

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND TO THE STUDY

The Nigerian building and construction industry continues to occupy an important position in the nation's economy even though it contributes less than the manufacturing or other service industries, (Aibinu and Jagboro, 2002). The contribution of the building and construction industry to national economic growth necessitates improved efficiency in the industry by means of cost effectiveness and timeliness, and would certainly contribute to cost savings for the country as a whole. It is also common knowledge that the implementation of the construction project in the industry is usually accompanied with poor quality delivery and delivery time delay and cost increase as well as owner dissatisfaction (Hafez, 2001). Thus, the efficient use and management of material have an important influence on a company's profit and can delay project construction (Abdul- Rahman and Alidrisyi, 1993). These researchers will examine the impact of material management on project delivery in Nigeria.

Material management is a planned procedure that includes the purchasing, delivery, handling and minimization of waste with the aim of ensuring that requirements are met (Illingworth and Thain, 1998). According to Culvert (1998), a detailed material schedule and co-ordination of the requisition and order of material are important in assuring material availability. Efficient material planning is a key to high productivity on site. Material planning embraces quantifying, ordering and scheduling. Productivity will suffer if the material planning process is not executed properly (Kaming, Olomolaiye, Holt and Harris, 1997).

Kwik (1994) stated that another issue (which is sometime beyond management control) is material shortages, for example yearly cement shortages have long been a topic of debate within the construction industry. Bell and Stukhart (1987) investigated a total concept for a Material Management System (MMS), which combined and integrated the take-off, vendor evaluation, purchasing expediting, and warehousing and distribution functions of material. The system resulted in improved labour productivity, reduced material surplus, reduced material management, manpower and cost saving. Al-Jibouri (2002) described

a computer simulation model, which helps to solve the problem of order and deliveries of materials in real life by keeping a predetermined list of order and delivery time of all the materials on site. The delivery of each kind of material then takes place automatically at the specified time.

Ineffective materials management for projects can result in significant cost blow-outs and delays in project completion. Such cost inefficiencies will negatively impact global competitiveness, and owner operators and engineering, procurement, and construction companies are trying to streamline work processes for their projects. Inaccurate materials information, such as incorrect bills of materials, inaccurate cycle counts, shipping errors, receiving errors and soon, will also affect the overall project life cycle and increase project costs. Having to deal with subcontractors outside of the materials management process impacts the overall project supply chain as there is an increased risk of data inconsistencies.

Material management is the system for planning and controlling to ensure that the right quality and quantity of materials and equipment are specified in a timely manner. Materials should be obtained at a reasonable cost, and be available for use when needed. The cost of materials represents a large proportion of the cost. A good management system for materials management will lead to benefits for construction. Cash flow has become crucial for the survival of any business, if materials are purchased early, capital may be tied up and interest charges incurred on the excess inventory of material. Material may deteriorate during storage or be stolen; also delays and extra expense may be incurred if materials required for particular activities are not available.

Despite the importance of the materials, very little research has been directed towards understanding the management of materials from order to production; most research is focused upon the management of the design and procurement process and on labour site productivity. Materials management, which includes procurement, shop fabrication, logistics, supply chain management, production on site, and field servicing, requires special attention to achieve cost reduction. The supply chain is a convenient term used to describe a complex web of activities. The use of new equipment and innovative methods of material handling has influenced changes in construction technologies in recent years.

Modern methods of material management have been embraced by the manufacturers across a wide range of industry sectors outside of construction.

1.2 STATEMENT OF THE PROBLEM

Ogunlana and Proukumtong (1996) studied construction delays in a fast growing economy: comparing Thailand with Nigeria and some of the construction delays were attributed to material management: the study blames material shortage on site on unreliable supply from material suppliers occasioned by the general shortage in the industry, although there were specific instances in which poor communication between sites and head office purchasing, planning and co-ordination could be cited. However, much research has not been done on material management and project delivery in Nigeria considering the economic situation of Nigeria and the market full of substandard products. This study will therefore examine the impact of material management of project delivery in Nigeria in terms of quality and time.

1.3 OBJECTIVES OF THE STUDY

The following are the objectives of this study:

1. To examine the impact of material management on project delivery time in Nigeria.
2. To examine the impact of material management on project quality upon delivery in Nigeria.
3. To determine the advantages and disadvantages of material management in project construction.

1.4 RESEARCH QUESTIONS

1. What is the impact of material management on project delivery time in Nigeria?
2. What is the impact of material management on project quality upon delivery in Nigeria?
3. What are the advantages and disadvantages of material management in project construction in Nigeria?

1.5 HYPOTHESIS

H_0 : Material management does not affect project delivery in Nigeria

H_A : Material management does affect project delivery in Nigeria

1.6 SIGNIFICANCE OF THE STUDY

This study will be of importance to building professionals and the general public because it would not only clarify but also create awareness of the extent to which inadequacies in material management can adversely affect project delivery. The study will also help

contractors, clients, consultants and all parties involved in construction projects about ways of improving their current method of material management. This research will also serve as a resource base to other scholars and researchers interested in carrying out further research in this field subsequently, if applied will go to an extent to provide new explanation to the topic.

1.7 SCOPE/LIMITATIONS OF THE STUDY

The scope of this study on impact of material management on project delivery in Nigeria will cover all the project construction in Nigeria looking at their level of adoption of material management approach considering their successes with respect to project delivery quality and time.

LIMITATION OF STUDY

Financial constraint- Insufficient fund tends to impede the efficiency of the researcher in sourcing for the relevant materials, literature or information and in the process of data collection (internet, questionnaire and interview).

Time constraint- The researcher will simultaneously engage in this study with other academic work. This consequently will cut down on the time devoted for the research work.

REFERENCES

- Abdul-Rahman, H. and Alidrisyi, M. N. (1994) *"A Perspective of Material Management Practices in a Fast Developing Economy, the case of Malaysia"*. Construction Management and Economics, 12, 412-422.
- Aibinu A.A and Jagboro G.O (2002): *"The Effects of Construction Delays on Projects Delivery in Nigeria Construction Industry"*. International Journal of Project Management, 20, 593-599.
- Al-Jibouri, S. (2002): *"Effects of Resource Management Techniques on Projects Schedules"*. International Journal of Project Management, 20, 627-632
- Kwik, K.G. (1994): *"Cement and Its Problem in Indonesia"*. Kompas October. 10
- Illingworth, J. and Thain, K. (1998): *"Material Management is it Worth It?"* Technical Information Service, The Chartered Institute of Building ASCOT. 93, 1-5
- Kaming, P.F, Olomolaiye, P. O., Holt, G.O. and Harris F.C. (1997): *"Factors Influencing Construction Time and Cost Overruns on High-Rise Project in Indonesia"*. Construction Management and Economics, 15, 83-94
- Hafez, N (2001): *"Residential Projects Obstacles and problems in Kuwait MS Project"*, Department of Civil Engineering, Kuwait University.
- Culvert, O. (1998): *"Correlates of time Overrun in Commercial Construction"*. ASC Proceedings of the 40th Annual Conference. Brigham Young University, Provo, Utah, April 8-10.

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