

THE PROJECT MANAGEMENT TASK OF MONITORING LABOUR COST ON SITE: A CASE STUDY OF MINNA IN NIGER STATE OF NORTH-CENTRAL, NIGERIA

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ABSTRACT

The frequent issues arising from the management of productivity of labour on site in Nigeria has resulted in the project delay and cost overruns. While some project stakeholders claimed that the absence of project supervisors on site to monitor the activities of operatives on site is responsible for the loss of productivity, some are of the opinion that ineffective trade unions on construction sites should be blamed. This paper aims at examining the task of monitoring labour cost on site in Minna taking a literature review approach. The objectives are (i) to determine the various types of labour cost in Nigerian construction sites (ii) to determine the accurate cost of labour vis a vis the output of workers on site. The research methodology adopted for the paper is qualitative and exploratory in nature. The workers within the construction sites in minna metropolis were randomly sampled and interviewed about the daily pay by the site foremen. This was corroborated by the studies from the literatures. The findings of the study show that project managers on site prefers daily pay to workers rather than contract payment. It was therefore concluded that trade unions should liaise with construction stakeholders in determine the appropriate daily wage

INTRODUCTION

The construction industry plays an important role in any developing country. According to Ayangade et al. (2009), the contribution of the Nigerian construction industry is yet to measure up to those of the western world like the UK and Australia due to its developing nature. As noted by the same researcher (Ayangade et al., 2009), whereas the construction industries of other developed countries are responsible for about 22% of their respective GDP's, the Nigerian case is different as it contributes slightly below 16% to its economy. However, this could be said to be complemented by the relatively higher employment (20%) it provides for its whooping 140 million citizens compared to the 12% as in the case of developed countries. Construction companies nowadays are actively looking for ways to get a competitive edge in the marketplace, which may be defined as "the ability in any functional area to make the performance of the organization better" (Ekakitie, 2009). Organizational performance is the result of the

willful combination of human, physical, and capital resources. The distinction between performance reporting, performance measurement and performance management is hazy, as noted by Greiling (2007).

There is need for creative conversion of resources into project asset through effect organization, planning, scheduling and controlling the fieldwork to achieve the constrain of project time, cost and quality. This is the responsibility of the project manager in the construction industry. However, the resources in achieving the success parameters in a construction project is always limited hence Jha and Iyar (2006) stated that in the realm of project management, the schedule, cost and quality achievement also referred to as the iron triangle are hardly achieved. Achieving the schedule and cost objectives, project quality is sometimes overlooked leading to project failure. It is only through a well-planned project management that the three aspects of project objectives will be actualized. The success of any construction project is attributed to the

proper management role of the project manager in putting together available resources. Considering the process of managing the competing demands and trade - offs between the desired result of the construction project (scope, performance, quality) and the natural constraints of the project (time & cost) and the nature of construction activities, the project manager often has to take action quickly on his own initiative. Sears, et al (2008) stated that the ineffectiveness of project managers in construction projects are due to: (a) low background of practical construction experience. (b) those persons with no expertise and experience in the application of specialized management techniques. (c) no capacity to step back from the complex details of daily construction operation and look into the future problem areas; and (d) not having the personality and insight that will enable him to work harmoniously with other people, often under very strained and trying circumstances.

LITERATURE REVIEW

The Nigerian construction sector is often criticized with delays, budget overruns, low productivity and quality problems. This reflects inefficiency in the use of project management tools. Nigeria construction industries have often been sidelined in large scale construction activities. This has been attributed to a number of factors such as mismanagement of funds and working capital which makes them prone to bankruptcy, with poor project execution and abandonment as the likely outcome. Apart from the mismanagement of funds by the firms, most construction projects in Nigeria are characterized by inadequate project objectives, inadequate details in the working drawings, the fact that designs are most of the time separated from the actual construction, demands for the drawings and designs to be detailed enough. The common challenges facing project managers in Nigerian

Construction Industry include: -

- Inadequate project objectives
- Design complexity
- Poor workmanship
- Non -compliance of design with government regulation.
- Inflation
- Aesthetics.

Construction project involve thousands of details and integrated inter-relation among owners, architects, engineers, builders, quantity Surveyors, project financiers, general contractors, special contractors, manufacturers, material dealers, equipment distributors, Government bodies and agencies, labour and others. The Construction Management Association of America following this integrated inter-relation listed 120 common responsibilities of a construction manager and grouped them into seven categories namely: (i) Project Management planning (ii) Cost management (iii) Time management (iv) Quality management (v) Contract administration (vi) Safety management (vii) Construction management professional practice. Hence, each person's role and responsibilities on the project need to be defined by the project manager in any construction project.

Cooke-Davis (2002) listed ten criteria necessary to measure the performance of a construction project namely time, cost, health and safety, profitability and quality, technical performance, functionality, productivity, satisfaction, environmental sustainability and were regarded as objective measures. It is only experienced and trained project managers that will surpass the objective of the construction project demands and the responsibilities associated with project management in the construction project delivery. A construction project is termed unsuccessful even when completed within the critical success

parameters namely cost, schedule and specification but with a record of site accident arising from unsafe site conditions. The same applies to conflict and lack of goodwill in construction projects arising from poor construction contract administrative planning. One of the areas of unsuccessful construction project delivery is the construction management professional practice, following the non-appointment of competent personnel to supervise vigorously.

LABOUR PRODUCTIVITY

Labour productivity plays a key role in determining the success of a project. However, it might be affected by many extrinsic variables. These variables may include factors related to labour, materials, tools and equipment, construction methods, political, financing and environment. Poor labour productivity is one of the main causes of cost and time overruns in construction projects and as such, deserves the attention of researchers in the construction industry (Ameh and Osegbo, 2011). In light of this, there is a need to study labour productivity factors and its impact on cost and time. Enshassi, Mohamed, Mustafa and Mayer (2007) identified factors affecting labour productivity within building projects, and ranked these factors according to their relative importance from a contractor's viewpoint. However, no attempt was done to relate these factors to its effect on cost and time. Understanding the impact of labour productivity factors on project cost, and time would improve the management, and control of project cost, and time. Furthermore, the study would assist project managers in the allocation of limited resources to address labour productivity factors that would yield greater output. Hence, the need to critically examine these labour productivity factors and determine their impact on construction project cost and time. The research only measured impact

of labour productivity factor on two project objective (cost and time), other project objectives were not considered.

Most of those researches reported country-specific productivity limiting factors, and the differences are driven by sociocultural, legislative, and regulatory environments within which construction operations are undertaken. In Malaysia, the various factors that affect labour productivity performance, based on an in-depth review of the relevant literature by Durdyev and Mbachu (2011) can generally be categorized into five areas, called the 5Ms, namely, management (method), money, manpower (i.e., workforce), materials, and machinery. It is further hypothesized that the latent factors (along with the key associated attributes), namely, management and control (MC), workforce(W), finance(F), project(P), material and equipment (ME), and external (E) influence the ability to achieve higher levels of labour productivity in the construction context of Malaysia.

COST OVERRUNS

Cost overrun occurs when the expenses required to complete a project exceed the amount budgeted (Endut et al., 2009). Cost overrun is also sometimes called “cost escalation,” “cost increase,” or “budget overrun.” (Al-Najjar, 2008). Cost overruns in construction projects are not uncommon all over the world (Olawale and Sun, 2010). Cost overruns, whether they are due to delay or estimation errors or any other factors, do not just happen, they are caused (Maieli, 2001). The cost of construction project is affected by a large number of factors (Chan and Park, 2005). Eden et al. (2005) illustrated that the growth in project cost is “amoebic” in nature. According to them, it is not easy to track down what drives total cost overrun. They suggested it tends to spread in an amoebic

manner. They also stated that project costs escalate in an exponential manner and not linearly. The following factors are considered when determining labour cost

i. Labour Availability and Skill Levels:

Skilled labour availability is considered as one of the important factor in labour pricing. Whenever there is shortage of skilled persons, the cost of labour increases as all the companies try to compete to attract talent. Apart from financial and technical aspects, labour productivity is profoundly influenced by wage earner experience, training, and region specific conditions. Well-trained and skilled personnel are mostly more creative, finishing responsibilities in smaller intervals and with lesser errors. On the other hand, inexperienced labours requires extra administration and may make overpriced faults, accumulative work hours and expenditures (Nguyen et al., 2011). Location surroundings, such as extreme weather, availability issues, or safety distresses, can also affect productivity, with contrary conditions normally ensuing in longer task timelines and higher labor costs.

ii. Wage Rates and Economic Conditions

Fluctuation of wage rates are predominantly impacted by local and national economic conditions. On the other hand, when economic downturn is seen, it may observe decrease in prices due to the competition. Location and area situations may also show its impact on wage structures, usually urban areas have high labour costs to that when compared to rural areas.

iii. Government Regulations and Compliance

Government rules and regulations such as rights, safety standards can have a significant effect on labour pricing. For the safety regulations to be followed properly the firm has to add on more cost for overall training, equipment kits, health insurance.

iv. Project Duration

The overall project duration and its complexity also plays a pivotal role in labour pricing. In turn these complex projects requires technically skill based personnel that incur heavy cost to the firm. Jarkas et al. (2011) observed that complex projects additional labor hours, which in turn increase total labor costs. The length of a project influences labor expenses; extended projects may result in elevated wages due to prolonged worker involvement and probable wage rate rises over time.

v. Technological Innovations

The integration of technology in construction can affect labor costs by improving productivity and efficiency.

vi. Employee Motivation and Job Satisfaction

Worker motivation and job satisfaction substantially influence labor productivity and, subsequently, labour costs.

v. Safety and Risk Management

Safety factors are crucial in construction, as the directly influence labour costs. Neglecting safety can result in substantial cost overruns from accidents and regulatory fines. Projects that emphasize safety may face elevated initial expenses but frequently achieve long-term savings via improved production and diminished liability. Following safety standards and regulations can really impact how productive workers are. When projects focus on safety, they usually see fewer accidents and injuries, which boosts productivity. But, if not handled right, strict safety protocols can really drag down operations

vii. Market Rivalry and External Influences

Competition among building companies also influences labor costs. In intensely competitive marketplaces, companies may be compelled to maintain low wage rates to secure contracts, hence affecting overall labour costs. Moreover, external

market dynamics, such variations in material pricing or alterations in global supply networks, might indirectly affect labor expenses.

Types of labour cost in Nigeria

In Nigeria, labour costs can be categorized into several types, each with its own implications for employers and workers. These are: -

Daily Labour: This type of labour is paid at the end of the year, typically between November and December, for work that began in January. Daily charges range from N1000 to N2000, depending on the nature of the job.

Contract Labour: Similar to daily labor, but remuneration is paid only after the task is completed. This form of labour is suitable for tasks that can be completed quickly and with little supervision.

Annual Wages Labour: This group of labourers provides food and shelter and is utilized in performing all farm operations for a year. They are paid annually, and the charges are determined based on the farm owner's needs.

Employers must also account for additional costs such as medical allowances, staff training, onboarding, and performance bonuses. The current national minimum wage is ₦30,000 per month, and employers must comply with the Labour Act, which mandates notice periods and statutory redundancy or severance pay.

DISCUSSION

The construction site workers (artisans) who are on daily pay consider themselves to be casual workers without any fringe benefits and allowances. This attitude and mindset actually affect morals and thereby reduces their productivity on site. Apart from the economic and family stress being experienced by these operatives on site, the work stress through working in an unsafe environment has a toll on their psyche.

CONCLUSION

From the foregoing, it is concluded that site operatives should as a matter of urgency form and joined trade unions who will liaise with the client, project manager in collective bargaining on the appropriate wages to be paid on daily basis. In addition, the project managers should also adhere strictly to the International Labour Organisation rules and principles.

Table 1.0. Field Works on the Outputs and Wages of selected Site Artisans Per Day

TRADE	Outputs in Superstructure	WAGES per Day =N=	REMARKS
Mason (Plastering in wall+ 2 labourers)	23.2m ²	7250.00	Inadequate
Carpentry	15.6 m ²	3500.00	Inadequate
Iron bender (cutting and fixing)	32m	3500.00	Inadequate
Tilers +2 labourers)	34m ²	5500.00	Inadequate
Painter	36m ²	3500.00	Inadequate

Source: Researcher's fieldwork (2011)

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