



**Short Communication**

# Impact of efficient labour management on construction project delivery in Nigeria

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Available online at: [www.isca.in](http://www.isca.in), [www.isca.me](http://www.isca.me)

Received 20<sup>th</sup> November 2018, revised 6<sup>th</sup> June 2019, accepted 15<sup>th</sup> July 2019

## Abstract

*This work examines the influence of labour management in construction industries of Nigeria with a view to achieving affordable investments, low rate in delay of contract and value for money. The high rate poor project delivery in construction industry in Nigeria, which at times is as a result of inefficient labour management needed for the project and component labour management tools to arrest the ugly trend of project failures is having serious effects on the economic growth of the country. The study was therefore guided by some research questions, which it sought to answer using a well structure questionnaire distributed to respondents. It was therefore recommended that relevant and professionally qualified contractors should be involved in projects to ensure that there is strict work programme, proper work amongst others.*

**Keywords:** Management, labour, project delivery, labour management.

## Introduction

The construction industry is best described as an amalgam of wide variable of economic activities. This is because of its initial role in economic growth and development transcending, these activities range from house building and maintenance work, to major civil engineering works. These varieties of economic activities and products of construction industry reflect the diversity of agents involved in the industry becomes an arduous task. On the other hand, it can be defined based on its areas of production which include firms and individuals involved in planning and management of human and material resources available. It can also be seen from the movement and transportation of plants and other service which helps in the procurement of physical infrastructure and services. Based on these descriptions of construction industry it can be seen that the industry is highly dynamic and diversified.

However, this description reflects the activities of an effective and functional industry that is well integrated with the wider. This is why the industry is regarded as a necessary pre-requisite to economic growth and development. In the same vein, it will be wise to note the fact that the implication of this increase in the economic growth and development invite, as a result, leads to high demand for constitution products. It can only be realized by a setup of effective management for the available resources which involved the employment of a unique construction manpower, ranging from skilled professionals to completely unskilled labour force. The high rate of poor project delivery in constructions industry in Nigeria which at times is as a result of inefficient labour management needed for the project and component labour management to arrest the ugly trend of

project failure is having serious effect on the economic growth of the country. This is as a result of many problems experienced by the contractors such as inadequate labour force, lack of finance, inadequate project cost control, inefficient labour management among others; as most projects are not delivered due to the under-estimation of labour force needed to execute the project efficiently and effectively. Therefore, this study assesses the impact of efficient labour management and tools of planning and the implication of efficient labour management. This is so because of the inadequate skills and capacity of workers, which have remained unchanged and irrelevant to immediate requirement of labour<sup>1</sup>. This fact however support the notion that adequate technical training, appropriate procurement and acquisition of general management skills enhances the techniques and tools of management and planning, for an efficient labour management in the Nigeria construction industry<sup>2</sup>. Management itself is a process of achieving organization goal and objections through the use of people. Labour on the other hand is the force or work force applied from start to the completion of a particular element of work.

**Literature Review:** Labour productivity is often broadly defined as output per labour hour<sup>3</sup>. It is however, important to note that labour management is a measure of overall effectiveness of an operating system in utilizing labour efforts into useful output and it is notoften a representative of the capabilities of only labour. Representing the diversities in construction industries by a common value is neither appropriate nor all encompassing<sup>4</sup>.

Productivity is not a measure of the performances of resources brought together in organizations and used for achieving desired

results<sup>5</sup>. While individual contractors and owner is at liberty to use their own methodology to measure labour, productivity patterns has often varied both in time and location<sup>6</sup>. There are several factors affecting labour management<sup>7</sup>. In labour characteristics, Performance analysis has been a conventional tool for assessing the performance and quality of worker's output<sup>4</sup>. The management of labour require some plans, proposed programme of work carrying complexities for varying purposes; this summarizes the need for efficient labour management in Nigeria construction industry<sup>8</sup>. Communication is viewed as the transfer of information, instruction or order from one person to another<sup>9</sup>. Communication is of three forms with the aim that the message received must be understood<sup>10</sup>. In the construction industry, most written communication comes in form of reports, letters minute of meetings and general documentation. Drawing is also another form of communication<sup>10</sup>. Communication is also a programme designed by employee to encourage and increase productivity towards achieving set out objectives<sup>11</sup>. However, the impact of efficient labour management in the Nigeria construction industry cannot be easily assessed<sup>12</sup>.

## Methodology

The collection of primary data was via stratified random sampling method, with sixty (60) (out of which forty (40) were returned) structured questionnaire and personal interview among contractors, clients, consultants and other professionals reflecting various categories. Three hypotheses were drawn to be tested using the chi-square test.

**First Hypothesis:** i.  $H_{01}$ : Consideration of the importance of labour management in construction does not have any impact on the growth and development of economic activities. ii.  $H_{a1}$ : Consideration of the importance of labour management in construction has impact on the growth and development of economic activities.

**Second Hypothesis:** i.  $H_{02}$ : Effective and efficient use of the basic labour management techniques is not a prevalent cause of high rate of project delivery. ii.  $H_{a2}$ : Effective and efficient use of the basic labour management techniques is a prevalent cause of high rate of project delivery.

**Third Hypothesis:** i.  $H_{03}$ : Effective labour management has not contributed towards minimizing waste of material in the construction industry. ii.  $H_{a3}$ : Effective labour management has contributed towards minimizing waste of material in the construction industry.

## Results and discussion

**Hypothesis-1:** Efficient labour management does not have any impact on the growth and development of economic activities: With a table value of 62.27 and computed value of 27.0, the null hypothesis is rejected and the alternative accepted.

**Hypothesis-II:** Effective and efficient use of the basic labour management techniques is not a prevalent cause of high rate of project delaying.

Since value from the table is 63.37, while the computed value is 2.2, accept the alternative hypothesis ( $H_{a2}$ ) which states that effective and efficient use of basic labour management technique is a prevalent cause of high rate of project delaying.

**Hypothesis-III:** Effective labour management has not contributed to minimizing waste of material in the construction industry.

The table value is 63.67, while the computed value is 11.8. Therefore, reject the null hypothesis and accept the alternation which states that effective labour management has contributed in minimizing waste of materials in the construction industry.

**Discussion of Findings:** The result of analysis revealed that a large percentage of the respondents apply the techniques and tools in the management of labour because of the advantage on cost and duration of projects. From the analysis of the observed data it revealed that there is no way planning techniques can be avoided in management of labour. The information also showed that all the respondents (100%) are aware of planning techniques. Considering the importance of construction project to human life. Therefore researcher sought and observed that about 80% of the respondents have used or implemented the planning techniques in project construction, which enabled them to respond to the rest of the question effectively. The analyzed data indicated that the major causes of project failure are inefficient labour management, lack of proper project financing and budgeting control. It was also discovered in the analysis of the data that techniques and tools have impact on the management of labour, 95% of the respondents agreed to that. Result also show that labour management minimizes waste of materials, need for assessment of the efficiency of the various planning techniques and impact on the growth and development of economic activities. The result from this analysis agrees with literature that the use of these techniques and tools of labour management has effect on the cost of project<sup>13,14</sup>.

**Table-1:** Response to Questionnaire.

Type of Organization	No of Questionnaire Distributed	Responses	%
Public Sector	11	7	17.5
Consultancy	17	11	27.5
Contracting Firm	28	20	50.0
Multi-National	4	2	5.0
Total	60	40	100

**Table-2:** Biographical Data by Profession.

Profession	No. of Responses	Percentage (%)
Architect	3	7.5
Estate Surveyor	17	42.5
Engineer	10	25.5
Builder	10	25.5
Total	40	100.0

**Table-3:** Educational qualification.

Qualification	No. of Responses	Percentage (%)
OND	6	15.0
HND	8	20.0
B.Sc	12	30
M.Sc	11	27.5
Ph.D	3	7.5
Total	40	100.0

## Conclusion

This paper has shown that the implication or impact of efficient labour management in the Nigeria construction industry is based on the timely delivery of project which results to growth and development. The tools and techniques have shown similar objectives which are on the issue of quality of work, increased productivity, reduction in waste of resources and to avoid exceeding cost limit and contract duration. The researcher has been able to analyze the most important technique and tools. Major recommendation of this work is that basic techniques and tools of management should be implemented in the management of labour, as this will help to achieve the objectives of construction work.

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