This study is an evaluation of organisational structure on management effectiveness with reference to Dangote Cement PLC in Gboko, Benue State. The specific objectives were to identify the type(s) of organisational structure adopted in Dangote Cement PLC, Gboko Plant, and its effect on management effectiveness, among others. The research adopted survey research design, the population consist of management personnel of the organisation, which was one hundred and fifty one (151). Purposive and simple random sampling techniques, primary and secondary data was used. Using Taro Yamane’s formula, the sample size of the study was used deduce to be one hundred and ten (110), while one hundred (100) questionnaire was well field and return, which formed the basis for the data analysis. Descriptive statistic, Pearson Product Moment Correlation, and Logistic Regression Analysis was used to analyse the objectives. The major findings revealed that; line and staff organisational structure and product/market organisational Structure are organisational structure adopted in the organisation, the correlation analysis result indicated that at P>0.05 level of significance, organisational structure has a strong positive effect on managerial effectiveness with correlation coefficient of (r = 0.811). The Logistic Regression result revealed that: Centralisation (sig≤0.05; w = 2.764), Formalisation (sig≤0.01; w = 11.609), and effective Organisation Communication (sig≤0.01; w = 5.342), are structural variables that are significantly related with the effectiveness of managers in Dangote Cement PLC, Gboko Plant. The researcher concluded that effective organisational structure is sine qua non to management effectiveness and organisational performance, and recommends that organisation structure should be effectively designed for it provides the framework for the activities of the organisation, and its competitive ability.

**KEYWORDS**
Evaluation, Organizational Structure, Management Effectiveness.
INTRODUCTION

It is obvious that every organisation is unique, and mixture and configuration of its components are unique as well (Daniels et al., 2011) but increasing management effectiveness is one of the most important organisational goal for almost all organisations in every industry. To achieve these goals organisations create inner order and relations among organisational parts that can be described as organisational structure. An organisational structure is a mostly hierarchical concept of subordination of entities that collaborate and contribute to some one common aim. Organisations are a number of clustered entities, the structure of an organisation is usually set up in one of a variety of style dependent on their objectives and ambiance the structure of an organisation will determine the modes in which it shall operate and will perform. Organisational structure has an important part in determining management effectiveness, and practices of organisational structure are context specific (Zheng et al., 2010). Therefore, in order to achieve its goals and objectives the work of an organisation has to be divided among its members. Some structure is necessary to make possible the effective performance of key activities and to support the efforts of staff. Structure provides the framework of an organisation and for its pattern of management. It is by means of structure that the purpose and work of the organisation is carried out.

A successful organisational structure facilitates managerial issues, provides great potential for improving organization’s competitive power, innovation capability and labor force relations while lowering expenses. Organisation structure allows the expressed allocation of responsibilities for different entities ordinary description of such entities is as branch, site, department, workgroup, and single people. Organisation structure is clearly important, for any organization that is properly structured, there are likely to be fewer problem of structure in the distribution of task, the definition of authority and responsibility. Thus, managers needs to understand the importance and effects of organisational structure and design. In the words Drucker (1999) it is the correct design of structure that is of most significance in determining organisational performance. He further explained that good organisation structure does not by itself produce good performance. But a poor organisation structure makes good performance impossible, no matter how good the individual managers may be. Coming to the task that structure in the present day organisation presents complex relationship, there is the need for people to organize their efforts. Hence organisation structure defines the format of allocation of work roles to identify the members of the organisation. It establishes the line of authority for integrating and co-coordinating activities. Structure provides the framework for the activities of the organisation and must harmonies with the organization’s goals and objectives.

Therefore, it cannot be succinctly stated that to a great extent organisational structure can make or mar management effectiveness. Due to the static nature of organisational structure, it sometimes cannot meet requirements of efficiency and adoptability. Thus, there is greater need for a carefully designed and purposeful formal organisational structure. There is also need for a continual review of Dangote Cement PLC organisational structure to ensure that it is the most appropriate form for the organisation, and in keeping with the growth and development of the organisation and its personnel. Furthermore, the need to evaluate the efficiency of the structure of Dangote Cement PLC in Gboko, Benue State in achieving the profitability objective of the organisation and to streamline the negative influence it’s creating on the effectiveness of the management team propelled the research; on the evaluation of organisational structure on management effectiveness with reference to Dangote Cement PLC in Gboko, Benue State. Specifically, the study sought to:
• identify the type(s) of organisational structure adopted in Dangote Cement PLC, Gboko Plant and its effect on management effectiveness.
• find out the relationship between size, centralization, specialization, formalization etc, of organizational structure and the effectiveness of managers in Dangote Cement PLC, Gboko Plant.

LITERATURE REVIEW
There are many different opinions and definitions on organisational structure. Structure in one sense is the arrangement of duties used for the work to be done. This is best represented by the organisation chart (Jackson and Morgan 1982). In another sense, “structure is the architecture of business competence, leadership, talent, functional relationships and arrangement” (Wolf 2002). Walton (1986), identified structure as the basis for organising, to include hierarchical levels and spans of responsibility, roles and positions, and mechanisms for integration and problem solving. Organisational structure is the construction or shape and determines the internal structure of the relationships prevailing in the organisation, it illustrates the divisions or units of the main and branch undertaken various actions and activities required to achieve the objectives of the organisation (Hammoud, 2002). It includes the size of the organisation and style of power and decision-making style, so that the nature of the organisational structure and personnel in the organisation look to affect their ability to participate and creativity (Qaryouti, 1997). Bloisi et al., (2007) defines organisational structure as a grouping of people and tasks into different units to boost coordination of communication, decisions, and actions. Realizing the close connection between the processes taking place inside an organisation makes it is easier to understand the intricate task of directing an efficient organisation.

The Design of Organisation Structure
It is important to bear in mind that there are many variables that influence the most appropriate organisation structure and system of management, including situational factors and the contingency approach. Changing patterns of work organisation, the demand for greater flexibility and the multi-skilling challenge and managerial processes such as delegation and empowerment also have a major interrelationship with structure and influence decisions of structural design. Lundy and Cowling (1996) say that organisations are collections of people brought together for a purpose to achieve this purpose successfully, people need to be organized within the best possible structure. Decisions on structure are primary strategic decisions. Structure can make or break an organisation. There is an underlying need to establish a framework of order and system of commend of which the work to be under taken is accomplished successfully. This demands that attention be given to certain basic principles and considerations in the design of organisation structure or in reviewing the effectiveness of an existing structure. The basic considerations in the design of organisation structure according to Lundy and Cowling (1996) are as follows:

Clarification of objectives
A clear definition of objectives is necessary in order to provide a basis for the division of work and grouping of duties into subunits. The objective for these sub-units must be related to the objectives of the organisation as a whole in order that in appropriate problem of structure can established. Clearly stated and agreed objectives will provide a framework for the design of structure, and a suitable pattern of organisation to achieve those objectives. Clearly defined
objectives will help facilitate system of communication between different parts of the organisation and the extent of decentralisation and delegation.

**Task and element functions**
In order to produce some good, or provide some services, there are four essential functions that the organization must perform:

a. The good or service must be developed
b. Something of value must be created. In the case of the business organisation this might be the production or manufacture of a product; in the case of the public sector or organisation the provision of a service.
c. The product or services must be marked. They must be distributed or made available to those who are to use them.
d. Finance is needed in order to make available the resources used in the development; creation and distribution of the products or services provided.

Woodward (1980) refers to these essential function of developing the good or service, manufacturing the good or providing the service, marketing them and finance the organisation as task functions. To ensure the efficient achievement of overall objectives of the organisation, the results of the task function must be coordinated. Other activities of the organisation that are not directed towards specific and definable ends but are supportive of the task functions as an intrinsic part of the management process are referred to as element functions.

**Divisional work**
Within the formal structure of an organisation work to be divided among its members and different jobs related to each other. The division of work and the grouping together of people should, whatever possible, be organised by reference to some common characteristics which forms a logical link between the activities involved. The most commonly used basis for grouping activities is according to specialisation, the use of the same set of resources, or the shared expertise of members of staff. In division by product or service the contributions of different specialised are integrated into separate, semi-autonomous units with collective responsibility for a major part of the business process or for a complete cycle at the work. This form of grouping is more common in the larger diversified organisations and may be used as a means of sub-dividing department into sections.

Division may be according to the nature of the work performed where there is some special common feature of the work such as the need for speedy decisions, accuracy, confidentiality /security, or where local conditions require first-hand knowledge not immediately available elsewhere.

**Centralization and decentralization**
A critical decision point that arises from division of work and grouping of activities is the extent to centralization or decentralization. Most organisations necessary involve a degree of decentralisation arising from such features as an increase in size, the organisation, or the need to extend activities or services to remove areas. The balance between centralisation and decentralisation is one of the major debates in organisational structure. However, there are advantages of centralisation and decentralisation as posited by Lundy and Cowling (1996), they are as follow:
Advantage of centralisation
a. The easier implementation of a common policy for the organization as a whole.
b. Providing a consistent strategy across the organization.
c. Preventing sub-units becoming too independent.
d. Improved economies of scale and a reduction in overhead costs.
e. Greater use of specialization, including better facilities and equipment.

Advantage of decentralisation
a. Enable decisions to be made closer to the operational level at work.
b. Increased responsiveness to local circumstances.
c. Improved level of personal customer services.
d. Provide opportunities for training and development in management.
e. Support service such as administration, are more likely to be effective if provided as close as possible to the activities they are intended to serve.

Principles of organization
The classical writer placed emphasis on the definition of structure in terms of division of work, chain of command, span of control and reporting relationship. Attention was focused on the requirements of the formed organization and the search for a common set of principles applicable to all circumstances. Urwick (1952) originally specified eight principles of organisation but revised these to ten in his letter writing. According to him they are as follows:
i. The principle objective: Every organisation and every part of the organisation must be an expression of the purpose of the undertaking concerned or it is meaningless therefore redundant.
ii. The principle of specialization: The activities of every members of any organised group should be confined, as far as possible, to the performance of a single function.
iii. The principle of co-ordination: The purpose of organizing, as distinguished from the purpose of the undertaking is to facilitate the co-ordination, unity of effort.
iv. The principle of authority: In every organized group the supreme authority must rest somewhere. There should be a clear line of authority to every individual in the group.
v. The principle of responsibility: The responsibility of the superior for the acts of the subordinate is absolute.
vi. The principle of definition: The content of each position; both the duties involved, the authority and responsibility contemplated and the relationship with other position should be clearly defined in writing and published to all concerned.
vii. The principle of correspondence: In every position, the responsibility and the authority should correspond. 8. The principle of span of control: No person should supervise more than five, or at the most six direct subordinates whose work interlocks.
viii. The principle of balance: It is essential that the various units of an Organization should be kept in balance.
ix. The principles of continuity: Re-organisation is a continuous process in every undertaking specific provision would be made of it. The proper application of these principles is likely to help improve organizational performance.

Span of control
The span of control arise in line authority and refers to the number of subordinate who report directly to a given manager or supervisor. It does not refer to the total of subordinate operating
staff, that is, those staff who report first to another person. Hence the term span of responsibility or ‘span of supervision’ is sometimes considered to be more appropriate.

Factors influencing span of control as noted by Lundy and Cowling (1996)

i. The nature of the organisation, the complexity of the work and the similarity of functions, and the range of responsibility.

ii. The ability and personal qualities of the manager including the capacity to copy with interruptions.

iii. The amount at time the manager has amiable from other activities to spend with subordinates.

iv. The ability and training of subordinate staff, the strength of their motivational and commitment, and the extent of direction and guidance needed.

v. Chain of Command: This refers to the number of different levels in the structure of the organization, the chain, or lines, of hierarchical command sometimes known as the secular chain. The chain of command establishes the vertical graduation of authority and responsibility and the framework for superior–subordinate relationship in an unbroken line down from the top the organization. Every person must know their position within the structure of the organization. Most organization charts demonstrate that this principle is used widely as a basis for organizational design. A clear line of authority and responsibility is necessary for the effective operation of the organization.

THEORETICAL FRAMEWORK

Theories are formulated to explain, predict and help in understanding phenomenon and in many cases to challenge and extend existing knowledge within the limits of the critical bounding assumptions, (David, 2009). Different authors have come up with theories on organisational structure. Thus, in the course of this research, the researcher review an underpinning theory of organizational structure; The Contingency Theory of Organisational Structure.

The Contingency Theory of Organisational Structure

Contingency theory is an organisational theory that claims that there is no best way to organise a corporation, to lead a company, or to make decisions. Instead, the optimal course of action is contingent (dependent) upon the internal and external situation. A contingent leader effectively applies their own style of leadership to the right situation. The contingency theory of organisational structure provides a major framework for the study of organizational design (Donaldson, 1995, 2001). It holds that the most effective organisational structural design is where the structure fits the contingencies. There are, however, several major challenges to it. Some of these are theoretical, while some are empirical. However, some challenges lead to innovations in theory. Other challenges are accompanied by innovations in method. Both these theoretical and methodological innovations constitute opportunities for the contingency theory of organizational structure. In turn, they can feed into the study of organizational design.

EMPIRICAL FRAMEWORK

Linda (2012) in her work: “The Impact of Organisational Structure in Effective Management of Nigerian Organization: A Study of Nigerian Brewery Plc, Enugu” adopted the descriptive survey design and made use of both the primary, and secondary sources of data in the course of her study. The primary data was sourced through the instrument of questionnaire and oral interview
while secondary data was sourced through texts books, magazines, journals and internet. The Population of her study is eight hundred and ninety while the sample size is one hundred and thirty-three. Her findings revealed among others that organizational structure has a great impact in the effective management of organisations. She recommended among others things, that organizations should endeavour to have well-structured organization, in order to achieve the set up objectives.

Quangyen, and Yezhuang (2013), in their work: “Organisational Structure: Influencing Factors and Impact on a Firm” opined that the influence of certain factors on organisational structure has been in researchers’ focus for years, together with their impact on the overall organisational efficiency. Many of these factors are from the environment where traditional view commonly divided into internal and external factors. Their paper presents the findings of a study to evaluate the influencing factors and impact on organisational structure of a sample of firms located in Hanoi, Vietnam. Structured questionnaires were administered with respect to these factors. The variables studied were identified from among the factors considered in contingency theory and by incorporating elements of the strategic choice approach. After grouping the variables into two factors (related to external and internal respectively), their results revealed three groups of firms according to how they regarded the impact of these factors on organisational structures. In those groups that consider the variables of internal factors to be modifiers of structure the organisational structures are of the “complex classical” type, whereas simple forms predominate in the group that believes these variables do not modify their structure.

Hamdan and Mohammed (2013), in their work: “Impact of Organisational Structure on Knowledge Management in the Jordanian Insurance Companies: From the Perspective of the Supervisory Leadership” investigated the impact of organisational structure on knowledge management and applications (Knowledge acquisition, knowledge storage, dissemination of knowledge, the use of knowledge) in the Jordanian insurance companies considering the organisational structure of a tool help manage knowledge, investment and benefit from its added value. The study sample consisted (162) individual occupants of leadership and supervisory functions in (24) insurance companies operating in Jordan, where the questionnaire was developed to gauge the views of the occupants of these jobs consisting of (27) paragraphs. After a process of data analysis and hypothesis testing using SPSS package, their study found the possibility of relying on the organizational structure in strengthening the application of knowledge management. They recommends that design of appropriate organisational structures, which is pushing for more production and application of knowledge as a prerequisite for the survival and success.

Esra and Ozgur (2014) in their work: “Structural Determinants of Organisational Effectiveness” stated that increasing organisational effectiveness is one of the most important organisational goals for almost all organisations in every industry. Their study reviews the function of organisational structure for increasing organisational effectiveness especially by focusing on software organisations. The structural variables considered in their research are formalisation, specialisation, centralisation, organisational age and size. The survey prepared according to their research model was responded by 120 software firms. The collected data were analysed using statistical test techniques. Their findings show that formalisation and specialisation increase organisational effectiveness. On the other hand, increasing the organisational size decreases the organisational effectiveness. Their results indicated that software companies should stay at small scales in their organisational size while increasing their organisational performances with the help of specialisation and formalisation.
Brief Profile of Dangote Cement PLC Gboko Plant Benue State

Benue Cement Company was a product of the industrialisation moves of the Federal Government of Nigeria in the years following Nigeria’s independence. Following the discovery of limestone traces in Mbayion, Gboko Local Government Area of Benue State in 1960, the federal and regional governments initiated the project to build a cement plant in the region and invited Cementia Holding AG of Zurich to carry out a confirmative study of the feasibility of establishing a cement plant in the region. Eventually the Benue Cement Company (BCC) was incorporated in July 1975 as a private limited liability company but commenced operations in August 1980. At this time of incorporation, Cementia Holding AG of Zurich, which carried out the design and construction of the cement factory, became the management partners. At the official commissioning in 1981, the cement plant had a rated capacity of 900,000 metric tonnes per annum. Following the 1990 privatisation of the company, the company’s name was changed to Benue Cement Company Plc in March 1992.

In another round of federal government’s privatisation program in 2000, Dangote Industries Limited acquired federal government’s majority 65% equity in BCC and effectively took over the management of the company in 2004. Until the Merger, Dangote Cement is the majority shareholder, as it owns 74.76% of BCC’s total outstanding shares. BCC’s principal activities are the manufacture and sale of cement. In 2004 when Dangote Industries took over the management of BCC, the company had an annual capacity of 900,000 tonnes and capacity utilisation was largely below 50%, with frequent maintenance challenges due to the obsolete state of the plant. Management thus embarked on an aggressive upgrading and rehabilitation of the plant, which transformed it into a new state-of-the-art cement factory with two 1.4 million tonnes lines, thereby increasing the company’s annual capacity by more than three-fold. The first cement line was commissioned in late 2007, while the second became operation in 2008. Unlike the Obajana plant that was primarily built to operate on gas (although can also operate on fuel oil), BCC’s plants were built to use Low Pour Fuel Oil (LPFO) – although the process of adapting the plant to be dual-firing capable of using coal is presently on-going.

METHODOLOGY

The researcher adopted survey research design in selecting samples from the population of the organisation. Survey research design make use of questionnaire and oral interview in eliciting information from the respondents. Primary and secondary data was used, primary data was elicited through well-structured questionnaires of closed ended type designed in Likert form. The closed ended questionnaire with two to five options was administrated to selected management personnel in their different departments of the organisation. The researcher also made use of oral interview in eliciting information from the management personnel that made up the sample size of the research. Secondary data was obtained through; textbooks, journals, organisation’s magazines and brochures, and internet materials.

Population of this research work consist of only the senior staff and management personnel of the organisation, (Dangote Cement PLC Gboko Plant). The researcher limited the population to senior staff and management personnel because the research title: “Evaluation of organisational structure on management effectiveness with reference to Dangote Cement PLC” specified the scope. The senior staff/front line managers and management personnel of the organisation is one hundred and fifty one (151). Purposive and simple random sampling techniques was used, purposively all the senior staff and management personnel were sought for, and randomly all the senior staff and
managerial personnel was given an equal opportunity of being selected to serve as the sample of the study. Based on the population, normal confidence level of 95% and error tolerance of 5% were used to deduce the actual sample size of the study through Taro Yamane’s formula. One hundred and ten (110) respondent was computed as the sample size and equal number of questionnaire was distributed. Content validity was used to validate the research instrument, while Cronbach Alpha was used to test the reliability of the research instrument. Data collected from field work was analysed using: Descriptive Statistics, Pearson Product Moment Correlation, and Logistic Regression analysis. One hundred (100) questionnaire was well field and returned which form the basis for the data analysis.

The formula for computing the mean used for objective (i) is specified as:

\[
\bar{x} = \frac{\sum fx}{N}
\]

Where,
- \(\Sigma\) = summation
- \(F\) = frequency
- \(X\) = scores to response category
- \(\bar{x}\) = Arithmetic mean
- \(N\) = number of respondents

The Pearson Product Moment Correlation used for objective (i) is specified as

\[
r = \frac{n \sum xy - \sum x \sum y}{\sqrt{(n \sum x^2 - (\sum x)^2) (n \sum y^2 - (\sum y)^2)}}
\]

Where:
- \(n\) = the Sample Size = 100
- \(\sum x\) = the sum of x (independent variable) = Organisational Structure
- \(\sum y\) = the sum of y (dependent variable) = Managerial Effectiveness
- \(\sum x^2\) = the sum of the square x values
- \(\sum y^2\) = the sum of the square y values
- \(\sum xy\) = the sum of the cross product of x and y

Objective (ii) which was analysed using Logistic Regression analysis, the formula is specified as:

\[
Y = B_0 + B_1X_1 + B_2X_2 + \ldots + B_nX_n + u
\]

Where:
- \(Y\) = Managerial Effectiveness = Logit (p)
- \(X_1\) = Organisational Size (1=yes, 0=otherwise)
- \(X_2\) = Centralisation (1=yes, 0=otherwise)
- \(X_3\) = Specialisation (1=yes, 0=otherwise)
- \(X_4\) = Formalisation (1=yes, 0=otherwise)
- \(X_5\) = Organisational Communication Pattern (1=yes, 0=otherwise).
RESULTS, FINDINGS AND CONCLUSION

Organisational Structure Adopted in Dangote Cement PLC, Gboko Plant.

Table 1, showing the organisational structure adopted in Dangote Cement PLC, Gboko Plant.

<table>
<thead>
<tr>
<th>Types of Organisational Structure</th>
<th>N</th>
<th>A (3)</th>
<th>N</th>
<th>D (1)</th>
<th>( \Sigma x )</th>
<th>Mean</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line Organisational Structure</td>
<td>100</td>
<td>11(33)</td>
<td>26(52)</td>
<td>63(63)</td>
<td>148</td>
<td>1.5</td>
<td>Disagreed</td>
</tr>
<tr>
<td>Functional Organisational Structure</td>
<td>100</td>
<td>29(87)</td>
<td>17(34)</td>
<td>54(54)</td>
<td>175</td>
<td>1.8</td>
<td>Disagreed</td>
</tr>
<tr>
<td>Line and Staff Organisational Structure</td>
<td>100</td>
<td>78(234)</td>
<td>14(28)</td>
<td>8(08)</td>
<td>270</td>
<td>2.7</td>
<td>Agreed</td>
</tr>
<tr>
<td>Product/Market Organisational Structure</td>
<td>100</td>
<td>51(153)</td>
<td>33(66)</td>
<td>16(16)</td>
<td>235</td>
<td>2.4</td>
<td>Agreed</td>
</tr>
<tr>
<td>Matrix Organisational Structure</td>
<td>100</td>
<td>18(54)</td>
<td>31(62)</td>
<td>51(51)</td>
<td>167</td>
<td>1.7</td>
<td>Disagreed</td>
</tr>
<tr>
<td>Total Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grand Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bench Mark Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Survey, 2016

Keys: A = Agreed, N = Neutral, D = Disagreed. Figure in parenthesis are the frequency.

The result in Table 1 above revealed organisational structure adopted in Dangote Cement PLC Gboko Plant. The result showed Line and Staff Organisational Structure and Product/Market Organisational Structure with the mean score of (\( \bar{x} = 2.7 \)) and (\( \bar{x} = 2.4 \)), which is above the benchmark mean of 2.0 are organisational structure adopted in Dangote Cement PLC Gboko Plant.

Table 2, Showing Pearson Product Moment Correlation Analyses Result on the Effect of Organisational Structure on Management Effectiveness in Dangote Cement PLC, Gboko Plant

<table>
<thead>
<tr>
<th>Variable</th>
<th>Correlation Coefficient</th>
<th>t- value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managerial Effectiveness</td>
<td>0.811</td>
<td>0.813**</td>
</tr>
<tr>
<td>N</td>
<td>100</td>
<td>0.005</td>
</tr>
</tbody>
</table>

Source: field survey 2016

** Significant at the 0.01 level (2-tailed)

The correlation analysis result in Table 2 indicated that at P>0.05 level of significance, organisational structure has a strong positive effect on managerial effectiveness with correlation coefficient of (r = 0.811). Signifying that there is a strong correlation between the structure of the organisation and the effectiveness of its managers. Thus, the organisational structure of Dangote Cement PLC, Gboko Plant is well structured and effective and aid the management personnel in accomplishing set goals and objectives of the organisation while remaining competitive among the industry. This speak volume why Dangote Cement Plc function effectively among other cement manufacturing organisation, as it presently controls about 57% of local manufacturing capacity, and according to the organisational statistics, Dangote Cement accounted for about 40% of total cement supply as at 2009. The structure of the organisation is well articulated thus leading to managerial effectiveness.

The result agrees with the findings of Qaryouti, (1997), who opined that the nature of the organisational structure and personnel in the organisation affect their ability and creativity of the organisation, and Drucker (1999) stated that the correct design of structure is most significance in determining organisational performance. Santra and Giri (2008) also posited that organisational
structure is not only crucial for every successful organisation; it is also directly related to the efficiency of this organisation.

The Relationship between Size, Centralisation, Specialization, Formalisation Etc, of Organizational Structure and the Effectiveness of Managers in Dangote Cement PLC Gboko Plant.

Table 3 showing the logistic regression result on the relationship between size, centralisation, specialization, formalisation etc, of organisational structure and the effectiveness of managers in Dangote Cement PLC Gboko Plant.

<table>
<thead>
<tr>
<th>Organisational Variables</th>
<th>Structure</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>Wald</th>
<th>Sig</th>
<th>[95% Con. Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisational Size</td>
<td>-0.448</td>
<td>0.558</td>
<td>0.644</td>
<td>0.422</td>
<td>1.908</td>
<td></td>
</tr>
<tr>
<td>Centralisation</td>
<td>0.356</td>
<td>0.214</td>
<td>2.764</td>
<td>0.96*</td>
<td>2.173</td>
<td></td>
</tr>
<tr>
<td>Specialisation</td>
<td>0.471</td>
<td>0.691</td>
<td>0.465</td>
<td>0.485</td>
<td>6.207</td>
<td></td>
</tr>
<tr>
<td>Formalisation</td>
<td>2.259</td>
<td>0.663</td>
<td>11.609</td>
<td>0.001***</td>
<td>35.089</td>
<td></td>
</tr>
<tr>
<td>Organisation Communication</td>
<td>-1.244</td>
<td>0.538</td>
<td>5.342</td>
<td>0.021***</td>
<td>0.288</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>0.642</td>
<td>0.609</td>
<td>1.112</td>
<td>0.292</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Survey, 2016

Dependent variable: Managerial effectiveness: ***sig≤0.01**sig≤0.05 *Sig≤0.10.

The Logistic Regression result in Table 3 above shows that Centralisation (sig≤0.05; w = 2.764), Formalisation (sig≤0.01; w = 11.609), and effective Organisation Communication (sig≤0.01; w = 5.342), are structural variables that are significantly related with the effectiveness of managers in Dangote Cement PLC, Gboko Plant. Centralisation is the degree which indicates the concentration of decision making authority by a person, department or a level in the organisation, formalisation indicates the amount of written principles, policies, procedures, rules for managing business processes and relations among employees, while effective organisation communication portrays the free flow of information between managers and subordinates in the organisation. Thus, from the result, there is a positive significant relationship between these variables and the effectiveness of managers in Dangote Cement PLC, Gboko Plant. Signifying that as decision making authority, policies, procedures, rules and free flow of information are maintained by the managerial cadre in the organization, it enhances their effectiveness and leads to organisational performance.

This result agrees with the findings of Pertusa-Ortega et al., (2010) they opined that if an organization has a formalized structure, the attitudes of its employees are organised, and are frequent and effective. They further stated that formalisation improves and facilitates the cooperation and collaboration among the members of the organization, which in turn increase the quality of all activities in the firm. Beckmann et al. (2007) opined that formalisation has a positive correlation with the quality of the products and services which is an essential part of the organisational performance. Ruekert et al., (1985) findings also showed that organisational effectiveness is influenced positively by centralisation. Schminke et al., (2002) in agreement with the result also emphasised that free flow of communication is conducive, and help in faster response to changing market requirements, thus enhancing organisational performance.

CONCLUSION

Conclusively, it cannot be succinctly stated that efficiently designed organisational structure facilitates managerial issues, provides great potential for improving organisation’s competitive power, innovation capability, and labour force relations while lowering expenses, as this was obvious in the just concluded research in Dangote Cement PLC Gboko Plant. Furthermore,
Effective organisational structure is sine qua non to management effectiveness and organisational performance. Thus, organisation structure should be effectively designed for it provides the framework for the activities of the organisation, its competitive ability and should be harmonise with the organisation’s goals and objectives. Since the organisation is already using a conventional structure that is well tailored to the need of the organisation, management of the organisation should sustain the effectiveness of the structure to enhance their performance and accelerate their competitive ability. The organisation should sustain the centralisation, formalisation and effective organisation communication system already existing in the organisation, this will enable them to get the best from their management team, increase their market share and enhance performance and profitability.

REFERENCES
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