

PROJECT MANAGEMENT: A PANACEA FOR REDUCING THE INCIDENCE OF FAILED PROJECTS IN NIGERIA

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ABSTRACT

The management of projects has for long been a problem in the public sector of the Nigerian economy, thus causing many projects of government to fail or be abandoned or to breakdown soon after completion. Scarce resources were wasted with its negative consequence on utilization and distribution of national wealth. In order to carry out the investigation of failed and abandoned projects in Nigeria, the authors who have participated in various committees on failed/abandoned projects in Nigeria, examine the various steps involved in project management as guides and the consequences it had on the projects. Various factors such as lack of financial discipline of the managers and sponsors of the projects, poor project management and the lack of understanding of the rudiments of project management formed major framework for the failures. Panacea was proffered for the reduction of the incidence of abandoned and failed projects of government. It was recommended that no matter the size of a project, the basic steps of project management must be followed and government must maintain financial discipline. Deliberate efforts must be made to ensure that only persons who have the professional expertise and experience are saddled with its planning, costing and execution.

Key words: Project; Panacea; Failure; Incidence and Abandonment

1. INTRODUCTION

Many projects of government have remained uncompleted or abandoned in Nigeria due to poor project management. ([1]. The incidence of abandoned projects has caused the government to constitute a task force code named Panel for the Assessment of Failed or Non-Performing Federal Government Contracts on Construction, Supplies and Services [2]. The mandate of the panel included; identification of all government failed or abandoned projects, the contractors, and the cause for abandonment. They were to ascertain the cause of abandonment, the viability of the project, the original contract sum, the level of completion and match the value of work done with the total sums already paid. They were to determine in order of priority which of the projects to be completed and the estimated cost required for completion [2].

The lead author was privileged to work with a sub committee of the panel that was assigned to inspect the abandoned and failed projects of government in some research institutes in the south-south, the south east, the Lagos areas of Nigeria. The co-author was in the team set up by the University of Benin in 2008 to investigate the rationale surrounding abandoned and failed projects in the University. The objective therefore, is to report their findings and proffer panacea for the reduction of the incidence of abandoned and failed projects in Nigeria.

1.1 Characteristics and Nature of Project

A Project is an interrelated set of non-repetitive activities, that has definite starting and ending points, which result in a unique product. A project must be goal oriented, has definite beginning and end, has particular set of constraints and measurable output and also be able to convert one situation to another. The activities are one at a time and they can be distinctly subdivided to have definite beginnings and ends with definite sequential relationships. Each activity can be defined with respect to every other activity as either preceding or simultaneous or succeeding or independent and each activity time can be determined [3].

The nature of project:

Projects have a generic life cycle; conception, birth, infancy, maturity, old age and death. Just like humans, it is not all projects that complete all the different stages of the cycle before death [4].

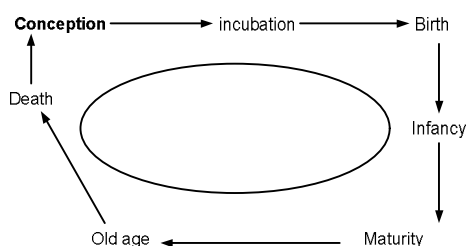


Fig. 1. The generic life cycle of a project

2. MATERIALS AND METHODS

In order to carry out a detailed investigation, the various steps involved in project management were used as guides to analyse the reasons for failures or abandonment as follows:

Project initiation:

The main reasons for initiating the project were taken into cognizance. Regardless of its size and complexity, every project is goal oriented. To achieve the set goal, it is important to identify and state in clear terms the problem that the project is being proposed to solve or the unsatisfied need to be met. The project must be described in terms that every stakeholder would understand.

Environmental impact assessment:

To carry out an Environment Impact Assessment (EIA) on the Community, the following questions need to be answered. They include:

How does the planned project positively or negatively affect the project environment?

How would the project affect their traditional way of life? The panel reviewed this to ensure whether this aspect lead to failure of the project.

Project design:

The design of the project to achieve the set goals were investigated to ascertain its contribution to the state of the problem. The following must be done. They include:

- Definition of all project activities and precedence relationships.
- Planning and organising the network of interrelated activities, materials and personnel.
- Development a network Model represented by a network diagram.
- Insertion of time estimates using either, the Programme Evaluation and Review Technique (PERT) or the Critical Path Method (CPM).

- Determination of the critical path by defining each possible path from the start of the project to its finish.
- Calculation of the length of each path and finally determining the longest path, which becomes the critical path.

• Analysis of the model, by identifying activities that are crucial to project completion and estimate the probability of completing the project on time.

• Development of a schedule for each activity within the project to ensure that the project is completed as planned and on time [5]

Project costing:

The value of the project as at the time of award based on BEME was investigated to ascertain how this affected the status of the project. The items involved in cost estimation as shown below were considered. Thus, every project required to prepare and value the Bill of Engineering Measurement and Evaluation (BEME) as a basis for the computation of costs of the project. The project cost must include the following:

Direct costs,

Indirect Costs such as: Compensations, Supervision, Initial maintenance, Training costs, Penalty costs, where applicable.

Project tendering:

The mode of award was investigated to check whether due process was followed during tendering process. Not all projects would require tendering. Projects to be executed by direct labour do not require tenders. The tender document must include a clear description and specification of the job required to be done in addition to the statement of the bill of engineering measurements and evaluations (**BEME**) or the material estimates giving the detailed technical description and specification of the materials. Bill of engineering measurements and evaluations must be prepared for all projects irrespective of their sizes and whether it is to be done in-house or by contract. BEME provides the guide on the project cost and its stages of execution.

Other components in the tender document include:

Decision on the mode of project execution. To aid the decision on whether to execute a job by direct labour or by contract requires that the resources available in house be analysed. This is a very important stage of a project management. Sometimes the complexity of the project may require that spare parts and training programme for the client's personnel be included in the tender. The tender document should also state clearly the level of technical competence of the manpower, sophistication of the machines that would be required and the safety facilities to be provided during the project execution. This is to provide a common platform for price valuation by all the contractors and easy evaluation of the bids thereafter.

Tenders may be advertised locally on notice boards within the establishment or nationally or internationally in the print media or even on the internet. The decision on the coverage of the advertisement is dependent jointly on the value and the level of skill and the sophistication of the job to be carried out. All adverts must be time bound and the bids must be opened immediately thereafter to avoid manipulations [6].

Evaluation of bids:

The evaluation process also constitute a major analysis in the investigation of failed or abandoned projects. The process of evaluation includes:

Public opening of the bids soon after the expiration of the adverts notice in the presence of all the bidders or by a committee in the absence of the bidders. However, it is important that the Chairman of the committee must sign all the opened bids in the presence of all the other members to show some evidence of transparency. It is also important to note that the tender with the least cost may not necessarily be the best tender. For a tender to be considered for consideration, it must first be responsive. That is, it must meet with all the requirements stated in the tender document. The most responsive bid is that, with the least cost about 10% around he estimated cost after

having met with the stipulated terms and conditions of the tender document. The bidder with the most responsive bid must be awarded the contract and should be informed soon after bid evaluation to avoid corruption.

The contractor must sign a contract agreement of project execution, which must state clearly the following;

- The total value of the contract.
- The expected duration of project completion.
- The work schedule stages for certification and payments.
- Penalty for failures on both sides of contractor and client.

Project execution:

Mode of execution of the project was considered to determine whether the project have qualified consultants/supervisors and how competent the contractors were. Every project must have a resident supervisor. Some others, depending on the complexity may have consulting supervisor in addition. Once resources are allocated and the contractor mobilizes to site, both the contractor and the supervisor should strive to ensure that the work schedule is implemented so as to complete the project as planned and on time.

Project monitoring and control:

Monitoring by relevant bodies is essential. The greatest benefit of project network planning models is the improved insight they provide concerning project completion status. The best-laid project can go awry. Therefore progress must be monitored so that delays can be readily identified. Periodic reports, say weekly is helpful. There must be professionally qualified personnel appointed to monitor the progress of the project.

The project manager should focus on the activities along the critical path. However, the manager should also pay attention to near-critical paths. The reason is that these near-critical paths could easily become critical, if one or more of the activities along these path slips relative to its schedule. He must always remember Murphy's law, which states that "if something can go wrong, it will." This applies to all projects, as when the unexpected problems do come up, they cause delays, which may require rescheduling and reallocation of resources, and thus resulting in severe financial repercussions. This situation may require the project manager to make quick decisions.

To maintain control, the manager must be capable to answer "what if" questions regarding the timing of project activities and to evaluate the time cost implications of resource trade – offs.

3. ANALYSIS AND DISCUSSION OF FINDINGS

A total of thirty four projects, in research institutions which were civil work, were listed as failed projects. They were abandoned at four varying stages of completion.

- Eighty percent of them had been roofed.
- They have all deteriorated thereafter to the extent that the roofs of forty five percent of them had either collapsed or blown off.
- Most of the contractors could not be located in their addresses. They have either relocated, changed names or died.
- Twenty percent of the projects were certified and paid to their completion levels.
- Seventy five percent were not fully paid to certificated level.
- Five percent were overpaid.

Responses to structured questionnaires from the recipients of the projects revealed lack of clear definition of the project, and deliberate exclusion of local professionals during the tendering, ordering, procurement, installation and commissioning stages of projects. Appointment of persons who were technically ill equipped to manage such projects. Poor tender documentation, poor evaluation of the tenders constitute major factors. Procurement and location of projects on political consideration only and the non-committing attitude of government functionaries to the implementation of its own budget plans, unpatriotic attitude of some policy makers who for the purpose of handsome kickbacks encourage over-invoicing and Absence of built in planned maintenance affected the project a great deal. The Nigerian preference for imported machinery, equipment and even foreign expertise and the unpatriotic habits of many Nigerians who hold the view that what belongs to the government is nobody's property and therefore deserves no special care lead to major failure. We found generally that most project beneficiaries and managers lacked the understanding of project management. That is, the procedure for its initiation, costing and execution. It is for this reason that we found it expedient to give some explanation on the term 'project' and the procedure for its management.

4. RECOMMENDATION

4.1 Commission and Handover:

On completion of the project, the following procedure must be followed before commissioning and hand over. They are:

To check and ensure that all fixtures function properly and comply with the design. For machinery, the project must be test-run.

To confirm that all the documents are available and in good condition. For equipment and machinery, the following manuals must be available. They are:

- Installation manual,
- Spare parts manual,
- Operation manual,

Maintenance manual,
All flow charts and drawings.

Having been satisfied that the project is satisfactorily completed, the manager must prepare and complete the completion certificate. It is very important that the project be put to full use immediately after hand-over so that all faults inherent during the project completion period are revealed and corrected within the project liability period, which is usually six months.

4.2 Factors to reduce project failures/abandonment:

The following are recommended to reduce the incidence project failures and abandonment:

- Government must accept the fact that, there are professionals who have been trained and adequately equipped to handle projects. They must therefore be involved at every stage of the project.
- Government must make a budget plan and be committed to its implementation to avoid future cost variation, which quite often leads to project abandonment.
- Funds must be promptly released to offset approved completion certificates.
- All stakeholders must adequately understand the description of the project to avoid future unrest and vandalism. They must be made to see the project as part of their property.
- An environmental impact assessment is a must to avoid delay that may stall or extend the project completion time.
- Maintenance plans, cost of training, project supervision and monitoring must be built into projects.
- Nigerians must be trained in readiness for the take over of the project and they must be involved at all the stages of the project.
- Plans should be realistic.
- There must be in place a performance reporting system that would guarantee an effective control, with adequate, accurate and timely information on project.

5. CONCLUSION

Projects are designed to achieve a goal. All projects no matter the size must be planned. To avoid project failure deliberate efforts must be made to ensure that only persons who have the professional expertise and experience are saddled with its planning, costing and execution.

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REFERENCES:

1. Lawal, Y. O. (2000), "Maintenance Culture: The Nigerian Situation". Nigerian Journal of Engineering Management. Vol. 1, No. 4 October-December, 2000 Pp 38-43.
2. Inuwa Iguda (1999), Submission of Returns on failed or Non-Performing Federal government Contracts for Construction, Supplies and Services, 1976-1998
3. Forgarty, Donald W., John H. Blackstone, Jr., Thomas R. Hoffmann (1991): Production and Inventory Management. South-Western Publishing Co. Cincinnati, Ohio. Pp. 532-564.
4. Osara, S. I. O. (1994): Anatomy of Engineering Project Management. Ilupeju Press Ltd. July 29, 2003.
5. Moder, Joseph J., and Cecil R. Phillips (1970): Project Management with CPM and PERT. 2nd ed.: Litton Educational Publishing, Inc., Van Nostrand Reinhold Co., Inc., New York.
6. Naiyeju, J. K. (2002): Guidelines for Implementation of due Process Certification of contracts. Office of the Accountant General of the Federal republic of Nigeria. July 5, 20002.

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