the distribution of paints are generally different from those in shoe polish. In paints marketing, they comprise mostly paints distributors and manufacturers representative. Middlemen in shoe polish distribution comprises of wholesalers, agents, retailers, etc.
- (iii) The channel members for paints are generally expected to make more sales effort than those for shoe polish.

- (iv) The production line inventory requirements make physical distribution more important in distributing paints than for shoe polish.
- (v) Paint buyers are usually few in number and concentrated geographically unlike those for shoe polish that buy in smaller units and are scattered over a wide area.
- (vi) The orders involved in paints are usually large and more expensive unlike in shoe polish whose orders are less with corresponding less expensive.

(b) *Buyer Characteristics*

- (i) Purchasers of paint products are usually more technically qualified than shoe polish product buyers.
- (ii) Paint buyers appeal more rational than emotional buying motives.
- (iii) Decision making in paint purchases usually involve many people that may constitute a committee or buying centre for that assignment. Purchasing decision for shoe polish is an individual or almost a family affair.
- (iv) Packaging goal of paints products is usually more of protective than promotional.
- (v) There is a higher incidence of reverse elasticity of demand in paints products unlike in shoe polish products.
- (vi) Paints products buyers need a lot of information to plan ahead and to avoid the higher risks involved investing large sum of money in bulk purchases. Shoe polish product buyer requires little or no information before purchasing.
- (vii) Paints products are usually bought on specifications. This is not the case usually in purchasing shoe polish products.

(c) *Promotional Characteristics*

- (i) Personal selling is given more emphasis in paint products than in shoe polish products.
- (ii) Sales people involved in paints products possess good knowledge of the technicalities of the products they handle unlike the retailers and wholesalers involved in shoe polish and who in addition trade on many other articles.
- (iii) Advertising of the paint products is used to lay the foundation for the sales-person calls.
- (iv) Advertising themes in paints products normally stress more factual and technical data and are generally less-emotional.
- (v) Sales promotion activities in paints products market centre allow the use of catalogue and trade shows unlike in the shoe polish products market.

(d) *Pricing Characteristics*

- (i) Price is of less importance to the purchaser of paint products than quality, service and durability.
- (ii) Negotiated prices are common in paints products than in shoe polish products.
- (iii) Financing arrangements are usually provided in pricing of paints products due to the high unit value, bulk purchase and the closeness of the two parties involved in the transactions.
- (iv) There is a wider usage of list and net pricing in paint product marketing than in shoe polish marketing. This involves the use of trade and quantity discounts of published prices.

- (v) There is little use of prices as promotional tools in paints products.
- (vi) Stabilization of price and non-price competition are quite common in paints products than in shoe polish products.

2.7 *The importance of using middlemen in distribution*

Referred to alternatively as marketing intermediaries and channel members, the term middlemen describes any member of a distribution channel who play the role of a go-between the consumer or user and the producer.

In order to stress the importance of using middlemen, one has to analyze the manufacturer's tasks to see if there are advantages in using middlemen to perform some of them.

A manufacturing organization that produces goods or services and decided to sell them direct to the market must use its own outlets or use sales representatives to sell them or mail the goods. In each case, the organization, by abounding its specialized field of manufacturing, loses the benefits of specialization and must therefore, grapple with the problem of inefficiencies. By using the services of middlemen, the manufacturer is free to concentrate on its area of specialization and even to improve on it.

It has been proved that the use of middlemen in the distributions of goods and services enhances the efficiency of the process by reducing the number of transactions which would have been made had the direct channel of distribution been used.

An example is the case of manufacturers who sold their goods direct to four buyers as shown in fig. 2:2 and decided to use middlemen to supply their goods to their four customers as shown in fig. 2:3. As demonstrated in these figures, the second option, the introduction of middlemen in the process of distribution is more efficient as it involves smaller number of

transactions than the alternative. The second option involves only eight as against the sixteen transactions in the first alternative.

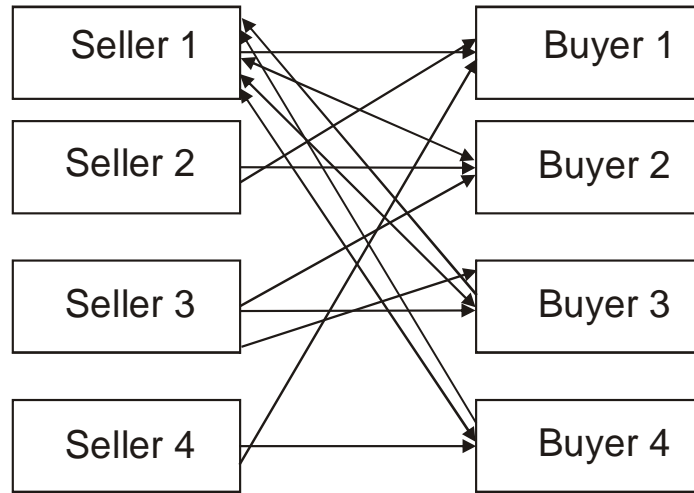


Fig 2:2

The indirect channel of distribution

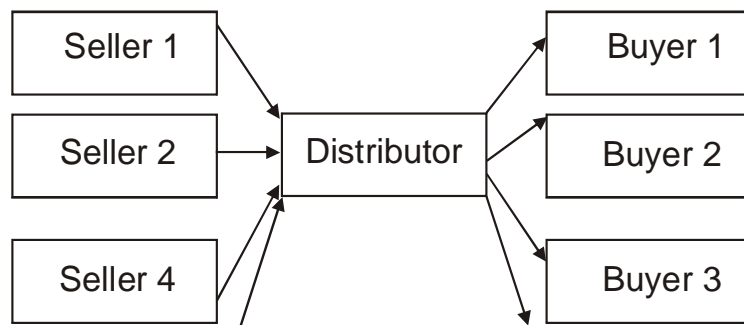


Fig 2.3

The Indirect Channel of Distribution

It is clear from the above analysis that the use of middlemen in the firms' channel of distribution reduces costs and enhances distribution efficiency.

According to Baker (1991:343), cited in Udeagha (1995:2000), the cost advantage of selling through an intermediary, include:

1. Minimizing the cost of a field sales organization.
2. Elimination of warehousing costs.
3. Minimizing of inventory financing charges.
4. Minimizing of sales cost involving, financing of account.
5. Minimizing of the risk of loss through inventory obsolescence.
6. Minimizing of loss through bad debts and reduction of the cost of credit control.
7. Elimination of local delivery cost.
8. Reduction of the costs of processing to meet non-standard orders.

Baker (1991:344) also points out that the use of intermediaries makes it possible for the producer to reach all potential users without having to incur the fixed costs which would arise if selling uses. These middlemen can also provide quicker and immediate pre and after sales services than the distant producer.

2.8 Channel Dynamics

Distribution channels do not stand still. New wholesaling and retailing institutions keep emerging, and whole new channel systems evolve in response to the business environment.

Evolution of integrated channel of distribute is one of such changes (Kolter 1984:546). These types of distribution channels are channels where the intervening middlemen be it a retailer or a wholesaling middlemen and the producer they serve belong to the same organization or co-operate to achieve marketing objectives. The integration can be initiated by any member in the distribution channel.

This type of distribution system helps the channel members achieve the following:

- Economies of scale through their size
- Gain bargaining power
- Eliminate duplication of services
- Ensures effective financial and administrative financial and administrative control
- Competitive edge as important aspect of the integrated channel of distribution is the vertical marketing system (VMS). Vertical marketing system consists of the producer, wholesaler(s) and retailer(s) acting on unlimited system. Under this system, either one channel member owns the other or franchises them or has so much power that they co-operate.

Vertical Marketing System (VMS) are of many types namely:

- (i) The corporate type
- (ii) The contractual type
- (iii) The administered type
- (iv) The co-operate type

Corporate Type: This refers to a vertical marketing system where successive stages of production and distribution are combined under a single ownership. It can be initiated by channel members from any level. The UACN in Nigeria functions as a vertical integrated marketing system of the corporate type. The organization owns a whole organization, the GB Ollivant and retailing firm.

Contractual Type: This type of vertical marketing system consists of independent times at different levels of production and distribution integrating their programmes on a contractual basis to obtain more economies and for sales impact than they could achieve alone. Contraction vertical marketing systems are of three types:

- Wholesales sponsored voluntary chains
- Retail co-operations
- Franchise organization.

Administered Vertical Marketing System: This system co-ordinates successive stages of production and distribution not through common ownership but through the size and power of the parties.

Co-operation Vertical Marketing System: This type arises from a member of the channel active co-operating with all other as in the case of retailer helping its supplies to meet to its requirements. Here, care must be taken to avoid channel conflict.

Another development in the distribution system is the growth of multi channel system. This type of channel system entails the producer applying more than one system to reach the same or different markets.

2.9 Implementing and Management of Physical Strategies by Business Organizations

Physical distribution has two conflicting major objectives. The objective of offering accepted level of customer and objective of minimizing total distribution cost. The total cost approach as used in marketing logistics provides a means by which a firm can reconcile these two conflicting objectives. This approach emphasizes the need for a firm to offer optimal customers services at the point where the total distribution costs and cost of transportation, order processing, and inventory carrying costs is at its maximum.

Kotler (1980) also identifies some of the things an organization needs to do in order to accomplish physical distribution objectives and these are:

1. The speed of filling and delivery of normal orders.
2. The suppliers' willingness to meet emergency merchandise needs of the customer.
3. The care with which merchandise is delivered so that it arrives in good condition.
4. The number of options for shipment loads and carriers.
5. The suppliers' willingness to carry inventory for customers.
6. The suppliers' readiness to take back defective goods and re-supply quickly.
7. The availability of installation and repair services and parts from the suppliers.
8. The services charges, that is, whether the services are free or separately priced.

To provide services that will satisfy the customers' needs entails incurring costs. It behooves organizations to draw a scale of preference for consumer needs and then try to satisfy those needs the customer wanted or needed most. The analysis and management of these costs with the aim of offering accepted level of customer service will be examined. The major functional areas in the sound implementation and management of physical distribution include: Order Processing, Inventory Management, Transportation, Materials Handling, Warehousing (storage), Location Analysis and Customer Service.

(i) *Order Processing*

Physical distribution starts with the receipt of a customer's order. Order processing is essentially a paper work. Upon the receipt of a customer's order, the order processing officials will check to ensure that the credit standing of that customer is alright if

he buys on credit. Thereafter, the availability of the product is checked from the stock cards or warehouse. Once enough quantity of the product is available, the customer is issued with the correct item and quantity billed, and the stock cards are updated. Items which are out of stock are back ordered from production or suppliers if customer agrees to wait. The invoices prepared by the order processing official are sent to the relevant departments or sections for record and shipment purposes. Middlemen can also provide quicker and immediate pre and after sales services than the distant producer.

Kotler (1988) asserts that many companies state their physical distribution objectives as getting the right goods to the right places at the right time for the least cost. Imaging a situation where a firm wants to increase its level of customer service from 80 to 90 percent. It might necessitate the firm establishing one or two extra sales depots, employing more personnel or machine such as computers to increase the efficiency of its order processing, expedite delivery system through the use of efficient transportation mode. All these require huge capital investment, which care has to be taken by management to ensure that the information channel between the order processing department and other departments is not blocked.

If so, customers' orders are delayed or misinterpreted and sales as well as customers are lost. Effective information flow should be with the transmission of the customer order. Continue without interruption through the credit, paper processing, the withdrawal from the warehouses, the assembling and packing the pick-up by the transportation carrier, the adjustment to the inventory level and the transmission of the information to production planning

(Taff: 1984:20). The use of computers expedites the order processing system.

(ii) *Inventory Management*

Inventories are the stock of material (such as finished goods,) which a firm keeps in anticipation of the activities that will ensure the steady and efficient inflow and allocation of products (inventories).

The level of inventories a company keeps has bearing on the level of customer attraction and satisfaction it plans to achieve. The more inventories a company keeps, the higher its costs for maintaining them. Inventories are kept so that an adequate level of customer service can be given. Customers like to have the confidence that their preferred brands are available at sales points whenever they get there. If this is not the case, they will get dissatisfied and switch brands. Companies keep inventories also to serve as buffer or safety stocks against situations of storage of materials (such as during strike activities). The management of any organization has to guard against keeping too much or too little inventory in order to avoid serious cost problems. Therefore, it becomes mandatory to strike a balance between carrying excess inventory and under stocking in order to prevent the occurrence of either of two extremes. To achieve this goal companies adopt any of the following inventory control methods:

- (a) A ó B ó C Analysis
- (b) Two ó Bin Method
- (c) Economic Order Quantity (EOQ)

(a) *A – B – C Analysis*

This type of inventory control measure is based on ranking and selection of inventory items on the basis of naira value of each individual item. This is done by the inventory controlling manager after identification and description of the firms inventories through inventory cataloguing. The most or vital items are classified as 'A' items; less vital items are classified as 'B' items; and the least items are classified as 'C' items. The classification of individual items will require the knowledge of each item in terms of its price, usage (demand), and lead time as well as problems, which can be encountered during procurement. This knowledge will enable management to know how to apportion departmental effort and expense to the tasks of controlling the thousands of inventory items of personnel and financial resources but the long time benefits of inventory control using the A-B-C analysis outweighs this advantages.

In this own submission Nwokoye (1981:172) defines A-B-C analysis as one of the oldest and most reliable selection method and it simply develops a trading organization that has 10 items. The first two (20% of the items) account for 60 percent of sales revenue, the next 4 (40% of items) account for 30 percent of sales and the last 4 (40% items) account for only 10 percent of sales. The first two products are put in the 'A' category, the middle four in the 'B' category and the last four in the 'C' category.

The 'C' items may be controlled by a relatively simple inventory control measures. 'A' items should come under the close supervision of the plant manager.

A table from Nwokoye N.G (1981:172) will help to throw more light on this analysis.

Table 2.1 A – B – C Analysis of an Organization that has 10 items

<i>Items</i>	<i>Sales (₦)</i>		<i>% of Items</i>	<i>% of Total (₦)</i>	<i>Item Category</i>
1.	20,000				
2.	10,000				
		30,000	20	60	-Aø
3.	5,500				
4.	4,000				
5.	3,000				
6.	2,500				
		15,000	40	30	-Bø
7.	2,000				
8.	1,500				
9.	1,000				
10.	500				
		5,000	40	10	-Cø

Source: Nwokoye N.G (1981:172)

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(b) Two – Bin System

This is one of the oldest and simplest methods of stock control. Inventory is divided into two parts: the currently used inventory and back up inventory. Whenever the quantity of back up stock drops below a predetermined level, an order is placed for new stock.

In retailing, for example, a retailer may establish the rule that whenever the stock of any item is reduced to one carton on shelf display and none in the store, an order will be placed to refill the empty bin. In the manufacturing, there may be enough stock of raw materials on the line for a day's production plus a minimum of one

day's supply as reserve. Whenever the reserve stock drops below one day's supply and order is placed for new stock.

The two bin method is applicable if the number of stock items is large or the sales are slow or not easily predictable.

(c) ***Economic Order Quantity (EOQ)***

Economic Order Quantity is determined by balancing two kinds of inventory costs and (b) carrying costs. Ordering costs are simply the expense of placing a simple order multiplied by the total number of orders placed in the year. Therefore, the smaller the quantity of stock ordered at a time, the greater the annual number of orders.

Inventory carrying costs depend upon the level of average inventories. The fewer the annual orders, the larger the average inventory and the higher the carrying cost. Ordering costs therefore, move in the opposite direction to carrying costs as a function of the size of order. When the two costs are added up we get a minimum point which corresponds to Economic Order Quantity (EOQ).

The basic EOQ formula is

$$EOQ = \sqrt{\frac{2AS}{C}}$$

where

- A = Ordering costs per order
- S = Annual quantity of inventory
- X = Carrying costs expressed as cost of holding one unit of inventory per year

Assuming A = ₦20, S ₦2,000 and C ₦0.5

$$EOQ = \sqrt{\frac{2(20 \times 2000)}{0.5}} = \sqrt{16,000}$$

EOQ = 400 units

(iii) *Transportation*

As a marketing function, transportation increases the economic value of products by creating time and place utility and promotes possession utility (Agbonifoh et al 1988:509). Transportation ensures that people and materials are at the places where they are needed, at the right time (Olakunori, 1993:469). It is therefore, the cornerstone on physical distribution.

A company's product cannot compete favourably with other brands without an efficient management of product transportation. This means that the physical distribution strategy cannot succeed without due consideration for transportation. Various modes of transportation has been developed to facilitate the mobility of people and materials. These include water, road, air, rail and pipeline with each mode having its own carriers, characteristics, comparative advantages and disadvantages. The mode of transportation selected for the physical distribution of a company's product will greatly affect the price of the product, its on-time delivery and condition at destination, customer's patronage and post-purchase satisfaction. The choice of the mode to be selected for use will depend on any or a combination of such factors as the type of product being shipped, the goal the company wants to achieve, its resources and the available modes. Evans and Berman (1985:363) cited by Olankunori et al (1993:100-101) gave the following peculiarities in the selection of different modes of transport:

- (a) **Railways** ó Ideal for the transportation of heavy bulky products at low unit value over long distances.
- (b) **Motor Trucks** ó Predominately transport relatively small shipment over relatively short distances. They are the most flexible mode of transport.
- (c) **Water ways** ó Include inland water transport and sea transport. Usually, it is the cheapest but the slowest means of moving non-perishable, bulky items of low unit value.
- (d) **Pipeline** ó Mainly used for transporting liquids, gases, and semi-liquids from the wells to the refinery and from the refinery to the storage facilities. They are the most flexible mode of transportation.
- (e) **Airways:** The most expensive form of transport and it, therefore, ideal for the movement of high value, weight, perishable and emergency freights. They are the fastest and most expensive mode.

The choice between the different alternative forms of transport depends on the merits and demerits of each alternative. The relevant considerations include the costs, the distance to be covered, the flexibility of the transport, availability, the bulkiness, weight, size perishability and fragility of the goods, the security/safety of the goods in transit, the urgency of the goods and the preference of the owner of the goods.

(iv) **Materials Handling**

Materials handling is concerned with the preparation, placing and positioning of materials in order to facilitate their storage or movement (Taff, 1984:277) cited in Olakunori et al (1993:101). Material handling does not add anything to the

value of product. If materials handling is poorly done, the company suffers through product damage, higher costs of operation and customers' dissatisfaction. If possible, the ideal thing is to eliminate materials handling but since this is not possible, the best thing to do is to select and use the most appropriate method and equipment for handling the product. The aim is to achieve the lowest possible cost and product safety. Examples of such equipment are conveyors (roller, belt, and link-chain types) industrial trucks (such as fork lifts and trolleys), cranes, hoists and containers (such as barrels, cartons, skid and pallets) wheel barrows etc. Movement can be manual, power assisted or fully mechanized for moving materials from one fixed point to another.

The choice of equipment to be used for handling material will depend on such factors as the properties of the materials to be handled, the layout and characteristics of the warehouse of buildings, the production flow and cost considerations.

(v) ***Warehousing/Location Analysis***

Warehousing covers storage and a broad range of other activities such as assembling, dividing (bulk breaking) and preparing products for reshipping.

At the warehouse, goods are received, identified, sorted, dispatched for storage or shipment, packaged and shipped or transported to customers (Olakunori et al 1993:101). The importance of warehouse derives from the need and decision to maintain inventories in anticipation of customers demand as well as for safety/security reasons.

The determination of the numbers of warehouses to use, where they are located and the ownership of the warehouses used are decision which must be carefully taken. The number and location of the warehouses to be employed for keeping and distribution a company's product is better taken by using the optimization technique or cost trade off approach. Warehousing decisions will be influenced by the desired level of customer service to be offered, closeness of production or supply centre to the market, customer's buying habit, the costs of operation and availability of space and resources. Some companies prefer to use their own warehouses because it generally agreed that a degree of control over distribution is achieved through company owned network of facilities, tightly organized and integrated into the total physical distribution system.

Warehouse Location Strategies

Stock and Lambert (1987 cited by Achison, 2000:199-200) identifies certain important factors of warehouses which included:

- (a) The market location and environment
- (b) The customer and nature of service
- (c) The sources of production/supply
- (d) The transposition issues and costs
- (e) The nature of the commodities
- (f) The cost and quality of industrial land
- (g) The cost and availability of utilities
- (h) Cost of labour and constructions
- (i) The potentials for expansion

These factors tend to influence the site and number of locations of warehouses to serve the market and customers effectively.

Specific Strategies

Proximity to Market/Customers Strategy

Location close to the market is to improve product flow to the market and customer service, as well as reduce costs of order processing and transportation. This choice of strategy is usually influenced by such factors as frequency of order, order size, the cost and availability of transportation.

Proximity to Production/Sources of Supply Strategy

Location close to source of production supply, particularly where the warehouses is expected to serve as a collection entire formality of productions manufactured or sourced at different branches.

This strategy tends to be influenced by multiple production/supply site transport consideration.

When verity of the commodity is being produced at various branches, locate the warehouses somewhere between the market/customer and produce/supply sources. This alternative is usually associated with relatively high level of customersøservices.

(vi) *Customer Service*

The physical distribution objective of getting the right goods to the customer at the right place and right time is customer service oriented. Customer services include free or doorstep transportation, after-sales service, guarantees, warranties, credit sales, returns, order cancellations, etc. The

type and level of customer services offered differ from company to company. Customer service increases the cost of physical distribution but it has the tendency of increasing the cost of physical distribution and it has the tendency of increasing a company's sales. A company will have to find out level of service in order to efficiently determine the level of customer services it should offer. The company will also need to know how important each of the service is to the customers so as to know which one it should focus on.

A company should try as much as possible not to offer less customer service than its competitions. However, a company can offer less customer service than its competitors are offering, and then offer less price, if prices a major evaluative criterion to the customers. On the other hand, a company can offer a high level of customer service (if customers are very service conscious) and then sell the product at premium price. Generally, customer's response to the services offered them will depend largely on the level of information they receive, the impact of the cost of the service on price, what competitors are doing, their taste, income and the quantity of the product they can consume (Olakunori, 1993:102).

Customer is a key asset of business, that must be satisfied, but never at the detriment of business. For any business to survive, it must make reasonable profit and for customer to continue to cast his votes in naira, he must be pacified (Achison, 2000:196).

2.10 Problems of Effective Management of Physical Distribution of Paints in Nigeria

(a) Poor Infrastructural Facilities:

The basic infrastructures needed to support modern marketing in the physical distribution activities of paints products in Nigeria are poorly provided. Basic infrastructures such as computers for faster order processing, material handling equipments etc are lacking.

According to Nwokoye, (1981:161), these cause distribution bottlenecks which in turn increases the rate of price inflation.

(b) Poor Transportation Facilities:

Distribution of paints involves physical movement of these goods from one place to another such as from the producer to the distributors or sales representative and then to the final consumer. It is when this is done smoothly and effectively that the function of bridging the gap between production and consumption is carried out. Nigerian roads are often poorly constructed and not well maintained. Access roads to the rural areas are typically nothing more than bush paths. Many paint companies do not have delivery vans. Those who have use old vehicles which usually breakdown during business trips. The Nigerian roads (where they are available) are so bad that movement of goods take three to five times the time they should take under normal conditions. The railway system is oriented to the evacuation of export produce.

(c) *Poor Inventory Management:*

Many paint companies in Nigeria do not practice modern inventory management. Due to insufficient storage facilities and inappropriate storage methods, spoilage and waste of products tend to be high.

(d) *Poor Warehousing Facilities:*

Most paint companies in Nigeria do not have warehouses. Some even use their residential accommodations as production grounds. This compels the paint companies to engage in production only when they receive order. This also caused distribution bottleneck as a result of delays associated with the system.

(e) *Poor Modern Communication Networks:*

Many paint companies in Nigeria lack modern communication facilities such as telephone services, internet facilities etc which are necessary in enhancing the effective management of physical distribution of paints. The role of modern communication facilities cannot be overemphasized as they are highly needed by everybody especially business organizations at every minutes of the day.

(f) *Middlemen's Lack of Marketing Techniques:*

Most distributors of paints in Nigeria are appointed on the basis other than that of expert product or marketing knowledge. The distributor is appointed either because he/she is well connected, or he/she is a friend, a relation of the manager or director of the company in question. Each of these basis for appointment of the

distributors tends to breed indiscipline, inefficiency and dereliction of duty.

(g) *Nigerian Business and Government:*

Local, State and Federal Government fail to recognize and plan for investment in the logistic systems needed for the effective distribution of paints. This is worsened by the poor state of the economy, which the government has failed to improve. Individual producers of paints have not been encouraged by way of loan grants.

These factors all contribute in making the production and distribution of paints in Nigeria a very costly venture and quite inaccessible to most consumers.

2.11 Prospects of Effective Management of Physical Distribution of Paints in Nigeria

Physical distribution is fast establishing itself as major marketing function for achieving consumer satisfaction, increased patronage and lower operating costs in Nigeria. Since reliability, dependability, shorter order cycles, smaller inventories, and faster delivery have become important aspects of physical distribution services, a well planned and well managed physical distribution system has become an absolute must for firms hoping to survive in highly competitive markets (Markin: 1979:429; cited by Olakunori et al, 1993:103). The above stated assertion is a true prospect for effective management and distribution of paints in Nigeria.

The indigenous production and export oriented industries being stimulated by the Structural Adjustment Programme introduced in Nigeria in 1986 cannot be sustained without good physical distribution management. The international sourcing of component parts and finished

goods requires more advanced planning. Cost reduction, demand forecasting and better customer services are now very vital factors for gaining competitive edge. Companies that fail to adjust their operation and make use of modern techniques, many soon discover too late there is no place for them and their products.

Competition among companies will enhance or improve the future of physical distribution in Nigeria. Like the paint industry, which is a highly competitive market, the company that is more innovative in getting its products to the doorsteps of the consumer at the right time, condition and price will surely be patronized by the consumer. This will ensure the survival and continued operation of the company, thereby offering employment to Nigerians.

Physical distribution of paints products will definitely enhance the improvement in the Nigerian economy.

2.11 Summary of the Reviewed Literature

From the foregoing, it is noted that entrepreneurial venture into the paint industry with well designed marketing strategies will be rewarding.

The views of the various marketing practitioners on the subject of investigation, "Distribution", as an important marketing mix element were discussed. Areas of discussion includes, the definition, components, importance, role, channel dynamics/level and distribution types available to the selected three paint manufacturers in Onitsha, Anambra State.

The three selected paint companies in Onitsha, Anambra State, were subjected for investigation to find out how this all important marketing mix element is being manipulated. The efficiency and effectiveness of the distribution management in the three selected paint companies and its impact on the customers' satisfaction; cost of paints in the market and profitability of the paint companies was also investigated.

Furthermore, the distribution system adopted by each of the selected paint companies and the associated problems were another important area covered by the research work.

The research looked into problem areas such as:

- Poor level of infrastructural facilities
- Poor level of transportation facilities
- Poor response of business environment
- Poor adoption of new inventory management techniques
- Inadequate warehousing facilities
- Poor adoption of modern communication network and
- Lack of knowledge of modern marketing techniques by middlemen

The purpose of the intensive study is to identify the areas of bottleneck with a view of evolving strategies that could enhance the distribution management of the three selected paint companies.

It is believed that the prospects of the selected paint companies will be bright if the problems so identified will be minimized. If this is achieved, the customers and the distributors of the selected paint companies will be satisfied and this will in turn lead to repeat purchase (cognitive resonance), increase in sales volume and consequently improved profit margin of the paint companies.

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CHAPTER THREE

3.0 *Research Design and Methodology*

This section of the study presents the study design and methodology. The section presents equally the following: Sources of Data; Population of the Study; Determination of Sample Size; Method of Data Analyses, Test of Hypotheses.

3.1 *Research Method*

The type of method to be used in any research undertaking is determined substantially by the nature of the research problem and purpose of the study Uzoh (2001). The use of descriptive and normative method is regarded by the researcher as logically sound and adequate for getting solution to the problems posed by the study.

3.2 *Research Design*

The exploratory design which embraces questionnaire and interview were used since according to Busha (1986), researchers considered it to be "the most suitable technique for discerning the kind of information needed by the users as well as the source on which most researchers commonly rely." The researcher thus, used questionnaire and personal interview for the purpose of primary data collection.

3.3 *Sources of Data*

Two main sources of data were used for this study. They were primary and secondary sources.

3.3.1 Primary Data

A primary source is used in collecting primary data. Primary data refer to data that is collected for the first time during research process. Data collected from this source were mainly through the use of questionnaire and personal interview.

3.3.2 Secondary Data

They are already existing data that is previously published. They are data collected for some purposes. This helped the research work under review greatly and lies much under the caption Literature Review.

The main sources of data include Journals, Magazines and Newspapers. The researcher also made extensive use of the school library, public and private libraries.

3.4 Population of the Study

The target area of the study is Onitsha, Anambra State. The research was mainly centred on the selected three paint companies, namely, Citizen Paints, Ages Paints and Jacobon Paints, their distributors and customers. The population distribution for both the customers and the distributors of the paint manufacture companies are as stated below.

<i>S/N</i>	<i>Name of Paint Manufacturers</i>	<i>No. of Customers</i>	<i>No. of Distributors</i>
1.	Citizen Chemical International Ltd	120	14
2.	Ages Enterprises Limited	100	10
3.	Jacson Industries Limited	80	6
	Total	300	30

Source: Field Survey, 2010.

The population of customers of the three (3) paint manufacturing companies is 300 while that of the distributors is 30.

3.5 *Determination of Sample Size*

Population of the customers/consumers is too large to be exhaustive. Therefore, the researcher decided to adopt a pilot survey so as to arrive at the sample size for the customers. Twenty one (21) questionnaire were distributed to the customers of the three paints companies under study. Eighteen (18) questionnaire were correctly filled and returned while three (3) were not returned. Thus, we have response of eighteen (18) customers thereby representing 85% for the returned questionnaire and 15% for the unreturned questionnaire. We have thirty (30) distributors of the paints companies.

To calculate the sample size Topman's formula is used

$$n = \frac{Z^2PQ}{E^2}$$

where

n = Sample Size

Z = Standard deviation for desired level of confidence
(1.96)

P = Probability of positive response

Q = Probability of negative response

E = 5% the limit of tolerable error

Z = 1.96

P = 85%

Q = 15%

E = 5%

$$N = \frac{(1.96)^2 \times .85 \times 0.15}{0.05^2}$$

$$= 195.92 = 196$$

3.6 Instrument for Data Collection

Questionnaire and personal (oral) interview techniques were employed to collect data for this research. The questionnaire is in two categories ó one for the paint companies distributors and customers of the product. Personal (oral) interview was targeted at some staff of the companies. Also, the oral interview was intended to gather some other information that the researcher might find useful.

3.7 Validation of the Data Collection

To ensure validity, the questionnaire was designed in such a way that the questions contained therein are unambiguous as they are simple. Also, oral interviews contain structural questions, which are intended to collaborate with the ones contained in the questionnaire, and oral interview structure was made to reflect and relate to the objectives of the study as well as the hypotheses.

Moreso, to ensure that questionnaire instrument measures what is intended, it was categorized into two ó one for the distributors and the other for the customers. This intends to ensure clarity.

3.8 Method of Data Analysis

The raw data collected were analyzed with the use of tables and percentages. This was further subjected to null hypothesis test using Z test formula.

$$Z = \frac{P - P_0}{\sqrt{\frac{P_0(1 - P_0)}{N}}}$$

where

P = Sample proportion

N = The sample size

P = The hypothesized population proportion

CHAPTER FOUR

4.0 *Presentation and Analysis of Data*

4.1 *Introduction*

In this chapter, the researcher presents the desired primary data generated in this research through questionnaire administered to both the distributors and customers of the three selected paint companies in Onitsha.

However, it suffices to point out that the data presented and analyzed are only those that directly relate to and also reflect the objectives and hypothesis of this study.

4.2 *Allocation and Return of Questionnaire*

Table 1: Allocation and Returned of Questionnaire on Customers

<i>Group</i>	<i>No. of Questionnaire</i>	<i>No. Returned</i>	<i>No. Unreturned</i>	<i>% of Returned</i>	<i>% of Unreturned</i>
Customers	196	159	37	81	19

Source: Field Survey, 2010.

This table shows that 196 questionnaire were distributed to the customers, 159 or 81% were returned, 27 or 19% were not returned. However, the researcher made use of 159 questionnaire representing 81%.

Table 2: Allocation and Returned of Questionnaire on Distributors

<i>Group</i>	<i>No. of Questionnaires</i>	<i>No. Returned</i>	<i>No. Unreturned</i>	<i>% of Returned</i>	<i>% of Unreturned</i>
Distributors	30	30	-	100	-

Source: Field Survey, 2010.

4.3 *Presentation and Analysis of Data on the Customers*

The presentation and analysis of data on the customers are based on the responses of 159 customers (81% of the sample size ó 196) in the three selected paints companies in Onitsha.

Table3: Sex Distribution of Respondents

Sex	No. of Respondents	Percentage%
Male	89	56
Female	70	44
Total	159	100

Source: Field Survey, 2010.

This table shows that 89 of the respondents were males representing 56% while 70 were females representing 44% of the total responses.

Table4: Customers' Opinion as to their Satisfaction in the Distribution System

Options	No. of Respondents	Percentage%
Yes	70	44
No	89	56
Total	159	100

Source: Field Survey, 2010.

The table shows that 89 (56%) of the customers said that they were not satisfied with the present distribution system of the selected paint companies while 70 (44%) of them said that they are satisfied.

One will, therefore, conclude that the customers are not satisfied with the present distribution system of the selected paint companies. They need changing or modification.

Table5: The view of Customers as to the Efficiency of the Distribution of Paints by the Selected Paint Companies

Options	No. of Respondents	Percentage%
Highly efficient	6	3.5
Efficient	49	30.8
Inefficient	91	57.2
Very efficient	13	8.3
Total	159	100

Source: Field Survey, 2010.

The table indicates that 91 (57.2%) of the customers said that the distribution system of the paint companies is inefficient, 49 (30.8%) of the customers said that the distribution system is efficient. 13 (8.3%) of the respondents said that it is very inefficient while 6 (3.5%) said it is highly efficient. We can see from the analysis that the distribution system of paints by the companies is inefficient.

Table6: Customers' Responses as to whether High Cost of Distribution Leads to High Cost of Paints in the Market

Options	No. of Respondents	Percentage%
Strongly agree	117	73.6
Agree	28	17.6
Disagree	10	6.3
Strongly disagree	4	2.5
Total	159	100

Source: Field Survey, 2010.

The table indicates that 117 (73.6%) of the customers strongly agree that high cost of distribution leads to high cost of paints in the market. 28 (17.6%) agreed, 10 (6.3%) disagree while 4 (2.5%) strongly disagreed. From the analysis we can see that high cost of distribution leads to high cost of paints in the market.

Table7: Customers' Responses on the Services they normally expect from Paints Companies

Options	No. of Respondents	Percentage%
Availability	21	13.2
Delivery	21	13.2
Quality product	21	13.2
Moderate price	21	13.2
All of the above	75	47.1
Total	159	100

Source: Field Survey, 2010.

The table indicates that 75 (47.1%) of the respondents said that they normally expect the following services from paint companies viz: availability, delivery, good quality product and moderate prices. 21 (13.2%) of the respondents each stated separately the other options of availability, delivery, quality product and moderate prices as the services customers/users normally expect from paint companies. We can conclude that paint companies should always produce good quality paints, at reasonable inventory levels, at affordable prices and purchase sound delivery vans for the door to door step delivery of the purchased paints.

Table8: Customers'/Users Response on the Channel through which they buy Paint Product

<i>Options</i>	<i>No. of Respondents</i>	<i>Percentage%</i>
From Producers	16	10
From Distributors	91	57
From Traders	52	33
Total	159	100

Source: Field Survey, 2010.

The table shows that 91 (57%) of the customer respondents purchase paints through the distributors of paint companies. 52 (33%) say that they buy their paints through traders on assorted kinds of building materials. 16 (10%) purchase their paints directly from the company.

4.4 Presentation and Analysis of Data on the Distributors

All the 30 distributors of the 3 selected paint companies were served with questionnaire. The presentation and analysis of data on the distributors are based on the responses of 30 respondents in the three selected paint companies.

Table 9: Sex Distribution

Sex	No. of Respondents	Percentage%
Male	25	83.3
Female	5	16.7
Total	30	100

Source: Field Survey, 2010.

The table shows that 25 (83%) of the distributors are male, while 5 (16.7) are female.

Table 10: Customers Age Distribution Response on the Channel through which they buy Paint Products

Age Group	No. of Respondents	Percentage%
21 ó 30	2	6.6
31 ó 40	5	16.6
41 ó 50	16	53.3
51 and above	7	23.3
Total	30	100

Source: Field Survey, 2010.

The table indicates that 16 (53.3%) of the distributors are between the ages of 41 ó 50 years, 7 (23.3%) are between 51 and above, 5 (16.65) are between 31 ó 40 and 2 (6.6%) are between 21 ó 30 years.

Table11: Efficient and Effective Physical Distribution Management does not lead to Customers Satisfaction

Options	No. of Respondents	Percentage%
Agree	24	80
Don't agree	6	20
Undecided	-	-
Don't know	-	-
Total	30	100

Source: Field Survey, 2010.

The table shows that 24 (80%) of the distributors agreed that efficient and effective physical distribution management does not lead to customers satisfaction while 6 (20%) of them said they don't agree. We

can see that efficient and effective physical distribution management if applied by the management of the three selected paint companies will lead to customers satisfaction.

Table12: High cost of Distribution leads to High Cost of Paints in the Market and reduces the level of purchases

<i>Options</i>	<i>No. of Respondents</i>	<i>Percentage %</i>
Strongly agree	8	26.6
Agree	10	33.3
Disagree	6	20
Strongly disagree	6	20
Total	30	100

Source: Field Survey, 2010.

The table shows that 10 (33.3%) of the distributors agreed that high cost of distribution leads to high cost of paints in the market and reduces the level of purchases. 8 (26.6%) said that they strongly agreed, 6 (20%) said that they disagree while 6 (20%) said that they strongly disagree.

Table13: The Impact of Efficient Distribution Management on Profitability

<i>Options</i>	<i>No. of Respondents</i>	<i>Percentage %</i>
Increases profit	23	76.7
Reduces profit	3	10
No impact on profit	4	13.3
Don't know	-	-
Total	30	100

Source: Field Survey, 2010.

The table shows that 23 (76.7%) of the distributors stated that efficient physical distribution management increases profit. 4 (13.3%) said it has no impact on the profit while 3 (10%) said it reduces profit.

Table14: Duration it takes to receive Paints when ordered

Options	No. of Respondents	Percentage %
Less than I week	5	16.6
1 ó 2 weeks	6	20
2 ó 4 weeks	11	36.6
Above 4 weeks	8	26.8
Total	30	100

Source: Field Survey, 2010.

The table indicates that 11 (36.6%) of distributors said that it takes them 2 ó 4 weeks to receive paints when orders is placed. 8 (26.8%) said it takes them more than 4 weeks, 6 (20%) said it takes them 1 ó 2 weeks while 5 (16.6%) said it takes them less than one (1) week. We can see that it takes distributors too long a period to receive paints when order is placed. This attracts a lot of cost to the distributors, companies and customers. The distributors also make some complaints like inadequate supply of paints, delay in the supply, high cost of transportation and delays in processing of orders to the management of paint companies.

4.5 Testing of Hypotheses

Testing hypothesis I

H₀₁: Efficient and effective physical distribution does not lead to customers satisfaction.

H₁: Efficient and effective physical distribution leads to customers satisfaction.

In testing this hypothesis, the research used the data in Table 11 which shows the reaction of the distributors as to whether efficient and effective physical distribution management leads to customer satisfaction.

Table11: Efficient and Effective Physical Distribution Management does not lead to Customers Satisfaction

Options	No. of Respondents	Percentage%
Agree	6	20
Don't agree	24	80
Undecided	-	-
Don't know	-	-
Total	30	100

Source: Field Survey, 2010.

The table above shows that 6 (20%) of the distributors agreed to the hypothesis while 24 (80%) of distributors did not.

The above analysis notwithstanding, it was further subjected to null hypothesis test of population.

To this effect, Z test formula was applied thus:

$$Z = \frac{P \hat{p} - P}{\sqrt{\frac{P(1 \hat{p})}{n}}}$$

where

P = The Sample proportion (24)

N = The sample size (30)

P = The hypothesized population proportion

H₀₁ = Is less than ^{1/2}

H₁ = Is greater than ^{1/2}

H₀₁ = ^{1/2} = 0.5

H₀₁ = ^{1/2} = 0.5

P = ²⁴/₃₀ = 0.8

$$Z = \frac{0.8 \hat{p} - 0.5}{\sqrt{\frac{0.5(1 \hat{p})}{30}}}$$

$$Z = \frac{.3}{\sqrt{\frac{0.25}{30}}}$$

$$Z = \frac{.30}{\sqrt{0.0083}}$$

$$Z = \frac{.30}{0.09128}$$

$$Z = 3.2865$$

At 5% level of significance tabulated = 1.64

Decision Rule: Reject H_0 if Z calculated is more than Z tabulated (1.64).

Since Z calculated 3.2865 is more than Z tabulated, H_{01} is rejected.

The conclusion is that efficient and effective distribution leads to customer satisfaction.

Testing hypothesis II

H_0 : Efficient physical distribution management does not affect profitability.

H_1 : Efficient physical distribution management affects profitability.

Table13: Reproduced the Impact of Efficient Distribution Management on Profitability

Options	No. of Respondents	Percentage %
Increased profit	23	76.7
Reduces profit	3	10
No impact on profit	4	13.3
Don't know	-	-
Total	30	100

Source: Field Survey, 2010.

The table shows that 23 (76.7%) of the distributors stated that efficient physical distribution management increases profit which is disagreement to the hypothesis, while 7 (23.23%) support the hypothesis.

This was further subjected to the null hypothesis (H_{02})

Applying Z test formula:

$$Z = \frac{P \hat{=} P}{\sqrt{\frac{P(1 \hat{=} P)}{n}}}$$

where

P = The Sample proportion (23)

N = The sample size (30)

P = The hypothesized population proportion

H₀₂ = Is less than ^{1/2}

H₂ = Is greater than ^{1/2}

H₀₂ = ^{1/2} = 0.5

H₂ = ^{1/2} = 0.5

P = ²³/₃₀ = 0.7667

$$Z = \frac{0.7667 \hat{=} 0.5}{\sqrt{\frac{0.5(1 \hat{=} 0.5)}{30}}}$$

$$Z = \frac{0.2667}{\sqrt{\frac{0.5 \times .5}{30}}}$$

$$Z = \frac{0.2667}{\sqrt{.00083}}$$

$$Z = \frac{0.2667}{0.091287}$$

$$Z = 2.9216$$

At 5% level of significance tabulated (Z_t) = 1.64

Decision Rule: Reject H_0 if Z calculated is more than Z tabulated.

Since the Z calculated (2.92) is Z tabulated, H_{02} is rejected.

The conclusion is that efficient physical distribution management increases profit of the paint manufacturing organization. In other words, the more efficient the distribution management of the paint companies, the more the profit.

Testing Hypothesis III

H_0 : High cost of distribution does not lead to high cost of paints in the market.

H_1 : High cost of distribution leads to high cost of paints in the market.

Table 6: Reproduced: Customers' Responses as to whether High Cost of Distribution leads to High Cost of Paints in the Market

<i>Options</i>	<i>No. of Respondents</i>	<i>Percentage %</i>
Strongly agree	117	73.6
Agree	28	17.6
Disagree	10	6.3
Strongly disagree	4	2.5
Total	159	100

Source: Field Survey, 2010.

The table above indicates that 145 (91.2%) of the customers did not support the null hypothesis (H_{03}) while 14 (8.8%) customers were in support of it. The above analysis was further supported to statistical test as a means of acceptance to rejection of the null hypothesis (H_3).

Applying Z test formula:

$$Z = \frac{P \hat{O} P}{\sqrt{\frac{P(1 \hat{O} P)}{n}}}$$

where

$$P = \text{The Sample proportion } 117 + 28 = 145$$

$$N = \text{The sample size (159)}$$

$$P = \text{The hypothesized population proportion}$$

$$H_{03} = \text{Is less than } \frac{1}{2}$$

$$H_3 = \text{Is greater than } \frac{1}{2}$$

$$H_{03} = \frac{1}{2} = 0.5$$

$$H_3 = \frac{1}{2} = 0.5$$

$$P = \frac{145}{159} = 0.91194$$

$$Z = \frac{0.91194 - 0.5}{\sqrt{\frac{0.5(1 - 0.5)}{159}}}$$

$$Z = \frac{0.41194}{\sqrt{\frac{0.5 \times .5}{159}}}$$

$$Z = \frac{0.41194}{\sqrt{\frac{.25}{159}}}$$

$$Z = \frac{0.41194}{\sqrt{0.001572}}$$

$$Z = \frac{0.41194}{0.039648}$$

$$Z = 10.3899$$

$$Z \text{ Cal} = 10.39$$

At 5% level of significance tabulated = 1.64

Decision Rule: Reject H_0 if Z calculated is greater than Z tabulated. Since the Z calculated (10.39) is more than Z tabulated, 1.64, H_0 which states that high cost of distribution does not lead to high cost of paint in the market is therefore rejected. This implies that high cost of paint distribution leads to high cost of paints in the market.

CHAPTER FIVE

5.0 Summary of Findings, Conclusion and Recommendations

5.1 Summary of Findings

The preceding chapter presented an analysis of information gathered from the various field studies carried out by the researcher. This portrays the relevant facts.

1. The customers of the paint manufacturing companies are not satisfied with their present distribution system and services.
2. There is need for the introduction of efficient and effective physical distribution management teams of the paint manufacturing companies.
3. The high cost of distribution of paints leads to its high cost in the market which causes the reduction of customers' purchase.
4. Efficient physical distribution management increases the profitability of companies.
5. It takes distributors too long period to receive paints when order is placed. And the customers of the paint manufacturing companies normally expect services like availability of paints when ordered, good quality paints, affordable prices and delivery/transportation.
6. Majority of the customers purchase their paints through distributors and the manufacturers are yet to embrace the integrated channel of distribution system such as vertical marketing system.
7. All the three selected paint companies are yet to adopt the modern inventory control

5.2 Conclusion

The researcher hereby concludes that physical distribution which is an important other half of marketing is not well planned and managed in

three selected paint manufacturing companies in Onitsha, Anambra State. Physical distribution in these companies is therefore, ineffective and inefficient hence, customer satisfaction, repeat purchases, higher sales and greater profits became unattainable. The ineffectiveness and inefficiency is mainly caused by lack of adequate distribution facilities, lack of modern techniques in materials handling and inventory management. Besides this, these companies do not recognize effective distribution and logistics management as a competitive weapon and a potent tool for increased profitability and hence, do not give it the attention it deserves.

5.3 Recommendations

From the data collected and findings on the distribution system of made in Nigeria paints, the researcher now makes the following recommendations:

1. There should be effective management of physical distribution activities in the companies and other marketing logistics operations to satisfy the customers.
2. The companies should be well equipped with all necessary facilities.
3. The management should source for fund to procure raw materials for continuous production which will lead to constant availability of the products that will satisfy the customers.
4. The system of distribution of the companies' product using mainly the distributors should be relaxed hence, it does not ensure adequate market coverage as the products do not get to the numerous customers scattered all over the town. An intensive distribution strategy (direct, indirect and integrated strategies) should be adopted. New delivery vans should be purchased and more salesmen employed by the companies to sell the products.

5. The management of the companies should introduce many different sizes of paints products to take care of the different needs, purposes and uses of their customers.
6. The management should adopt modern Inventory Control Measures such as the A-B-C Analysis; Two Bin Method and Economic Order Quantity. Also, adequate warehouses and depots should be constructed with Store Officers in-charge for proper inventory management. With sound warehousing and inventory management policies in place, customers and distributors will no longer have to wait for too long before being supplied with their ordered paint products.
7. The management of the companies should adopt the marketing concept in all the companies' marketing activities.
8. Effective promotional programmes should be carried out to create reasonable level of awareness for the products.
9. The government should assist in providing the basic amenities such as good roads, water, electricity, communication facilities and sound business environment. These will help for an efficient operation of physical distribution of products in Onitsha, Anambra State, and Nigeria as a whole.

Recommendations to re-address the problems have been made, the implementation of which will go a long way in improving the physical distribution management of the three selected paint manufacturing companies. This will increase and promote their customers level of satisfaction at increased profit thereby realizing the objectives of marketing.

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APPENDIX I

Department of Marketing
University of Nigeria
Enugu Campus.

August, 2010.

Dear Sir/Madam,

RESEARCH QUESTIONNAIRE

I am an MBA student of the Department of Marketing, University of Nigeria, Enugu Campus, carrying out a research on *"Distribution System of made in Nigeria Paints"* (A study of three selected paint companies in Onitsha, Anambra State).

This study is basically in partial fulfillment of the academic requirements for an award of a Masters of Business Administration (MBA) Degree in Marketing of the above named institution.

I solicit your co-operation in providing me with the much needed data for this study by completing the attached questionnaire objectively. All the information given will be used purely for academic exercise.

Thanks for your co-operation.

Yours sincerely,

OBIEGUE, ANN CHIAMAKA
PG/MBA/06/45667

QUESTIONNAIRE FOR CUSTOMERS

INSTRUCTION

Except where otherwise indicated, please complete all questions by ticking against your choice of answer (s) in the appropriate box.

1. Please which of the following age brackets do you fall into?
(a) 21 ó 30 (b) 31 ó 40
(c) 41 ó 50 (d) 52 and above
2. Sex: Male Female
3. Marital status: Single Married
4. What is your highest level of educational attainment?
(a) FSLC and below (b) GCE and TC II
(c) OND/NCE (d) HND/B.Sc and
5. Please, where is your business area?
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í .
6. For how long have you been a distributor?
(a) Less than 1 year (b) 1 ó 3 years
(c) 3 ó 5 years (d) 5 ó 7 years (e) 8 years
7. How does it currently take you to receive paints when order is placed?
(a) Less than 1 week (b) 1 ó 2 weeks
(c) 2 ó 4 weeks (d) Above
8. What is the average quantity of your current purchase of paints in a month?
í í
9. Does the paint company deliver your order stock of paints as and when required?
(a) Yes (b) No

10. Which of the following complaints do distributors often make to the management of paint companies?
- (a) Inadequate supply of paints []
 - (b) Delay in the supply of paints []
 - (c) High cost of transportation []
 - (d) Delay in processing of orders []
 - (e) None of the above []
11. How does the physical distribution activity affect your pricing?
- (a) Increase the price []
 - (b) Lowers the price []
 - (c) Fluctuates the price []
12. To what extent do you accept the idea that high cost of distribution leads to high cost of paint in the market and reduces the level of purchases?
- (a) Strongly agree []
 - (b) Agree []
 - (c) Disagree []
 - (d) Strongly disagree []
13. What is the impact of efficient distribution management on profitability?
- (a) Increases profit []
 - (b) Reduces profit []
 - (c) Has no impact on profit []
 - (d) I don't know []
14. Do you share the view that poor logistics management leads to high cost of physical distribution management?
- (a) Yes []
 - (b) No []
 - (c) Any other view

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15. To what extent do you agree with the idea that efficient and effective physical distribution management lead to customer satisfaction?

(a) Agree []

(b) Don't agree []

(c) Undecided []

(d) I don't know []

APPENDIX II

Department of Marketing
University of Nigeria
Enugu Campus.

August, 2010.

Dear Sir/Madam,

RESEARCH QUESTIONNAIRE

I am an MBA student of the Department of Marketing, University of Nigeria, Enugu Campus, carrying out a research on *"Distribution System of made in Nigeria Paints"* (A study of three selected paint companies in Onitsha, Anambra State).

This study is basically in partial fulfillment of the academic requirements for an award of a Masters of Business Administration (MBA) Degree in Marketing of the above named institution.

I solicit your co-operation in providing me with the much needed data for this study by completing the attached questionnaire objectively. All the information given will be used purely for academic exercise.

Thanks for your co-operation.

Yours sincerely.

OBIEGUE, ANN CHIAMAKA
PG/MBA/06/45667

QUESTIONNAIRES FOR DISTRIBUTORS

INSTRUCTION

Except where otherwise indicated please complete all questions by ticking against your choice of answer (s) in the appropriate box.

1. Name and Address:
2. Sex: (a) Male (b) Female
3. Age: (a) 20 years and below (b) 21 ó 30 years
(c) 31 ó 40 years (d) 41 years and above
4. Marital status: (a) Single (b) Married
5. Employment (a) Self-employed (b) Part employment
6. Educational attainment
(a) FSLC and below (b) GCE/TC II
(c) OND/NCE (d) HND/B.Sc. and above
7. For what purpose do you normally buy paints?
(a) To paint house (b) To paint furniture
(c) To paint vehicle (d) From a ó c
(e) None of the above
8. What services do you normally expect from the paint companies?
(a) Availability
(b) Delivery
(c) Quality product
(d) Cheapness
(e) All of the above
9. From what channel of distribution do you set paint products, you use?
(a) Direct from producers
(b) From distributors
(c) From traders selling building materials

10. When you need large quantity of paints, how soon do you normally get supplies?
- (a) Quickly
- (b) Slowly and waiting for production department
11. Based on your response to questions 9 and 10 above, would you agree that they contributed to any remarkable increase in the prices of paints in the market?
- (a) Strongly agree
- (b) Agree
- (c) Don't agree
- (d) Strongly disagree
12. How would you rate the way paint products are distributed by the manufactures?
- (a) Highly efficient
- (b) Efficient
- (c) Inefficient
- (d) Very inefficient
13. Based on your rating in question 12 above, would you say that you are satisfied with the present systems of distribution of paints by the paint companies?
- (a) Yes (b) No
14. Please suggest ways (if any) of improving the supply of paints by paint manufacturers to their customers/users.

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Thank you.

