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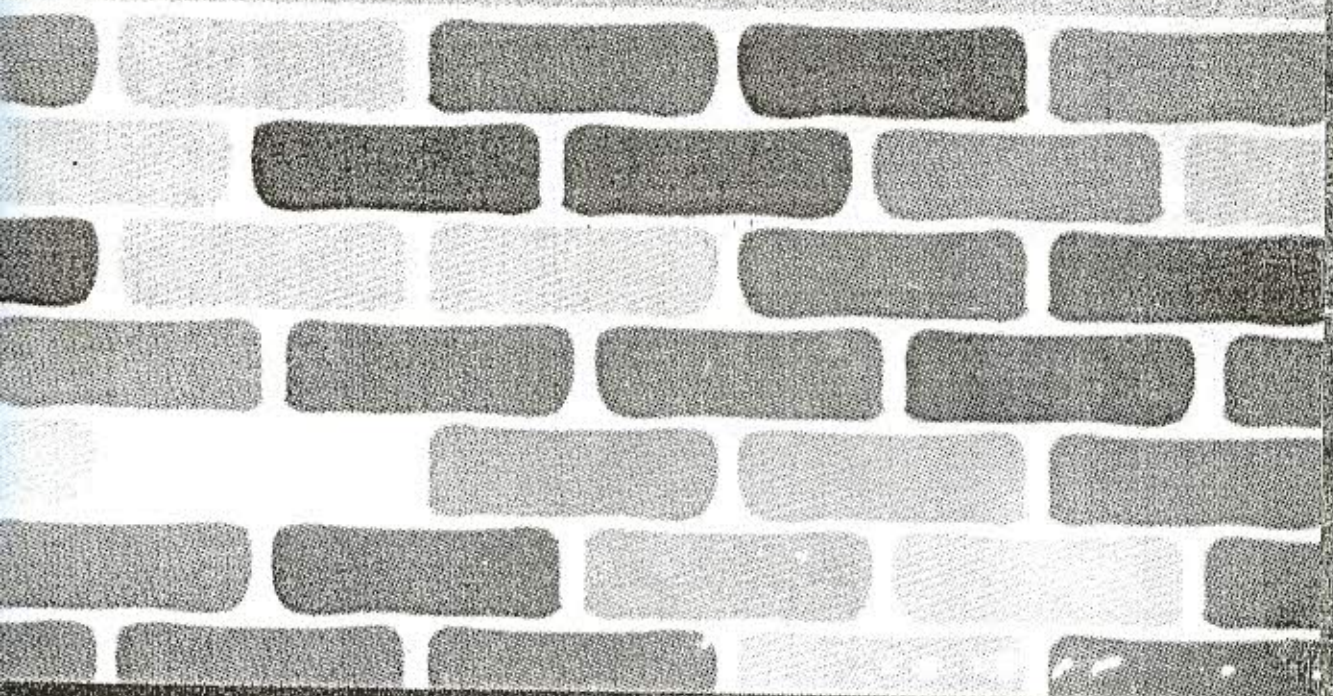

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EXPLORING THE APPLICATION OF PROGRAMME BUDGETING MANAGEMENT TECHNIQUE IN SELECTED CONSTRUCTION COMPANIES IN NIGERIA

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ABSTRACT

A survey was conducted on a sample of seven construction companies in Lagos State to investigate the extent of usage of a management technique: Programme Budgeting. It is a type of management technique that can be used to solve planning problems related to projects' budget and expenditure. The study reveals that project planning problem exist averagely in construction companies; the usage of the technique is very low; four reasons were adduced to its non-usage and; as many as six 'alternative techniques' that are used in-lieu of it are observed. The study therefore recommends its usage to combat planning problems.

KEY WORDS: *Construction Company, Management Technique, Planning, Programme Budgeting, Project Control.*

INTRODUCTION

Project planning and control is the precise coordination of many separate activities to be completed on time, within budgeted cost and specified quality. The absence of project planning and control leads to failure in completing the project on time and to scheduled cost and quality. This is a recognized management problem in many companies and can be analyzed and solved by management techniques. It is of note that several techniques are used in solving project planning and control such as critical path method (CPM), bar-chart, linked bar-chart, activity on the arrow network, precedence diagram, line of balance, space-time diagram, programme evaluation and review technique (PERT) etc (Harris and McCaffer, 1997).

One of such techniques to solving project planning and control is Programme Budgeting. The problem of project planning and control abounds in Nigerian construction projects, which results to project failure in terms of meeting clients' objectives and satisfaction amongst others (Ojo and Dada, 2005; Akutu, 1998). The aim of this paper is to examine the extent of application of programme budgeting in solving planning problems related to projects' budgets and expenditure by construction companies.

LITERATURE REVIEW

Argenti (1987) defines management technique "as a recognized method of analyzing or solving a recognized type of management problem in a detailed, systematic way". He affirms that solving a problem in a detailed and systematic way is not a management technique except it is one that is globally recognized for tackling the same problem in the same way. He opines that a unique and recognizable identity is paramount for a management technique, which will also help to know if actually it is being used by anyone that claims to. Argenti adds that a recognized technique must have a name, consist of a precise step-by-step

procedure that is unique and peculiar to it and; it must lead reliably to certain quite specific results recognizably peculiar to it so that one can verify that it has been correctly used. They are for tackling relatively difficult management problems. On the other hand, he asserts that management problem is any situation in which a manager has to take a management decision.

Argenti (1987) posits that all management techniques depend heavily on the systematic, methodical, logical, rational approach: the careful, detailed, analytical dissection of problems or assembly of solutions. He affirms the efficiency of management techniques but pinpoints four reasons why they are not used: the names of some of them are terrifying and intimidating, so managers shy away from them; the experts in these techniques like to give the impression that they are considerably above the average intelligence, so it makes managers feel inadequate; there are so many of them but you do not need to know much and; it takes time since it is designed to tackle problems at the root. As a result of these, he proposes a six-step procedure for introducing management techniques which are: identify which of the type of problems one faces is the most severe; select the technique that is designed to analyze or solve that particular type of problem; learn about it; decide if it is worth applying; use the technique or see that it is used and; check result.

In the same vein, Argenti (1987) identifies the concept of programme budgeting as that which stipulates that expenditure for a company should be shown in two dimensions. He notes that when any construction company prepares its annual budget it very often shows how its total expenditure is to be split in one dimension only – usually by subdivisions of the construction sites as shown in Table 1. He explains that programme budgeting connotes that the construction company shows how much each site is going to spend and what each segment is to cost as shown in Table 2. From this, management can tell at a glance what each project is costing and where its main burden is falling. It can be inferred from Argenti's concept and illustration of programme budgeting that programme budgeting has to do with planning projects' budget and expenditure in two dimensions and not time; but when expenditure is properly planned, it helps to minimize time wastage amongst others on construction projects. It will also assist in monitoring and controlling project expenditure and cost.

Table 1: Expenditure for 1970

Section	Amount.
Chemistry section	120,000.00
Physics section	100,000.00
Biology section	210,000.00
Experimental section	440,000.00
Administration	80,000.00
Total	950,000.00

Source: Argenti (1987)

In addition, planning is an administrative process that necessitates issuance of instructions to accomplish a certain goal (Pilcher, 1967). It connotes different meanings to different people. Some see it as synonymous with programming while in some it is just a department with varying responsibilities from one organization to another. It is however the most crucial aspect of management process which includes the operation of a company as a commercial undertaking (i.e. policy planning- the over-all means of achieving objectives); and the technical process of that company (resources planning – methods of arranging and employing resources). It prevents waste and problems that can hinder attainment of objectives.

Table 2: Research expenditure for 1970

PROJECT	Routine Process Development	Bio-electric cell Project	Bio-thermic Materials	Total
DEPARTMENT	Amount	Amount	Amount	Amount
Chemistry section	40 000	10 000	70 000	120 000
Physics section	60 000	40 000	-	100 000
Biology section	10 000	180 000	20 000	210 000
Experimental section	80 000	300 000	60 000	440 000
Administration section	20 000	30 000	30 000	80 000
Total	210 000	560 000	180 000	950 000

Source: Argenti (1987)

Pilcher argues that planning of time should be closely linked with cost and every plan must be simple and flexible to facilitate any adjustments. However, He adds that programme is a graphical schedule that forms the basis for effective planning, which must show ample detail to afford proper consideration to be given to the timing and durations of all operations and then bring to light likely problems or delays. He summarizes the purposes and aims of a good programme as: exposure of likely future difficulties and organizing to overcome them; minimization of unproductive time of both men and machines; suitability for use as a control tool against which progress can be measured; enables forecasting of resources; and aid the establishment of a work method. On the other hand, Harris and McCaffer (1997) mentioned two levels of planning as strategic and operational planning. The former is concerned with high-level selection of overall project objectives while the latter involves establishing a method statement for each activity. They add that construction programme presents activities sequence with their associated durations and resource requirements. However, construction work can be programmed in whole and in part.

In the same vein, according to Oberlender (1994) project planning is the process of identifying all activities necessary to successfully complete the whole project. Oberlender further posits that project planning is a prerequisite to project scheduling (though they are synonymous and often used interchangeably in literature; because there is no way to determine the sequence or start and finish dates of activities until they are identified. The successful realization of a project will depend upon careful and continuous planning. He adds that the purpose of planning is to persuade participants in the project to perform their tasks before they delay the operation of other groups of people, in such a sequence that the best use is made of available resources and to provide a framework for decision-making in the event of change. He identified that planning is the heart of good project management because it provides the central communication that coordinates the work of all parties; establishes benchmark for project control system; is the first step to project scheduling; is a process and not a discrete activity; detects changes and adjust the schedule; prevents interruptions, delays, cost overrun, low worker morale, decline in productivity and reworks.

Therefore, though Oberlender affirms earlier that project scheduling and planning are synonymous, it is of note that his later submission of project planning as the first step to scheduling signifies that they are not. Similarly, Freeman and Backwill (1993) submit that it is paramount that every project be defined using project plan so that all the practitioners in the construction process know what is specified and what the outcome should be. These provide a term of reference for all participants to the

successful completion of the project within budgeted cost and time. They add that project plan is the project proposal which can be used as a working document in the project execution and it determines what needs to be done in details, by who and when as it is planned in details, the activities and resources available in order to achieve the project objectives.

THE PURPOSE OF THE STUDY

The main objective of this study is to find out the extent of application of programme budgeting in construction companies. The following are the specific objectives of the study: -

i. To establish if construction companies have the problems of project planning and control.
ii. To establish how often construction companies' use programme budgeting in solving the problem of project planning and control.
iii. To uncover the reasons why companies do not use programme budgeting.
iv. To find out other alternative techniques for programme budgeting.

METHODOLOGY

A questionnaire was designed to elicit required information from the respondents. Seven construction companies were administered 20 copies of questionnaire. These companies are: Precast Limited, Quest Limited, Jamalist Investment Limited, Multitechnics, Design Union Consulting Limited, Highcard Consult and Muklar Limited. As many as 19 copies of the questionnaire were filled and returned promptly.

FINDINGS AND DISCUSSION

Existence of Project Planning Problem in Construction Companies

A question was asked in the questionnaire to find out if construction companies have the problem of project planning and control. The result is shown in Table 3.

Table 3: Responses on if Construction Companies have the problem of project planning and control.

	Frequency	Percentage
Yes	9	50%
No	9	50%
Total	**18**	**100**

From Table 3, it can be observed that 50% of the companies have while 50% also claimed not to have this problem. The result shows that this problem is averagely present in construction companies.

The Scope Of Application Of Programme Budgeting

The scope of application was measured in the questionnaire on a Likert scale of 1-3 using 1 for Never, 2 for sometimes and 3 for always. 18 of the respondents attempted this question and the result is shown in Table 4.

Table 4: The use programme budgeting in solving the problem of project planning and control in construction companies

	Frequency	Percentage
Never	10	55.56%
Sometimes	6	33.33%
Always	2	11.11%
Total	**18**	**100**