Information Requirement for Forecasting and Cost Implication on Marketing 0f Consumer Goods in Dangote Nigeria Ltd.

Author's Details:
(1)**Abdulsalami T. Lucky PhD-**[1]Federal University Lafia, PMB 146. University Library, Lafia, Nasarawa State. Nigeria (2)**Omosigho A. Nsikanabasi Msc-**[2]Federal University Lafia, PMB 146.University Library, Lafia, Nasarawa State. Nigeria

Abstract:
The purpose of this study was to investigate the Information requirement for forecasting and its cost implication on the sales of consumer goods in Dangote Nigeria Limited. Information plays a prominent role in business planning and business strategy. The value and importance of advance information is a cornerstone for planning activity and a well-set forecast goal can guide sale-force more efficiently. A forecasting usually depends on many factors such as the product feature, supply chain constrain, market demand, market share, promotion strategy, competition, macroeconomics condition and others. Though, most of these data may be hard or even impossible to collect. Past studies have shown that intentions are predictive as one can examine the absolute accuracy of intentions, even though not their accuracy relative to other forecasting methods. As it was examined by the researchers no research has been able to demonstrate the information requirement for forecasting and cost implication on sales of consumer goods in Dangote Nigeria LTD hence the purpose of the study are: to know the types of goods Dangote company market, to find out if Dangote Company undertake forecasting of their products before embarking on sales, to know the effectiveness of the method used, to know the periods of sales forecasting, to examine if forecasting predicted good sales, to ascertain whether the cost of forecasting reflect heavily on the cost of sales, to know if sales forecasting have negative effect on the general plan of the products, to know the reasons for embarking on sales forecasting, workers opinions on information requirement for forecasting and cost implication on sales of consumer goods in Dangote Nigeria Limited was examined.. In analysing the data collected, percentage was use. A survey research was conducted to evaluate the role of information for forecasting and cost implication on sales of consumer goods in Dangote Nigeria Limited, population of two thousand three hundred and fifty (2350) was selected using stratified random sampling to select (235) respondents. Out of two hundred and thirty-five (235) questionnaire distributed only one hundred and forty eight (148) questionnaires was filled and returned. The researchers recommended qualitative and quantitative method of forecasting. The researchers also advice that Dangote Nigeria Limited should recruit a forecasting team that will be able to predict various sales of products line and promotional tools like advertising, personal selling etc.
Keyword: *Information Requirement, Sales Forecasting, Marketing consumer goods, Cost Implication.*

1. **Introduction** Information according to Abdulsalami (2016) plays a prominent role in sales forecasting especially in business planning and business strategy. The value and importance of information is seen in Dangote group of companies as a cornerstone for planning activity and a well-set forecast goal can guide sale-force more efficiently. Forecasting usually depends on many factors such as the product price, supply chain constrain, market demand, market share, promotion strategy, competition, macroeconomics condition and other.

According to Nikhila (2017) forecast can be termed as an indicator of what is likely to happen in a specified future time frame in a particular field. Therefore, the sales forecast indicates as to how much of a particular product is likely to be sold in a specified future period in a specified market at specified price. Accurate sales forecasting is essential for a business house to enable it to produce the required quantity at the right time. Further, it makes the arrangement in advance for raw materials, equipment's, labour etc. Some firms manufacture on the order basis, but in general, firm produces the material in advance to meet the future demand. Forecasting according to Nikhila means estimation of quantity, type and quality of future work e.g. sales. For any manufacturing concern it is very necessary to assess the market trends sufficiently in advance. This is a commitment on the part of sales department and future planning for the entire company concern depends on forecast.

Dangote Group of companies is one of the Nigeria's most diversified business conglomerates with a hard earned reputation for excellent business practices and products' quality. The operational headquarters is located at the bustling metropolis of Lagos, Nigeria. Dangote Group continues to grow in its vision of becoming the leading provider of essential needs in Food and Shelter in Sub-Saharan Africa with sustained market leadership in fruit and vegetables, animal oils and fats, dairy products, grain mill products, sugar, cocoa, chocolate and sugar confectionery, macaroni, noodles, couscous, cement, flour, oil refinery, malt liquors and malt, soft drinks, mineral waters, tobacco products, soap and detergents, cleaning preparations, perfumes others are:

Cement - Manufacturing / Importing, Sugar - Manufacturing & Refining, Salt - Refining, Flour & Semolina - Milling, Pasta - Manufacturing, Noodles - Manufacturing, Poly Products - Manufacturing, Logistics - Port Management & Haulage, Real Estate, Dangote Foundation etc. www.dangote.com.

Though the profit margin made on fast moving consumable goods or products may be relatively small (more so for retailers than the producers/suppliers), they are generally sold in large quantities; thus, the cumulative profit on such products can be substantial. Fast moving consumable goods is a classic case of low margin and high volume business.

Marketing Dangote consumer goods traditionally requires a business activity. Business organizations exist to satisfy human needs, especially material needs. One way to easily define marketing can be from the business perspective. For instance, marketing has been defined as the delivery of higher standard of goods. Other definitions referred to marketing as an exchange process. This process involves at least two parties: a buyer and a seller. Each party gives up something of value and receives something of value. However, a notable marketing scholar, Kotler and Karen (2007) posit marketing as a social process by which individuals and groups can obtain what they need and want through creating, offering, and freely exchanging products and services of value with others.

Marketing information is a process or procedures and sources managers adopt to obtain everyday information about developments in the marketing environment. Marketing managers according to Saidu (2011) need information about the future to make decisions. They need to ask what will be the size of the market next years. How large a share of the market will be in future years? What changes in the market can we anticipate? Information requirement for sales forecasting involves applying research techniques to answering questions like these. It is the process of predicting sales total over some specific future period of time. Accurate sales forecast is a useful information to marketing managers because these forecasts influences and helps in the planning and control of production, distribution and promotion activity. Information may suggest that price structures need adjusting or that inventory holdings should be changed.

Operational planning in sales forecasting greatly depends on experience acquired through information. Information provide sales forecasting for the control function by establishing an evaluation standard management uses for gauging the organizations marketing successes and failures without adequate information there will be no way to measure the success or failure of any enterprise.

Sales forecasting: If management is the primary tool for predicting the volume of attainable sales in Dangote (i.e. using qualitative method) then, the whole budget process should be premise on an accurate, timely sales forecast. Adamu express that technical projections of likely customer demand for specific products, goods or services for a specific company within a specific time horizon are made in conjunction with basic marketing principles, for example, sales forecasts are often viewed within the context of total market potential, which can be understood as a projection of a specific industry.

1.1 Statement of the problem

The major problem often faced by organizations according to Abdulsalami, (2010) is lack of data with which to base a marketing forecast of a product or environment event most especially during the introduction of a product into the market. Abdulsalami went further to express other impediment encountered in forecasting by Dangote organizations at the cost of carrying out forecasting, this forecasting techniques draw heavily on market survey, economic research and desk studies for valid explanations, which are incorporated into forecasting models. Gathering the necessary data is often of itself a complete task, information is seldom available exactly as the model builder would like it. There is also the problem in the implementation of the forecasting plans in Dangote organization as managers often deviate from actual plan even right away or at the middle of the plan a situation which does not augur well in building the corporate image of the organization as this affect sales price of goods witness by constant rise coupled with this, is lack of experiences of some Dangote managers who execute most forecasting policies of the organization due to qualitative forecasting method adopted by the company.

1.2 Objectives of the Study

The followings guided the objectives of the study:

1. To know the types of goods Dangote company market.
2. To find out if Dangote Company forecast their products before embarking on sales
3. To know the effectiveness of the method used
4. To know the periods of sales forecasting
5. To examine if forecasting predicted good sales
6. To Ascertain whether the cost of forecasting reflect heavily on the cost of sales
7. To know if sales forecasting have negative effect on the general plan of the products
8. To know the reasons for embarking on sales forecasting

1.3 Research Questions

The research questions guided the study to provide answers to the questions raised;

1. What types of goods does Dangote company market?
2. Does Dangote Company forecast their products before embarking on sales?
3. How effective is the method used?
4. What are the periods of forecasting?
5. How have forecasting predicted sales?
6. Does the cost of forecasting reflect heavily on the cost of sales?
7. Does forecasting have negative effect on the general plan of the products?
8. What are the reasons for embarking on forecasting?

1.4 Limitation of the Study

This research work is restricted to the study of Information requirement for forecasting and cost implication on marketing of consumer goods in Dangote Nigeria LTD**.** It is for the purpose of better marketing services that Dangote Nigeria LTD was chosen as coverage area, the study will act as guiding tools to managers of companies who may not be familiar with some of the marketing strategies that may probably help them in the marketing of their products. The study x-ray cost implication of forecasting on consumer goods in a selected company in Nigeria, adding to literature on the field of vocational and technical education, Business Administration/Studies, marketing, library and Information science etc. areas which other researchers have not touch especially in selected company like Dangote. This implies that in this era of economic crisis managers of companies need to keep abreast of latest techniques to avoid strong competitors of similar products particularly in chosen area and company.

Literature Review

Sales Forecasting: Meaning, Factors influencing sale forecasting, Importance of sale forecasting and Limitations of Sales Forecasting.

Meaning

Future is uncertain according to Nikhila (2017) Man thinks about future. You may be a businessman or a business organization, a broker, a manufacturer, a commission agent etc. All guess about the future in their respective field of interest. The researchers try to know, through a clear imagination, what will be happening in the near future after a week, month or year. Can it be called forecast or prediction? The process of forecasting is based on reliable data of past and present. Forecasting is not new, as it has been practiced from time immemorial.

Forecasting according to Armstrong et al (2017) is one of the important aspects of administration. The comer-stone of successful marketing planning is the measurement and forecasting to market demand. According to American Marketing Association, "Sales forecast is an estimate of Sales, in monetary or physical units, for a specified future period under a proposed business plan or programme and under an assumed set of economic and other forces outside the unit for which the forecast is made." A sales forecast is an estimation of sales volume that a company can expect to attain within the plan period. Nikhila express that sales forecast is not just a sales predicting. It is the act of matching opportunities with the marketing efforts. Sales forecasting is the determination of a firm's share in the market under a specified future. Thus sales forecasting shows the probable volume of sales. "Sales forecast is an estimate of sales during a specified future period, whose estimate is tied to a proposed marketing plan and which assumes particular state of uncontrollable and competitive forces. Armstrong et al (2017) gives an insight into the followings: The factors influencing a sales forecasting, Importance of sales forecasting, Types of sales forecasting and limitation of sales forecasting etc.

Factors influencing a Sales Forecasting:

A sales manager according to Armstrong et al should consider all the factors affecting the sales, while predicting the firm's sales in the market. An accurate sales forecast can be made, if the following factors are considered carefully:

1. **General Economic Condition:**

It is essential to consider all economic conditions relating to the firm and the consumers. The forecaster must see the general economic trend-inflation or deflation, which affect the business favourably or adversely. A thorough knowledge of the economic, political and the general trend of the business facilitate to build a forecast more accurately. Past behaviour of market, national income, disposable personal income, consuming habits of the customers etc., affect the estimation to a great extent which Dangote company need to take cognizance of.

2. **Consumers:**

Products like, short consumable goods, wearing apparel, luxurious goods, furniture, vehicles; the size of population by its composition-customers by age, sex, type, economic condition etc., have an important role. And trend of fashions, religious habits, social group influences etc., also carry weights and demand feasibility study.

3. **Industrial Behaviours:**

Markets are full of similar products manufactured by different firms, which compete among themselves to increase the sales. As such, the pricing policy, design, advanced technological improvements, promotional activities etc., of similar industries must be carefully observed. A new firm may come up with products to the markets and naturally affect the market share of the existing firms. Unstable conditions—industrial unrest, government control through rules and regulations, improper availability of raw materials etc., directly affect the production, sales and profits.

4. **Changes within Firm:**

Future sales are greatly affected by the changes in pricing, advertising policy, quality of products etc. A careful study in relation to the changes on the sales volume may be studied carefully. Sales can be increased by price cut, enhancing advertising policies, increased sales promotions, concessions to customers etc.

5. **Period:**

The required information must be collected on the basis of period—short run, medium run or long run forecasts.

Advantages of Sales Forecasting:

1. Supply and demand for the products can easily be adjusted, by overcoming temporary demand, in the light of the anticipated estimate; regular supply is facilitated.
2. A good inventory control is advantageously benefited by avoiding the weakness of under stocking and overstocking.
3. Allocation and reallocation of sales territories are facilitated.
4. It is a forward planner as all other requirements of raw materials, labour, plant layout, financial needs, warehousing, transport facility etc., depend in accordance with the sales volume expected in advance.
5. Sales opportunities are searched out on the basis of forecast; thus discovery of selling success is made.
6. It is a gear, by which all other activities are controlled as a basis of forecasting.
7. Advertisement programmes are beneficially adjusted with full advantage to the firm.
8. It is an indicator to the department of finance as to how much and when finance is needed; and it helps to overcome difficult situations.
9. It is a measuring rod by which the efficiency of the sales personnel or the sales department, as a whole, can be measured.
10. Sales personnel and sales quotas are also regularized-increasing or decreasing-by knowing the sales volume, in advance.
11. It regularizes productions through the vision of sales forecast and avoids overtime at high premium rates. It also reduces idle time in manufacturing.
12. The master plan or budget of a firm is based on forecasts. “The act of forecasting is of great benefit to all who take part in the process, and is the best means of ensuring adaptability to changing circumstances. The collaboration of all concerned leads to a unified front, an understanding of the reasons for decisions, and a broadened outlook.

Types of Sales Forecasting:

Omalu, et al (2007) opines the following sales forecast:

The Economic Forecast:

This type of forecast is important to understand the general economic trend through a careful study of five year plans. Gross national products, National income, Government expenditure, Unemployment, Consumer spending habits etc. This is in order to have an accurate forecast. Big companies, in India, adopt this method which can also be studied and tested by Dangote.

The Industry Forecast:

The future market demand is calculated through industrial forecast or market forecast. The expected sales forecasts of all the industries, in the same line of business are combined. Market demand may be affected by controllable-price, distribution, promotion, etc., and uncontrollable-demographic, economic, political, technological development, cultural activities etc. The executive must take into account all these conditions while forecasting.

The Company Forecast:

The company forecast is meant for firm concerned to look into the market share, for which forecast is to be made. By considering both controllable and uncontrollable, based on chosen marketing plans within the firm, with that of other industries, steps are taken in formulating forecasts.

Technological forecasts:

These forecasts predict the new technological developments that may change the operations of an organization. For example, the advent of the transistor put the vacuum tube totally out of business. The age of the electronic calculators totally wiped out the market for slide rules. An aggressive organization keeps up to-date with new technological development and readily adopts new methods to improve performance.

Competition forecasts:

It is equally necessary to predict as to what strategies your competitors would be employing to acquire, gains in the market share, perhaps at the cost of your market share. The competitor may be planning to employ a different market strategy for the product or to bring out a substitute for the product which could be cheaper and easily acceptable by consumers.

Social forecasts:

These forecasts involve predicting changes in the consumer tastes, demands and attitudes. Consumers have already established a trend for convenience, comfort and for products that are easy to use and manage. Matters of taste and preference may change over a period of time. For example, in the 1970s, the trend was to buy small economic cars. In the 1990s, the trend is back to luxury and comfort. While these trends partly do depend upon the general economic trends they also depend on the consumer tastes. For example, trends in women's fashions and clothing change almost every year. Nehru jacket, highly popular in 1960s is unheard of today. Accordingly, in the area of consumer goods, social trends are important aspects of forecasting. Forecasting as a strategy is widely used today, and some of these forecasts, specially the short-term ones are fairly reliable. Some forecasts, using scientific methods or instrumentations can be fairly accurately made. For example, short-range weather forecasting, forecasting the paths of meteorites and comets or solar and lunar eclipses is quite accurate. However, accuracy becomes less dependable as we extend forecasting farther into the future.

Forecasting about human behaviour or situational trends according to Omalu is much more difficult to assess and may result in faulty estimates. How people will respond to certain actions taken by the organization is difficult to predict. Perhaps, one of the classical examples of failure in correctly forecasting people's attitudes as well as economic trends is the total failure of Ford Motor Company's "Edsel" car, which was built in the early 1950s, after a thorough investigation of all the factors that determine future events.

Omalu et al posit that Bulova Watch Company suffered huge losses when it failed to accurately forecast the full impact of digital watches. On the other hand, IBM's correct forecast of the impact of its third generation computer system 360 in the 1960s was a major benchmark in the continuing success story of IBM. The uncertainty of future events overshadows the fact that even the most skilled forecasters using the most sophisticated tools and techniques; make major mistakes in making predictions.

An interesting example would be the faulty predictions about the population of America for the 1970s and 1980s, made in the 1950s. The actual population was much less than anticipated. Some of the assumptions on which these predictions were based did not include variables that became apparent later on, in time. These variables were legal abortions, social attitudes towards birth control, late marriages and a decline in social pressures to have children. Olmalu et al enumerate three classes of sales forecast.

There are three classes of sales forecasts:

1. **Short-run Forecast:**

It is also known as operating forecast, covering a maximum of one year or it may be half-yearly, quarterly, monthly and even weekly. This type of forecasting can be advantageously utilized for estimating stock requirements, providing working capital, establishing sales quotas, fast moving factors. It facilitates the management to improve and co-ordinate the policies and practice of marketing-production, inventory, purchasing, financing etc. Short-run forecast is preferred to all types and brings more benefits than other types.

2. **Medium-run Forecast:**

This type of forecast may cover from more than one year to two or four years. This helps the management to estimate probable profit and control over budgets, expenditure, production etc. Factors-price trend, tax policies, institutional credit etc., are specially considered for a good forecast.

3. **Long-run Forecast:**

This type of forecast may cover one year to five years, depending on the nature of the firm. Seasonal changes are not considered. The forecaster takes into account the population changes, competition changes, economic depression or boom, inventions etc. This type is goods call for adding new products and dropping old ones.

Limitations of Sales Forecast:

In certain cases forecast may become inaccurate. The failure may be due to the following factors:

1. **Fashion:**

Changes are throughout. Present style may change any time. It is difficult to say as to when a new fashion will be adopted by the consumers and how long it will be accepted by the buyers. If our product is similar to the fashion and is popular, we are able to have the best result; and if our products are not in accordance with the fashion, then sales will be affected.

2. **Lack of Sales History:**

A sales history or past records are essential for a sound forecast plan. If the past data are not available, then forecast is made on guess-work, without a base. Any new product that has no sales history and forecast are made on guess may be a failure.

3. **Psychological Factors:**

Consumers' attitude may change at any time. The forecaster may not be able to predict exactly the behaviour of consumers. Certain market environments are quick in action. Even rumours can affect market variables. For instance, when we use a particular brand of soap, it may generate itching feeling on a few people and if the news spread among the public, sales will be seriously affected, so also the case with Dangote consumable products, any serious ill complain can influence the fall of the sales vice vasa.

From the survey, it is possible that the growth of Dangote consumable products may not remain uniform. It may decline or be stationary. The economic condition of a country may not be favourable to the business activities-policies of the government; imposition of controls etc. may affect the sales, especially with the economic meltdown in Nigeria couple with inflation rate could also affect growth hence the need for business information to undertake forecasting.

The methods of forecasting no doubt could have respective merits and demerits. No single method may be suitable. Therefore, a combination method is suitable and may give a good result. The forecaster must be cautious while drawing decisions on sales forecast. Periodical review and revision of sales forecast may be done, in the light of performance. A method which is quick, less costly and more accurate may be adopted.

Forecasting

Forecasting is an ancient activity and has become more sophisticated in recent years. For a long time, steady steps in a time series data set, such as simple trends or cycles (such as seasonal), were observed and extended into the future. However, now a mixture of time series, econometrics and economic theory models can be employed to produce several forecasts which can then be interpreted jointly or combined in sensible fashions to generate a superior value. Recently, firms have begun to realize the importance of sharing information and integration across the stakeholders in the supply chain (Zhao, 2002). Although such initiatives reduce forecast errors, they are neither ubiquitous nor complete and forecast errors still abound (Carbonneau et al., 2008). Forecasting accuracy is a critical element of supply chain management, but it is an area that continues to challenge most companies. Carbonneau et al gives the following forecasting techniques.

Forecasting Techniques

Moving Averages

When seasonal patterns exist without trends, simple smoothing methods work well with depersonalized data. Intrinsic forecasting methods are those that use the past behavior of series to predict the future value of that same series. The term intrinsic denotes that the information used to forecast the series is internal or within the series. The terms time series analysis, univariate forecasting methods, and smoothing methods are often used as synonyms for intrinsic methods (De Lurgio and Bhame, 2001). The moving average forecast uses the average of a defined number of previous periods as the future forecasted demand (Carbonneau et al., 2008). Moving averages model is useful when the pattern less demands exist. Patternless demand defined as one that does not have a trend or seasonality in it. A pattern less series is random with either smooth or erratic variations.

Weighted Moving Averages (WMA)

It is normally true that the immediate past is most relevant in forecasting than immediate future. For this reason, weighted moving averages were used, when more important period (sales, or return data) were considered. For example, sales amounts are high before Christmas, so in January expected sales amounts are low and then lower index was used to calculate the January's forecast.

Integration of forecasting into marketing activities

Forecasting is a necessary part of every decisions process. A purposive choice among alternative actions in a problem situation required that an outcome for each action be predicted. We can no more avoid forecasting than we can avoid making decisions, forecasting recently has been the weapon most managers use in achieving the corporate aims of their organizations. Bemmaor, (2005) An organization that wants to introduce a new product into the market according to Infosino, (2006), has to plan and make necessary findings about the product. Decision on marketing activities like distribution, pricing, policy, product guarantee of quality, promotional tools etc. has to be forecasted even before taking off. A company launching a new proprietary pharmaceutical says a cough cure, might well study the price, promotion and progress of other types of proprietary products introduced in the previous five years. An analogy might be divided from the performance of these similar products which can be of value in predicting the likely results on the new item about to be launched. Through forecast, similar analogies in Dangote may be drawn from studies of promotional expenditures and market performance of competitive or similar products.

Method of forecasting

Basically, there are different methods of forecasting which are employed in an organization. Most authors generally agreed on three major methods of forecasting. Full and Hawlains (2007) classified forecasting methods under three major headings Viz:

i. Judgmental forecasting

ii. Time series analysis

iii. Casual method forecasting

General specific techniques may be used for each of these general methods. These methods are discussed below:

Judgmental method of forecasting

Some element of judgmental is of course involved in all methods of forecasting. A method is classified as judgmental; however, when the forecasting procedure used cannot be described well enough to allow more than one forecaster to use same result. There are however three method of judgmental forecast of sales. These are: Aggregate of individual salesman, expert consensus and the Delphi method.

Time series analysis

These are statistical techniques used when several years' data for a product or product line are available and when relationships and trends are both clear and relatively stable. One of the basic principles of statistical forecasting is that for all forecasting, when historical data are available the forecasters are advise to use the data on past performance to get a "speedometer reading" of the current rate of sales to know how fast the rate is increasing or decreasing. The current rate and changes in the rate "acceleration" and "deceleration" constitute the basis of forecasting. Once they are known, various mathematical techniques can develop projections from them. Even though it is not as simple as it sounds, however. It is usually difficult to make projections from raw data since the rates and trends are not immediately obvious; they are mixed up with seasonal variations, for example, and perhaps distorted by such factors as the effects of a large sales promotion campaign. The raw data must be massaged before they are usable, and this is frequently done by time series analysis.

Now, a time series is a set of chronologically ordered points of raw data—for example, a division's sales of a given product, by month, for several years. Time series analysis helps to identify and explain:

1. The regularity or systematic variation in the series of data which is due to seasonality: the "seasonals."
2. Cyclical patterns that repeat any two or three years or more.
3. Trends in the data.
4. Growth rates of these trends.

(Unfortunately, most existing methods identify only the seasonal, the combined effect of trends and cycles, and the irregular, or chance, component. That is, they do not separate trends from cycles. Once the analysis is complete, the work of projecting future sales (or whatever) can begin. The company should also note that when forecaster have separated analysis from projection for purposes of explanation it may be that most statistical forecasting techniques actually combine both functions in a single operation.

It is obvious from this description that all statistical techniques are based on the assumption that existing patterns will continue into the future. This assumption is more likely to be correct over the short term than it is over the long term, and for this reason these techniques provide us with reasonably accurate forecasts for the immediate future but do quite poorly further into the future (unless the data patterns are extraordinarily stable). For this same reason, these techniques ordinarily cannot predict when the rate of growth in a trend will change significantly, for example, when a period of slow growth in sales will suddenly change to a period of rapid decay. Such points are called turning points. They are naturally of the greatest consequence to the manager, and, as we shall see, the forecaster must use different tools from pure statistical techniques to predict when they will occur.

Casual methods of forecasting:

A casual method of forecasting requires the identification of casual (predictor) variables, measuring or estimating the change in them and estimating the functional relationship between them. Local utility supplying water to local community in Ogori-Magongo Community e.g. may find that water usage as a function of resident meters income; the rate may change in the amount if the rain falls.

Types of Forecasting Methods

There are types of forecasting methods based on mathematical (quantitative) models, and are objective in nature. Armstrong (2003) opine that the methods rely heavily on mathematical computations. These types of forecasting methods are based on **judgments, opinions, intuition, emotions, or personal experiences and are subjective in nature. They do not rely on any rigorous mathematical computations** explaining thus:

Quantitative methods:

Qualitative Forecasting Methods: Executive Opinion Approach in which a group of managers meet and collectively develop a forecast Market Survey Approach that uses interviews and surveys to judge preferences of customer and to assess demand. Delphi Method Approach is a consensus agreement reached among a group of experts Sales Force Composite. An approach in which each salesperson estimates sales in his or her region.

Quantitative Forecasting Methods Time Series Models

Model Description Naïve: Uses last period's actual value as a forecast, Simple Mean (Average) Uses an average of all past data as a forecast. Simple Moving Average: Uses an average of a specified number of the most recent observations, with each observation receiving the same emphasis. (Weight) Weighted Moving Average: Uses an average of a specified number of the most recent observations, with each observation receiving a different emphasis. (Weight) Exponential Smoothing: A weighted average procedure with weights declining exponentially as data becomes older Trend Projection Technique that uses the least squares method to fit a straight line to the data Seasonal Indexes. A mechanism for adjusting the forecast to accommodate any seasonal patterns inherent in the data Time-Series Models, Time series models look at past patterns of data and attempt to predict the future based upon the underlying patterns contained within those data. Associative Models: Associative models (often called causal models) assume that the variable being forecasted is related to other variables in the environment. They try to project based upon those associations.

Decomposition of a Time Series

Patterns that may be present in a time series Trend: Data exhibit a steady growth or decline over time. Seasonality: Data exhibit upward and downward swings in a short to intermediate time frame (most notably during a year). Cycles: Data exhibit upward and downward swings in over a very long time frame. Random variations: Erratic and unpredictable variation in the data over time with no discernable pattern.

To make proper decision in any company today the executive /sales managers must consider some kind of forecast. Sound predictions of demands and trends are no longer luxury items, but a necessity, if managers are to cope with seasonality, sudden changes in demand levels, and price-cutting manoeuvres of the competition, strikes, and large swings of the economy. Forecasting can help them deal with these troubles; the more they know about the general principles of forecasting, what it can and cannot do for them currently and which techniques are suited to their needs of the moment. Here the authors try to explain the potential of forecasting to managers, focusing special attention on marketing forecasting for consumers products goods of short and long time consumable. To handle the increasing variety and complexity of managerial forecasting problems, many forecasting techniques have been developed in recent years. Each has its special use, and care must be taken to select the correct technique for a particular application. The manager as well as the forecaster has a role to play in technique selection; and the better they understand the range of forecasting possibilities.

The selection of a method Armstrong et al (2002) posit depends on many factors—the context of the forecast, the relevance and availability of historical data, the degree of accuracy desirable, the time period to be forecast, the cost/ benefit (or value) of the forecast to the company, and the time available for making the analysis. These factors must be weighed constantly, and on a variety of levels. In general, for example, the forecaster should choose a technique that makes the best use of available data. If the forecaster can readily apply one technique of acceptable accuracy, he or she should not try to "gold plate" by using a more advanced technique that offers potentially greater accuracy but that requires non-existent information or information that is costly to obtain. This kind of trade-off is relatively easy to make, but others, may require considerably more thought. Furthermore, where a company wishes to forecast with reference to a particular product, it must consider the stage of the product's life cycle for which it is making the forecast. The availability of data and the possibility of establishing relationships between the factors depend directly on the maturity of a product, and hence the life-cycle stage is a prime determinant of the forecasting method to be used.

The researchers intension here is to present an overview of information requirement for forecasting by discussing some of the ways Dangote company can use a multi viral forecasting approach to overcoming competitors by describing the methods available, and explaining how to match method to problem. A manager generally assumes that when asking a forecaster to prepare a specific projection, the request itself provides sufficient information for the forecaster to go to work and do the job. This is almost never true. Successful forecasting begins with collaboration between the manager and the forecaster, in which they work out answers to the following ques.

Armstrong et al (2002) listed the following forecasting methods:

Aggregate of individual Salesman:

This involves the asking of each salesman to submit estimates of how much they expect to sell in the coming period. Such estimates are carefully reviews at successive management level and aggregated to obtain the company forecast. Adjustment are necessary to reduce sales man biases such as gross over or under-estimating or understanding demand so that the company may set a low sales quota, this technique is widely used especially by manufacturers of industrial products. It has the value of being relatively accurate over the short run (i.e. the next one or two quarters) of being inexpensive to use and for both industrial and consumer products.

Average or Consensus of Expert Forecast:

An expert is anyone whom we judge as "acquired special skill in or knowledge of particular subject". Thus, the role of "expert" is accordingly less well defined. As used in this context, it includes executives of the company consultants, trade association, official in government, and forecast of company sales, agencies etc. The expertise knowledge of company executives and consultants can be used for forecasting.

Delphi method of forecasting: A method of avoiding both the problems of weighing individual forecast of experts and the biases introduced by rank and personality in consensus method is provided by the Delphi method of forecasting. The method consists among others.

1. Having the participants to make separate distribution or same combination of the three.
2. Returning them to the analyst who combines them using one of the weighing systems Described previously.
3. Returning the combined forecast to the forecaster and who finally make new round of forecasts with this information. Others are:

Evaluation of forecast:

It is quite often necessary to evaluate sales forecast to know whether it has really achieved the objectives it was set for.

Full and Hawlains (2007) identified two measures of forecasting evaluation thus,

1. A forecast of sales should be made each forecasting period using a naïve model and the accuracy compared overtime with those of the primary forecasting method.
2. A review of forecasting accuracy overtime should be made periodically. The accuracy of the primary methods forecasts is not better than that of the naïve model. On the average a serious forecasting problem may be indicated (of course, in most case, the naïve method may provide such accurate forecasts that no improvement is required) if the accuracy of the method of forecast does not improve overtime a forecasting problem may also be indicated. An example of the use of naïve model in evaluating forecast made by another method is the evaluation and the resulting decision made by the Bureau of the census concerning forecasts made from survey of consumers to determine their intention

with respects to buying automobiles during the next six months. The decision made early in 1973 was to stop publishing data on anticipated levels of purchases of auto mobiles because the accuracy of the forecasting obtained was not an improvement upon the accuracy of forecasts "which should be obtained under the naïve assumption, that levels of purchases during any six month period would be equal to the level during the previous six month".

Full and Hawlains (2007) also went further to say that "sales forecast evaluation is best done by naïve model forecast which are characterized by reliance on the last period, sales as a forecast of the next period of sales". This model provides accurate sales. Forecast is "flat" rather than increasing or decreasing and when random, cycles and seasonal effects are negligible. Organizations of consumer good would found this model (naïve model) useful most especially when forecasting periodically and when it want to base its forecasting on the basis of comparison between today and the next period sales. They also went further by demonstrating their view on naïve model forecasting evaluation diagrammatically by comparing actual and forecast sales of consumer products in an organization or firm.

Gabor & Granger (2002) in their study posit that the purpose of the forecast is it to determine the accuracy and power required of the techniques, and hence governs selection. Deciding whether to enter a business may require only a rather gross estimate of the size of the market, whereas a forecast made for sales/budgeting purposes should be quite accurate. The appropriate techniques differ accordingly. Again, if the forecast is to set a "standard" against which to evaluate performance, the forecasting method should not take into account special actions, such as promotions and other marketing devices, since these are meant to change historical patterns and relationships and hence form part of the "performance" to be evaluated.

Forecasts according to Armstrong (2003) simply sketch what the future will be like if a company makes no significant changes in tactics and strategy are usually not good enough for planning purposes. On the other hand, if management wants a forecast of the effect that a certain marketing strategy under debate will have on sales growth, then the technique must be sophisticated enough to take explicit account of the special actions and events of the strategy to embark on. Techniques vary in their costs, as well as in scope and accuracy. The manager must fix the level of inaccuracy he or she can tolerate—in other words, decide how his or her decision will vary, depending on the range of accuracy of the forecast. This allows the forecaster to trade off cost against the value of accuracy in choosing a technique. For example, in production and inventory control, increased accuracy is likely to lead to lower safety stocks. Here the manager and forecaster must weigh the cost of a more sophisticated and more expensive technique against potential savings in inventory costs.

Consumer Goods

According to Baker (2005) consumer goods are "those goods destined for use by the ultimate household consumer and in such firm that they can be used by him without further commercial process". In other words consumer goods are the end result of production and manufacturing and are what a consumer will see on the store shelf. Clothing, food and jewelry are all examples of consumer goods. Daniel (2002) defined consumer goods "as those goods that are purchased by the ultimate buyer". Stanton (2005) defined consumer goods "as those products destine for use by ultimate consumer or households in such firm that they can be used without (further) processing"

.**Classification of consumer goods**

Consumer goods are classified into three major categories according to the method in which they are purchased. According to Baker (2005) consumer goods are generally classified into three categories viz:

Convenience goods

The significant characteristics of convenience goods are that the consumer has complete knowledge of the particular product wanted before going out to buy. Normally, the pain resulting from shopping around to compare price and quality is not consider with the extra time and effort required.

Shopping goods

According to Stanton (2005) shopping goods are consumer goods that the consumer in the process of selection and purchase, usually compares on such bases as suitability, quality, prices and style. The outstanding difference between shopping goods and convenient goods is that consumer lacks full knowledge about shopping goods before embarking upon the shopping trip. Thus, there is always room for alternative products before they make the purchase. Example of shopping goods including furniture and other durable goods, jewelry, piece of goods in general. Shopping goods cost more and are purchased less frequently than convenience goods.

Specialty goods

Consumer goods according to Baker (2005) can be categorized into convenience goods, shopping goods, and specialty goods. The classification scheme is based on the way consumers purchase. This system is based on the definition that convenience and specialty goods are both purchased with a predetermined pattern in mind. In the case of the convenience good, the pattern is that the most accessible brand will be purchased; in the case of a specialty good, the pattern is that only a specific brand will be purchased. For example, if the customer utilizes an outlet because it is the most accessible, it would be considered, for that customer at least, a convenience store; while one in which the consumer shops even if he/she has to go considerably out of his/her way to reach it, would be considered a specialty store. A shopping good is one in which the consumer does not have a predetermined pattern in mind. Likewise a shopping store is one which the consumer will undertake a search to select a store to patronize.

Classification

Baker classifies Specialty consumer goods as thus:

1. Convenience store – convenience goods. The consumer prefers to buy the most readily available brand of product at the most accessible store.
2. Convenience store – shopping well. The consumer selects his/her purchase from among the assortment carried by the most accessible store.
3. Convenience store – specialty goods. The consumer purchases his/her favored brand from the most accessible store which has the item in stock.
4. Shopping store – convenience goods. The consumer is indifferent to the brand of product he/she buys, but shops among different stores in order to secure better retail service and/or lower retail price.
5. Shopping store – shopping goods. The consumer makes comparisons among both retail controlled factors and factors associated with the product (brand).
6. Shopping store – specialty goods. The consumer has a strong preference with respect to the brand of the product, but shops among a number of stores in order to secure the best retail service and/or price for this brand.
7. Specialty store – convenience goods. The consumer prefers to trade at a specific store, but is indifferent to the brand of product purchased.
8. Specialty store – shopping well. The consumer prefers to trade at a certain store, but is uncertain as to which product he/she wishes to buy and examines the store's assortment for the best purchase.
9. Specialty store – specialty goods. The consumer has both a preference for a particular store and a specific brand. It would be naïve for the channel selector to assume that his/her market would not fall into only one or perhaps two of the various categories. He/she must study the market to see where his/her consumers concentrate in terms of the nine.

Buying behavior

Brands of high consumer loyalty are less likely to lose sales because they are not in many outlets. Here comes the meaning of specialty goods. A specialty goods choice is made by the buyer with respect to its value of the product in his/her life. When a certain decision has been made, he/she is unlikely to change the loyalty associated with the product to some other brand. At that moment, the consumer does not worry about the availability of that product in his area of convenience. (Baker 2005)

1.7 Ways in which information affect sales in forecasting and marketing of consumer goods

Adamu (2011) posit that company sales manager's sort for information through sale forecasting which is the management tool for predicting the volume of attainable sales. Therefore, the whole budget process hinges on an accurate, timely sales forecast. These technical projections of likely customer demand for specific time horizon are made in conjunction with basic marketing principles for example; sale forecasts are often viewed within the context of total market potential, which can be understood as a projection of total potential sales for all companies. Market potential relates to the total capacity of the market to absorb the entire output of a specific industry. On the other hand, sales potential is the ability of the market to absorb or purchase the output from a single firm. Many agencies and organizations publish indexes of market potential. They base their findings on extensive research and analysis of certain relationship that exist among basic economic data for example, the location of potential consumers by age, education, and income for products that demonstrate a high correlation between those variables and the purchase of specific products. This information allows analysis to calculate the market potential for consumer or industrial goods. Forecasting, involves not only the collection and analysis of hard data, but also the application. For example, forecasting requires business owners and managers not only to estimate expected units sold, but also to determine what the business production (materials, labour and equipment) are.

Stanton (2005) sees sales forecasting "as an estimate of sales (in currency or product units) during some specified period of time and under a predetermined marketing plan in the firm". While sales forecasting can ordinarily be made more intelligently if the company first determine its market or sales potentials many firms start their forecasting directly with the sales forecast. Nonyely (2000) sees sale forecast as an estimate of the monetary or unit sales of a product or service that an individual marketer expects in a specified time period under a given marketing plan". Implicit in this definition is that notion that firm's marketing strategy or plan helps determine what sales to expect.

Marketing according to Abdulsalami (2010) is the linking of two basic functions namely, those of production and consumption. As society has become more complex, and the process of production and supply varied, so the means by which the community is supplied with goods and services it demands has itself become more complicated and important within the business enterprise, it is the marketing activity that provides the means by which enterprise supplies its market with goods or services that customers wish to buy. Many authors of books on marketing have given various definitions notable among them are Rosenberg's (2007) sees, marketing as a matching processing, based on goods and capabilities, by which a producer provides a marketing mix (product, services, advertising, distribution, pricing etc., that meets consumer needs within the limits of society.

Kotler (2003) believes that "marketing is a social and managerial process by which individual and groups obtain what they need and want through creating and exchanging products and value with others. Since marketing is seen as a matching process and satisfaction of needs and wants through exchange of production and value, it therefore appears natural that any mix-match will lead to a failure. It follows then, that a business whether private or public, exists by selling its products and services by doing this it seeks to achieve its profits and other objectives".

An important step in market analysis according to Ozalp Vayvay1 et al (2013) is to make quantitative estimates of buyer demand for the budget sales forecast is an estimate of the monetary or unit sales of budget or services that an individual marketer expects in specified time period under a given marketing plan. Implicit in this definition is the notion that a firm's marketing strategies or plan helps determine what sales to expect, this means that after the sales forecast has been made, the figures obtained are adjusted before being used for planning to reflect how ambitious a plan is contemplated. By and large, managers should be able to predict and put in mind the purposes of the forecast which must be clearly defined to meet the degree of accuracy required. Forecasting and budgeting are twin sisters. This is because they both assist in planning, in any organization. It is therefore of no use to forecast for a line-up of activities without equally drawing up the budget to follow in sequence.

Producer of consumer goods such as Dangote can adopt more appropriate strategic forecast to plan production schedules and inventory levels. An accurate forecast will however, reduce the likely hood of both stock outs and excessive inventories. However, once the sales forecast is prepared it does become the key controlling factors in all operational planning throughout the organization, the factors is the basis of sound budgeting. (Abdulsalami, 2010)

Kotler (2003) opine that sales forecasting is essentially the art of anticipating what buyers are likely to do under a given set of condition". This immediately suggests that most useful source of information would be the buyers themselves. Ideally, a list of all potential buyers would be drawn up; each buyer would be approached, preferably on a face to face basis and asked how much the company would buy of the stated product in the defined future under stated conditions. This observation is based on the survey of buyer intentions point of view.

Williams (2001) sees forecasting "as that which involves the preparation of statement concerning uncertain or unknown event'. He went further to say that in most cases, those making forecast is to gain knowledge about uncertain events that are important to our present decisions. A sound understanding of the forecasting problem in addition to the rational study and analysis of available data require a preparation of a forecast.

Gross and Peterson (2006) in their own contribution posit sales forecast "as an attempt to foresee the future by examining the past". They went on to say that it consist of generating unbiased estimates of the future magnitude of some variable, such as sales on the basis of past and present knowledge and experience. They equally opined that the essence of forecasting estimating future events base on past patterns and applying judgments to projection of past pattern. These above definition surely make us to conclude that most estimate obtained in quality forecasting are derived on objective and systematic fashion and do not depend solely on subjective guess and lunches of the analysis. It shows that analysts select a forecasting tool such as equation, and applied it to A manager according to Armstrong et al (2000) generally assumes that when asking a forecaster to prepare a specific projection, the request itself provides sufficient information for the forecaster to go to work and do the job. This is almost never true. Successful forecasting begins with collaboration between the manager and the forecaster, in which they work out answers to the following questions. What is the purpose of the forecast—how is it to be used? This determines the accuracy and power required of the techniques, and hence governs selection. Deciding whether to enter a business may require only a rather gross estimate of the size of the market, whereas a forecast made for budgeting purposes should be quite accurate. The appropriate techniques differ accordingly. Again, if the forecast is to set a "standard" against which to evaluate performance, the forecasting method should not take into account special actions, such as promotions and other marketing devices, since these are meant to change historical patterns and relationships and hence form part of the "performance" to be evaluated. Armstrong opine that forecasts that simply sketch what the future will be like if such company makes no significant changes in tactics and strategy, it is not good enough for planning purposes. On the other hand, if management wants a forecast to be effective then a certain marketing strategy will have to be determined and such technique must be sophisticated enough to take explicit account of the special actions and events the strategy entails.

Techniques vary in their costs, as well as in scope and accuracy. The manager must fix the level of inaccuracy he or she can tolerate—in other words, decide how his or her decision will vary, depending on the range of accuracy of the forecast. This allows the forecaster to trade off cost against the value of accuracy in choosing a technique. For example, in production and inventory control, increased accuracy is likely to lead to lower safety stocks. Here the manager and forecaster must weigh the cost of a more sophisticated and more expensive technique against potential savings in inventory costs. (Armstrong et al 2000).

Area Studied

The area study is Lagos and Kano (Nigeria) Information requirement for sales forecasting on marketing of Dangote consumers goods was the area investigation. The study examined the important of information in forecasting of consumers goods, types of forecasting, importance and methods of forecasting and how sales forecast reflect on marketing of their consumer's goods.

2. RESEARCH METHODOLOGY

The researcher used stratified random sampling to select the respondents. This design allows the population to have an equal chance of being selected in the different strata. The strata in this case are in different categories within the company. The sample size was 235 respondents out of target population of 2350. These were selected to ensure that the sampling size had characteristic representation of the population using the formula developed by Osuala (2005). Gay (1980) cited in Jen (2002) reported that if the population is large, say in thousands the percentage of population to sample should be a minimum of 10%. For these reasons the researcher used 10%. This implies the use of proportionate stratified random sampling procedure to draw the sample for the population

3. Description of area study

Response Rate

The data was presented in tabular form using percentage. Each question was presented on a separate table to indicate the views or opinions of the selected Dangote workers both (junior and senior). Each table was followed by the interpretation of the data collected. It is however important to note that 235 questionnaires were distributed to respondents while only 148 questionnaires was successfully returned/collected representing (62.98%). Hence, the analysis was based on the returned data.

Table I: Types of goods Dangote company market.

Type	Response	Percentage
Industrial goods	36	24
Consumer goods	112	76
Total	148	100

Table 1 above indicates Dangote consumable goods. It is of interest to know that the company market both industrial and consumer goods. 112 (76%) expressed that Dangote group of companies market more consumer goods than the industrial goods. Goods like, rice, flour, macaroni, spaghetti, indomie etc. are daily consumption needs that costumers do purchase. The respondents 36 (24%) opine that industrial products like cements, roofing Zink etc. (Long time goods) are also sold.

Table II: Do you forecast your products before embarking on sales?

Option	Response	Percentage
Yes	94	64
Sometimes	45	30
Not Necessary	9	6
Total	148	100

Table II above on sales forecast of Dangote product before sales activities, according to the respondents 94 (64%) of the staff both (juniors and seniors) posit that, the company do embark on sales forecast before their products are produce and made available for sales especially new (products). 45(30%) opine that sometimes, market survey are undertaken before their product are offered for sales while 9 (6%) express that there's no need for sales forecast before products sales since the products is already accepted by the consumers. This implies that Dangote under take sales forecast before marketing of the products.

Table III: How effective is the method used?

Option	Response	Percentage
Very effective	71	48
Effective	52	35
Not Effective	25	17
Total	148	100

In table III above, 71 (48%) of the respondent agreed that sales forecast is very effective, it does not only help the marketability of their products, but increase their sales. 52 (35%) said its effective while 25 (17%) believed it's not effective this is an opinion best known to them or probably a personal opinion. The researchers disagree with this premise, because sales forecast has help in the areas of products improvement leading to high patronage of Dangote products.

Table IV: What are the periods of forecasting?

Option	Response	Percentage
Quarterly	83	56
Bye annually	41	28
Yearly	24	16
Total	148	100

Table IV express the right time for sales forecast to be carried out, majority of the respondents agreed that the right time for forecast is quarterly within a year i.e. 83(56%). Other staff representing 41 (28%) agreed that biannually is excellent while 24 (16%) agreed on yearly forecast. The researchers opine that large firm such as the Dangote should undertake regular forecast because of the competitive nature of the goods. The qualitative forecasting methods adopted by the company should be reviewed.

Table V: Has forecasting predicted sales accordingly?

Option	Response	Percentage
Yes	95	64
Sometimes	42	28
No	11	8
Total	148	100

In table V above 95 (64%) agreed that forecasting predict sales accordingly in Dangote Nigeria Limited. 42 (28%) believe that sometimes sales prediction could not be hundred percent predictably correct while 11 (8%) posits that sales forecasting is a mere guess/ working tools that is not realistic. The implication is that as far as there are competitors, there's need for sales forecasting. The company embark on short time forecasting for fear of economic instability as witness now.

Table VI: Does the cost of forecasting reflect heavily on the cost of sales.

Option	Response	Percentage
Yes	13	9
Sometimes	37	25
No	98	66
Total	148	100

In table VI. 98 (66%) strongly express that sales forecast cost is not normally transferred to the cost of products marketers, but rather it help to improve the genuineness of the quality because of competitor, even though 37 (25%) believe that sometimes it effect cost, depending on generally increase of the sale of such products, 13 (9%) expressed out rightly that sales forecast has cost implication on sales items which could be seen in exorbitant increase of sales products witness now.

Table VII: Does forecasting have negative effect on the general plan of your product?

Option	Response	Percentage
Yes	11	7
No	137	93
Total	148	100

In table VII above the respondent, representing 11 (7%) believed that forecasting has a negative effect on the general plan because of constant price increase of the products sold to the costumers while 137 (93%) debunk this argument. The executive opinion approach of group manager of the company who collectively develop market forecast survey has ultimately negatively effects on sales products, because of the qualitative forecasting method adopted.

Table VIII: Reasons for embarking on forecasting

Forecast	**Respondents**	**Percentage**
To increase sales	42	28
to increase price	16	11
To overcome competitors	33	22
To market products	57	39
Total	148	100

Table VIII above expressed the need to embark on marketing forecast. From the data gathered 57(39%) posit that Dangote need to embark on forecasting to enable the company to market her products efficiently and effectively considering the competitive nature of the products. 42 (28%) believe that forecasting increase their sales of the products while 33 (22%) opined that forecasting help to overcome market competitors of the same products. 16 (11%) opine that forecasting has cost implication on the products.

4. FINDINGS

1. Base on the data analysis 112 (76%) expressed that Dangote group of companies market more consumer goods than the industrial goods while 36 (24%) market both industrial Goods.
2. Ninety four; "94 (64%)" of the staff agreed that, Dangote company do embark on sales forecast, 45(30%) testify that market survey are undertaken before their product are offered for sales while 9 (6%) a negligence portion of the population disagree with the assertion on the ground of constant increase of price of their products.
3. The respondent: 71 (48%) agreed that sales forecast is very effective, 52 (35%) also agree while 25 (17%) believed it's not effective.
4. The right time for sales forecast to be carried out according to the respondents is the adoption of quarterly forecast i.e. 83(56%), 41 (28%) agreed on biannually while 24 (16%) agreed on yearly forecast.
5. In table 5: 95 (64%) agreed that forecasting predict sales, 42 (28%) express that sales prediction may not be hundred percent predictably correct while 11 (8%) posits that sales forecasting is a mere guess.
6. Ninety eight; 98 (66%) forecasting does not translate to the cost effectiveness of the products marketers, 37 (25%) believe that sometimes it effect cost while 3 (9%) posit it effect cost of sales items.
7. The respondent, representing 11 (7%) believed that forecasting has a cost implication on price increase of the products while 137 (93%) disagreed the assertion.
8. Table 8; expressed the need to embark on marketing forecast, 57(39%) respondents opine, 42 (28%) posit that it increases sales of the products while 33 (22%) express that it help to overcome market competitors.

5. RECOMMENDATIONS

With regards to the findings obtained from the survey conducted on Dangote Nigeria Ltd, it has become imperative for the researchers to make the following recommendations, to enhance efficiency and effectiveness of sales forecasting.

Dangote being a producing firm, marketing a wide variety of product lines including soft, fragile and tangible goods, and etc. should organize a strong forecasting teams to predict various sales of their products lines. One of the major responsibilities of this forecasting team should be the finalization of annual or quarterly broad-based forecasts, to do this the forecasting team should be provided with prior pass and present company sales data for accurate prediction. This statistics will enable the forecast team to predict what sales should be expected for the future. Since the organization deals with a wide range of consumer goods, short term forecasting should be considered useful to them rather than embarking on more mathematical models which take time and very costly. By doing this, it would enable the (management) review any changes that might occur either in terms of marketing techniques or otherwise. Also the organization should encourage promotional activities in their programmes, as delay or denial of staff promotion may affect the productive performance.

In selecting a specific method of forecasting situation, management should first compare the requirements of the forecasting with the capabilities of their method. Management of Organization such as Dangote Ltd in any forecasting situation should focus attention on accuracy, specification, data requirement and time availability for meaningful results.

6. Conclusion

Dangote Nigeria Limited embark on quantitative forecasting methods, the company base their forecast on the executive opinion of their managers to develop a forecast market for the company. This type of forecasting has indirect cost implication the sales of goods witness in most of their goods today. The study basically ascertain information requirement for forecasting cost implication on sales of consumer goods through the use of descriptive analysis. Based on the research findings, it could be express that forecasting has a remarkable influence on marketing of Dangote consumer goods, the researchers recommended qualitative and quantitative methods: These types of forecasting methods are based on mathematical (quantitative) models, and are objective in nature. They rely heavily on mathematical computations to predict the future based upon the underlying patterns contained within those data. A good Forecasting Method must have the following qualities: Simplicity: Economy: (cost), Availability: Flexibility: Durability: Plausibility: Accuracy and Consistency. An ideal forecasting method is one that yields returns over cost with accuracy, seems reasonable, can be formalised for reasonably long periods, can meet new circumstances adeptly and can give up-to-date results. Even though there is no unique method for forecasting the sale of any commodity. The forecaster may try one or the other method depending upon his objective, data availability, the urgency with which forecasts are needed, resources he intends to devote to this work and type of commodity whose demand he wants to forecast. Therefore, based on the findings, it could be summarized that forecasting plays a significant role in the marketing of consumer goods in Dangote Plc.

REFERENCES

i. *Abdulsalami, L. T. (2016)"Marketers Information Needs and Dissemination in two Bottling*
   a. *Companies in Nigeria". Department of Library and Information Science University of Nigeria, Nsukka. Unpublished PhD. Thesis.*

ii. *Abdulsalami T. L.. Information Accessibility and Use by Dealers of Nigerian Bottling Company*
   a. *Plc. Kaduna Plant. Master in Library and Information Science Thesis 2010. Ahmadu Bello University, Zaria.*

iii. *Adamu, S. (2011) Sales forecast in marketing of consumer goods: A case study of Unilever*
   a. *Kaduna. Unpublished BLS (ABU). Zaria.*

iv. *Armstrong, J. S. et. al (2000) "Extrapolation for time-series and cross-sectional data," in J. S.*
   a. *Armstrong (ed.), Principles of Forecasting: A Handbook for Researchers and Practitioners. Kluwer Academic Publishers: Norwell, MA. 28 March*

v. *Armstrong, J. S.; Morwitz, V. G. and Kumar, V. (2017) "Sales forecasts for existing*
   a. *consumer products and services". University of Pennsylvania, International Journal of Forecasting. Vol. 16(3) .2017 http://repository.upenn.edu/marketing_papers .*

vi. *Armstrong, J. S.(2003) "Relative Accuracy of Judgmental and Extrapolative Methods in*
   a. *Forecasting Annual arnings". Journal of Forecasting. 2: 437–447. doi:10.1002/for.3980020411*

vii. *Armstrong, J. S. and Collopy, F. (2002) "Error Measures For Generalizing About Forecasting*
   a. *Methods: Empirical Comparisons". International Journal of Forecasting. 8: 69–80. doi:10.1016/0169-2070(92)90008*

viii. *Baker, L. (2005) "Marketing measures for information service Special Libraries".*

ix. *Bemmaor, A. C. (2005) "Predicting behavior from intention-to-buy measures: The parametric*
   a. *case," Journal of Marketing Research, 32.*

x. *Carbonneau, R. K.; Laframboise. R. A.. (2008) "Aplication of Machine Learning Techniques*
   a. *for Supply Chain Demand Forecasting", European Journal of Operational Research.*

xi. *Daniel, M. C. (2002) "Marketing," 2nd Edition Harper and Row publisher Inc.*

xii. *Delurgio, S. B. C. (2001) "Forecasting Systems for Operations Management".*

xiii. *Full, D. and Hawkins, D. (2006) Marketing research meaning measurement Method" 4th Edition*
   a. *McMillan publishing Co. in New York.*

xiv. *Gabor, A. &. Granger, C. W. (2002) "Ownership and acquisition of consumer durables: Report*
   a. *on the Nottingham consumer durables project," European Journal of Marketing.*

xv. *Gay, A. ((2002) cited in Jen, S. U. ((1980) Fundamentals of Research Methodology. Yola:*
   a. *Paraclete publishers. p75-81*

xvi. *Gross, W. and Peterson, L. (2006)"Marketing Research" 3rd Edition Egunghton Nifflin Co.*
   a. *Boston U. A.*

xvii. *Infosino, W. J. (2006) "Forecasting new product sales from likelihood or purchase ratings,"*
   a. *Marketing Science, 5 (Fall),.*

xviii. *Kotler, P. (2003) Analysis Marketing Decision 12th edition, Penitence Hall New York, USA*

xix. *Kotler, P and Karem A. (2007) "Marketing management analysis planning implementation and*
   a. *Control" 8th Edition New Delhi: Prentice hall of India.*

xx. *Nikhila, C. (2017) Sales Forecasting: Meaning, Importance and Methods. International Journal*
   a. *of Business Management. (16) 1.*

xxi. *Nonyely, E. N. Modern marketing for Nigeria, 2nd Edition African Fap Publishers. 2000*

xxii. *Omalu, B. I.; Shakir, A. M.; Lindner, J. L.; Tayur, S. R. (2007) "Forecasting as an Operations*
   a. *Management Tool in a Medical Examiner's Office". Journal of Health Management. 9:75. doi:10.1177/097206340700900105.*

xxiii. *Osuala, E. C. (2005) Introduction to Research Methodology. Nimo: Rex Charles and Patrick.*
   a. *pp25*

xxiv. *Ozalp Vayvay, O. D and Semih, O. (2013) Forecasting Techniques In Fast Moving Consumer*
   a. *Goods Supply Chain" Department of Industrial Engineering, University of Marmara, Istanbul, Turkey*

xxv. *Rosenberg, J. (2007) Forecasting model, 3rd Edition vicar publishing House New Delhi.*

xxvi. *Stanton, W.J. (2005) Fundamental Marketing, 6th Edition McGraw Hills Inc.*

xxvii. *William, U. and Nicholas, J. (2001) Marketing Myopia, 2nd Edition Richard Irwin Home wood*
   a. *Illinois.*

xxviii. *Zhao, V. (2002) On the predictive value of consumer intentions and attitudes" Review of*
   a. *Economics and Statistics.*

Appendix 1

BIOGRAPHY OF AUTHORS

Dr. Lucky Tijani Abdulsalami was one time a Lecturer of Library and Information Science at the Institute of Education ABU Zaria. One time exams officer, student's adviser and an admission officer. He also lectures part-time (HND II) Intl Relations at divisional college of Agriculture ABU, Zaria for a period of ten years and later move to Federal University Lafia. He also contested for local Government Chairman 2007 and Kogi State House of Assembly in 2011 in Ogori-Magongo LGA area of Kogi State. He hails from Magongo in Ogori-Magongo Local Government Area, Kogi State. He holds Diploma in Library and information science in 1989, BLIS 1997, MLIS 2010 and master of international affairs and Diplomacy (MIAD) 2000, Master in Law and Criminal justice 2005 and PhD in January 2016. He has many academic publications and papers in national and international journals and books. His areas of academic interest are Marketing /Business Information, Information Technology and Information Resource Processing.

Nsikanabasi Ackley Omosigho is a Librarian in Federal University Central Library Lafia, Nasarawa State, Nigeria since 2016. Nsikan Omosigho studied Information Systems Management (M.Sc.) from the prestigious University of Salford Manchester, UK and graduated with a distinction in 2015. Political views - conservative. Nsikan Omosigho lives in Port Harcourt, Nigeria