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Mechanism for Enhancing Cost Effective Budgeting for Construction Project Delivery in Anambra State

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ABSTRACT

The study determined Mechanisms for enhancing cost effective budgeting for construction project delivery in Anambra State. The study adopted a descriptive survey research design. Three research questions guided the study and the population comprised 101 registered builders in Anambra State. Census sampling technique was used for the study. The instrument for the study was a structured questionnaire on 4-point Likert scale. The instrument was validated by three experts who are lecturers in the Faculty of Technology and Vocational Education, Nnamdi Azikiwe University, Awka. Cronbach Alpha was utilized to determine the reliability coefficient of the instrument which yielded 0.81 which was considered good enough for the study. Mean was used to analyze the data obtained in accordance with the research questions. Findings from the study show that effective monitoring of project suppliers, effective time management among others were the mechanisms that could enhance cost effective budgeting in Anambra State. It was therefore recommended among others that construction manager should work on their spending plans and ensure that tasks are completed as at when due.

Keywords: Mechanism, cost effective budgeting, construction project

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INTRODUCTION

All over the world, businesses and government agencies alike are demanding greater visibility into project and programme performance (Tatiana et al, 2016). With tighter budgets than in days past, stakeholders need confidence that funds are being well spent. As a result, project controllers are called upon to deliver timely information that can proactively shape effective cost controls (Bergerud Christen, 2015).

Nigerian construction industry is a large industry and does contribute largely to the economic growth of the nation but certain aspects, especially materials and technology that are most essential in the construction process are sourced outside the shores of Nigeria. The high rate of importation of construction materials and equipment and most times borrowed technologies reveal that innovation on these aspects are on the low level. Organized construction contracting in Nigeria began in the 1940s with few foreign companies coming into operation (Olowookere, 2017). Nigeria's Independence in 1960 bolstered by the "oil boom" of the 1970s

brought an upward trend in the construction activities and up to the end of the second Republic in 1983, the construction industry in Nigeria witnessed an overwhelming upsurge in construction contracting dominated by expatriate companies with few indigenous companies (Idoro, 2018). Unfortunately, the period also exposed the country's indigenous companies' low level of human resource development required for; planning, designing, constructing and maintaining the magnitude (in size and number) of projects conceived by the government. However, with improved training institutions, engagement of expatriates, collaboration between indigenous and foreign entrepreneurs, political stability and improved government policies and the apparent resources gap needed for successful completion of complex projects between indigenous companies and their foreign counterparts are now closer compared to the pre-independence (Mbamali and Okotie, 2012). Similarly, Osofisan (2017) criticized the Nigerian construction industry to be one of the slowest to integrate technological advancement. Osofisan also added that the issue of IT in the building industry is hence relatively limited compared to other sectors, thus demanding proactiveness.

Construction projects involves a number of inter-related and inter-dependent activities. Presently, due to fast changing environments-imposed number of legal, financial, logistic, ethical and environmental constraints, they interact economically, socially and technically within the organization and systems. These projects employ huge resources, but later faced with difficulties, risks and uncertainties. Due to the nature of resource-driven in construction management, the management of resources is really a difficult task. Thus, requiring the project manager develop an action plan for controlling and directing resources; machines, workers and materials in timely and coordinated manner in order to deliver a project within the frame of limited time and funding.

Financial management is the use of a company's financial resources (United States Census Bureau, 2015). This includes the use of cash and assets, such as equipment. It should be noted here that, everyday decisions affect a company's financial future. For example, the decision to bid on a large project can have a greater impact on the finances of a company.

In the traditional sense, the primary purpose of preparing budget is to understand and control costs (Olabosipo, 2019). This concept of budget has therefore transformed into using budget proposal as an instrument for individual, public and private policy. It is useful to all parties involved in a project as a planning and control tool. Budget could be employed by the client to get priorities among projects competing for limited resources. It enables the client to set the machinery in motion for meeting the interim valuations as when due and also used to justify the elimination of uneconomic project(s) as well as the revision of his objectives to meet the demand of a manageable project. Budget could also be employed by the consultants as cost control tool in managing construction project. In order to meet client's requirements of function and ensuring completion on time within the set cost and required quality standards.

In real terms, the Anambra State construction industry recovered in 2017, after registering a gloomy performance in 2016 (Ministry of works, 2018), due to the economic recession. Weak construction activity in 2016 came primarily on the back of high inflation, rising unemployment, currency devaluation, high interest rate, low oil prices and reduced oil production, which forced the economy into recession (Ministry of works, 2018). This reduced the pace of public and private sector investment in the construction projects in the state. The government of Anambra State should aim to enhance transport and residential infrastructure which in return will lead to the growth of the industry and also, increase in energy production capacity, which will support

investment in energy infrastructure project.

Statement of the Problem

The researchers perceived that poor unfinished infrastructures and lack of skill acquisition by contractors in Anambra State are problem of the study. It is quite expected that after the client provision of sufficient construction resources such as: products and materials, construction plants, tools, equipment and human resources to a contractor for proposed and agreed construction, that the contractor will utilize the resources and erect the structure to a finish product and hands that structure over to the client at agreed time, but revise is the case.

The importance of well utilized construction resources cannot be overemphasized, as it helps to accomplish every task with precision and meet the project objectives within time. It is not only beneficial to civilians but good infrastructure also impacts the global economic developments, its importance is exceptionally wide ranged. These poor unfinished infrastructure and lack of skill acquisition by contractors in Anambra State is what the researcher saw and got disturbed and was prompted to carry out the study on mechanism for enhancing cost effective budgeting for construction project delivery in Anambra State.

Research Questions

The following research questions guided the study:

1. What are the ways of ensuring effective monitoring of project supplies for enhanced cost-effective budgeting?
2. What are the means of enforcing financial regulations for enhanced cost-effective budgeting?
3. What are the ways of ensuring effective time management for enhanced cost-effective budgeting?

METHODS

The study adopted descriptive survey research design. According to Osuala (2015), involves the collection of detailed description of public opinion on an existing phenomenon with the intent to justify current conditions and practices to make better plans for improvement. Descriptive survey research design is suitable for this study because it used questionnaire to elicit the opinions of respondents on the mechanisms for enhancing cost effective budgeting for construction project delivery in Anambra State. The population of the study comprised 101 registered builders in Anambra State. The experts were selected based on their wealth of experience in building construction field as this would help to provide necessary data needed to actualize objective of the study. was used as an instrument to collect data. The questionnaire is a structured 4-point rating scale of Strongly agree (SA), Agree (A), Strongly Disagree (SD), Disagree (DA) responses from respondents with three items each. The data generated from the questionnaire was analyzed using mean to answer the research questions and was also computed and interpreted based on the statistical real limit of numbers.

RESEARCH RESULTS

Research Question one: What are the ways of ensuring effective monitoring of project supplies for enhanced cost-effective budgeting?

Table 1

Respondents' mean rating on the mechanism for ensuring effective monitoring of project supplies for enhanced cost-effective budgeting

S/N	Items	SD	$\bar{X}$	Decision
1	Classify suppliers into categories	0.83	3.26	Agree
2	Identifying key budget performance indicators on procurements of materials	1.23	3.73	Strongly Agreed
3	Regular visit to construction site by the construction site manager	0.89	3.60	Strongly Agreed
4	Consulting a renowned financial company or team on budgetary financial issues	0.99	3.53	Strongly Agreed
5	Monitoring the dispatch of materials in and out of the store	0.97	3.80	Strongly Agreed
6	Regular inspection of materials for enhanced quality assurance	1.22	3.63	Strongly Agreed
7	Regular checking and counting of supply materials before taking to the warehouse for storage	0.88	3.70	Strongly Agreed
8	Planning ahead for project supplies	1.22	3.54	Strongly Agreed
9	Analyzing and reporting findings on project supplies	1.07	3.27	Agree
	Grand mean		**3.56**	**Strongly Agreed**

N = 101

Data in table 1 show that item 5 has the highest mean score of 3.80 which indicates that most of the respondents strongly agreed that monitoring the dispatch of materials in and out of the store is a mechanism of ensuring effective monitoring of project supplies for enhanced cost-effective budgeting.

Research Question two: What are the means of enforcing financial regulations for enhanced cost-effective budgeting?

Table 2

Respondents' mean ratings on the mechanisms of enforcing financial regulations for enhanced cost-effective budgeting

S/N	Items	SD	$\bar{X}$	Decision
10	Document financial records	0.87	3.88	Strongly Agree
11	Set clear guidelines on limits of spendings	0.85	3.76	Strongly Agree
12	Establishing financial policies	1.01	3.89	Strongly Agree
13	Hire a qualified financial consultant	0.92	3.98	Strongly Agree
14	Treat all workers equally by not offering preferential treatment to some group of workers	1.03	2.63	Agree
15	Build system that works for all multiple workers depending on their craft and strength	1.00	3.35	Agree
16	Making a payment schedule for the list of workers working in the construction site	0.88	3.66	Strongly Agree
17	Proper overseeing of workers activities	1.23	3.15	Agree
18	Effective good contact management system	1.30	2.64	Agree
	Grand mean		**3.00**	**Agree**

N = 101

Data in Table 2 show that item 13 has the highest mean score of 3.98 which indicates that most of the respondents strongly agreed that hire a qualified financial consultant is a mechanism of

enforcing financial regulations for enhanced cost-effective budgeting.

Research Question three: What are the ways of ensuring effective time management for enhanced cost-effective budgeting?

Table 3

Respondents' mean ratings on the mechanisms of ensuring efficient time management for cost

S/N	Items	SD	$\bar{X}$	Decision
21	Create daily schedule of work	0.81	3.88	Strongly Agree
22	Prioritize wisely	0.92	3.97	Strongly Agree
23	Group similar task together	1.10	3.95	Strongly Agree
24	multi-tasking	0.87	3.75	Strongly Agree
25	Assign time limits to each task to be carried out	0.99	3.87	Strongly Agree
26	effective organization	0.98	3.87	Strongly Agree
27	Eliminate all sources of distractions	1.23	3.55	Strongly Agree
28	Effective scheduling	0.96	3.97	Strongly Agree
29	Delegation of responsibilities	0.95	4.04	Strongly Agree
30	Set goals that are achievable and realistic	1.14	3.58	Strongly Agree
	Grand mean		**3.84**	**Strongly Agree**

effective budgeting

N = 101

Data in Table 3 show that item 29 has the highest mean score of 4.04 which indicates that most of the respondents strongly agreed that delegation of responsibilities is a mechanism of ensuring efficient time management for cost effective budgeting

DISCUSSION

What are the ways for ensuring effective monitoring of project suppliers for enhancing cost effective budgeting?

Findings of the study showed that there are of ways for ensuring effective monitoring of project suppliers for enhancing cost effective budgeting. According to Epiq (2020), supplier performance management is a business practice that is used to measure, analyze, and manage the performance of a supplier. He went further to say that supplier management professionals seek to cut costs, alleviate risks, and drive continuous improvement. The findings also observed that all organizations must develop a core competency to quantify and manage their risks effectively in order to be successful over time.

It was also observed from the findings that the benefits to a company with an effective supplier performance management program do not only encompass risk mitigation or prevention of problems. There are also positive benefits. One benefit is improved collaboration between suppliers that can lead to better coordination and enable the company and supplier to better meet the company's business objectives. Another benefit that can arise is increased efficiency and productivity for the organization as it interacts with its suppliers.

What are the ways of enforcing financial regulations for enhancing cost effective budgeting?

Findings of the study showed that there are of ways for enforcing financial regulations for enhancing cost effective budgeting. The study observed that financial regulation has also influenced the the structure of construction companies (sites) by increasing the variety of financial products available. The findings also showed that financial regulation form one of three legal categories which constitute the content of financial law, the other two being market practices and case law.

What are the ways of ensuring effective time management for enhancing cost effective budgeting?
Findings of the study showed that there are of ways for ensuring effective time management for enhancing cost effective budgeting. According to Binita Bora (2017), time management is the skill of managing time effectively by planning, organizing, and controlling the hours spent on different activities. The meaning of time management skills is to productively use the available time to get all your tasks done. It includes abilities and skills such as planning, organizing, prioritizing, delegating, communicating, goal setting, etc. Wikipedia defines time management skill as, the process of planning and exercising conscious control of time spent on specific activities, especially to increase effectiveness, efficiency, and productivity.

Conclusion

Based on the findings of the study, it was concluded that ways for ensuring effective monitoring of project suppliers for enhancing cost effective budgeting should be put in place and in effective use to bring out quality construction project work and work that can stand the taste of time. It was further concluded that in enforcing financial regulations for enhancing effective budgeting, there should be measures taken such as documenting financial records, set clear guidelines on limits of spendings, establishing financial policies, hire a qualified financial consultant e.t.c. lastly, it was observed from the findings that in ensuring effective time management for enhancing cost effective budgeting not only should there be enough manpower to carry out duty, but rightful delegation of duties amongst this manpower is very important and essential.

Recommendations

Based on the findings, the following recommendations were made:

1. Construction manager should work on their spending plans. In essence, they should first go for market survey before drawing out that budget so as not to over spend or under spend.
2. Building construction professionals should ensure timely completion of projects.
3. Construction managers should also set out their priorities when it comes to acquiring materials for construction project.
4. Payment of construction workers on time should be fully adhered to. In that way, they'll bring out the best in performing their task at the construction site.

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