

Assessment of Cost-Risk Implication of Abandoned Public Projects in Enugu State

Akunne Z. C. and Nnadi E. O. E.

Quantity Surveying Department, Enugu State University of Science and Technology (ESUT),
Enugu

Email: Ezekiel.nnadi@esut.edu.ng

ABSTRACT

Every project is unique and its successful implementation is measured on the ability to mitigate any risk during the planning to its execution. Risk factors such as cost overrun, time overrun and substandard work execution are among the identified risk factors resulting to abandonment of projects in Nigeria. This study thus determined the cost risk implication of abandoned public project in Enugu state using Orthopedic Hospital E-library Enugu as a case study. The study is aim at examining the cost risk of abandoned construction projects to clients, contractors, construction professionals and the nation. Qualitative and quantitative method was implored in this research; self administered questionnaire was used to obtain relevant data in the research work. Regression model was used in analyzing the data collected. The research revealed that inadequate planning before embarking on project, inflation and poor funding contributed to the abandoning of the project. Based on the findings, the researcher recommends adequate pre-contract study and engagement of competent construction professionals.

Keywords: Abandoned Projects, Cash flow, Cost overrun, Public projects, Risk.

INTRODUCTION

Costing of a project involves the process of predicting the quantity and price of the resources required by the scope of a project. The project scope definition is never entirely complete until the project has finished. This involves the point that all expenses have been made and an accountant can determine the exact amount of money spent on resources [1]. Cost is the estimated amount of money or price that will be needed for something. It implies the effort, loss or damage that is involved in order to do or achieve something. The project cost might be affected as a result of changing state of the market due to fluctuation in supply and demand, inflation, inadequate planning, incorrect estimate, inadequate fund, incompetency among teams, faulty design, bankruptcy of contractors, death of client, natural disaster, dispute etc [2]. However projects are the major

component of the new investments, it adds to the growth of the economy. Projects contain numerous interdependent and inter related activities and thus employs voluminous resources which have in-built difficulties, uncertainties and risks. Most of the construction project face time and cost over runs due to management failure. The success or failure of a project largely depends upon the effectiveness and the efficiency with which the risks and undertakes are managed. The uncertainties can be from change in the project budgeted cost and variations in control estimates [3].

E-library in National Orthopedic Hospital Enugu was used as a case study in this research work. The project abandonment can lead to deterioration of materials used in its construction, variation in proposed cost at the initial state leading

to higher cost that was not budgeted [4]. More so, mismanagement, unfavorable government policies, inefficient public delivery system, unfavorable economic conditions and financial problems can still cause abandonment. This study will be beneficial to most construction industries in Nigeria, because once a project is initiated and managed properly,

it will eliminate high cost of procurement and a lot profit will be generated. This research also help in planning and execution of future construction project especially the quantity surveyor in the feasibility and planning stages of proposed scheme and preparation of work method and schedules by the building manager.

REVIEW OF RELATED LITERATURE

Project Concept

Project activity has been in existence since the caveman started building his dwelling. It has created many wonders in the world and has produced many facilities for the benefit of the mankind [5]. Universally, the construction of capital intensive facilities is undertaken by organizing the major works into one or more construction projects for implementation [6]. The fast changing environments of the present era impose numerous time, cost, and financial, legal, ethical, environmental, and logistic constraints.

The resulting instability involved in project execution level brings element of risk. Projects usually include large capital outlay, generate unbalanced cash flows and involve complex contractual arrangements. Thus it encounters changing economic and financial situations which face unstable political climate resulting in changing regulatory issues and have to cater to unpredictable environmental changes. The stability of projects is constantly subjected to certain sensitive and volatile, external and internal environments.

[7], Stated that failure of projects are not just peculiar to a particular reason rather cut across several reasons and as well as creating a total dwindling effects on the values of developed properties located close and within the vicinity. The expected prominence of any embarked development project is to be completed, while at the same time adding values to the built environment aesthetics.

The client and the contractors are the two parties that work to ensure project delivery. The contractor executes

contracted works and bears the cost of input resources employed by him for the execution of the work; these input resources and site expenses include the cost of men, materials, machinery and capital. Also the contractor incurs expenditure on interest on loans, statutory payments, insurance etc. while the client control his finances to meet the cash requirements from time to time, he tends to maximize profit margin. Invariably the both parties tend to foresee the trends in their respective budgeted cost of completion.

Project Abandonment

[8] stated that project abandonment is the act of discontinuing activities or maintenance within a time frame of the contract agreement and with no intention of returning back to the development. The Longman dictionary (2005) defined abandon as to stop something that is in progress as a result of problems. From the various definitions above, it can be deduced that a project is said to be abandoned when it is left uncompleted or when there is a partial construction of the said project. According to [9], the continuous abandoning of public projects at various levels of developments is of great concern not only to the government themselves but more on the civil servants who are inadequately accommodated. Only little portion of government projects are executed by direct labour while most of the development project are awarded to contractors.

Similarly [10], while reflecting on property development opined that it is when owner or developer is ceasing to provide the required maintenance management to a developed property.

There could be construction failure due to improper planning. A real property development projects being capital intensive should be critically analyzed to ascertain its feasibility and viability before embarking on it. But on several occasions and as it has been observed, governments, contractors and agencies abandon development projects mid way into construction and completion. Project abandonment is one of the major effects which negatively confront the building industry leading to declined economic and technological advancement. However, [3] ascertained that the abandoned housing projects can bring both environmental and socio-economic impacts. Those of socio-economic nature include loss of jobs, loss of value of the area, marginalization of population and transfer of cost between private and public sector while that of environmental nature include visual impact, landscape modification, erosion, loss of biodiversity and population.

E-library in National Orthopedic Hospital Enugu

The project was conceived during a joint departmental meeting with management of the Hospital, the project became necessary considering the need to access the current Medical Technical

RESEARCH METHODOLOGY

Qualitative technique is employed in this research. It involves naturalistic inquiry, seeks in-depth understanding of social phenomena within the natural setting. Regression was used to test non violation of the basic assumption of model used in the study.

Data Analysis

Project Award Date: The project was awarded in the year 2016.

Award Price: One hundred and fifty six million, eight hundred thousand naira (₦156, 800,000).

breakthrough in the world through the use of E-technology. The E-library is designed to assist physicians, patients, health professionals, students, medical researchers and information specialists in finding Health and scientific information to improve, update, assess, or evaluate health care. The e-library is thus meant to have access to Medline, a range of electronic resources, print digital journal collections and reference books. Invariably it is expected to promote electronic learning, support information management, assist in decision making relating to services and improving professional capacity.

The E-library was designed to have construction capacity of 500 seaters. The hospital decided to peg the capacity of 500 considering the difficulties associated in assessing budget estimate. The project is one storey building made up of two (2) big halls, one hall at the first floors and another at the ground floor, each of the two halls is expected to accommodate 250 people per hall. The building also has two offices, one for the librarian and a general office to serve for administrative purposes. It has four urinary basins and ten convenience; five conveniences for first floor and five other conveniences for the ground floor.

Expected time of completion for the project: It was expected to be completed in six months from the date of award of the project.

Reversed price as at 2018: ₦200, 000,000 two hundred million naira only.

Table 1:

The Table depicts some of the causes of abandoning a project which in turn leads to cost overrun.

Table 1: Factors Causing Cost Overrun

Model	Unstandardized Coefficients		Standardize Coefficients	t	Sig
	B	Std. Error	Beta		
(Constant)	6303085185	16283376		3.871	008
	5121.320	025224.158			
Inflation leading to cost overrun	3707.481	2992.250	.458	2.239	262
Changes in regulatory policy	1186.661	5252.169	.094	3.226	829
Exchange rate fluctuation	11542.180	9967.851	.504	2.158	291
Inadequate planning before embarking project	18528.465	39069.154	.161	5.474	652

Source: Field work, 2018

Table 1 shows the coefficients of variables. Having positive sign in the analysis indicates positive relationship amongst all variables under study, that is to say that inflation, changes in regulatory policy, exchange rate, inadequate planning before embarking on project can cause abandoning of a project which can lead to cost overrun.

Identified Reason for the abandonment of National Orthopedic Hospital E-library Enugu.

1. **Lack of fund (poor funding):** The component of the building like special electrical system, the wall, floors and ceiling finishing raised the price; and the unforeseen factors resulting from the initial misestimating of project cost by developers of the housing project during the planning stage.

2. **Inflation leading to cost overrun:** This led to expected cost incurring more cost than the pre - budgeted amount.

Outrightly, buildings which have been abandoned in the society cause a lot of economic meltdown which turn to affect the individuals, nations and the entire society. This normally occurs when the building contractors do not have a good knowledge of their project type estimates which leads to projects been abandoned because of low costing of contracts. The risk in projects are sometimes inevitable and it is therefore the responsibility of the parties involved in construction industry (consultants, owner and contractors) to indentify these risk as early as possible to minimize the potential losses.

TABLE 2: Impact of abandonment of project on the state economy

Model	Unstandardized Coefficients		Standardize Coefficients	t	Sig
	B	Std. Error	Beta		
(Constant)	65367856755651.31	26147142702264.1		3.772	007
Reduction of employment opportunity	3431.128	2983.249	.425	2.230	260
Decrease in revenue accrued	1226.710	5260.160	.101	3.269	821
Increase in final cost of the project	10645.190	8864.742	.499	2.170	282

Source: Field work, 2018

The above table quantifies the relationship between the variables, the increase in final cost of project has the highest figure of 10645.190, the

reduction of the employment opportunity with 3431.128 and decrease in revenue accrued has 1226.720.

DISCUSSION OF FINDINGS

The analysis is based on Factors causing cost overrun in project construction (Table 1) and the impact of abandonment of project on the Enugu state economy (Table 2).

when a project is not properly studied it is prone to be abandoned.

Table 1 shows the factors causing cost overrun; among the factors, inadequate planning before embarking on project has the highest number. This shows that

Table 2 shows the impact of abandonment of project on the state economy. In assessing the impact of each of the variable on the state economy, it can be seen that increase in final cost of project has greater effect than other variables.

CONCLUSION

Abandonment of project is mainly caused by factors like inadequate planning and exchange rate fluctuation. The effects of abandonment of project in the state

economy include reduction of employment opportunity, decrease in revenue accrued and increase in final cost of the project.

RECOMMENDATION

To drastically reduce the effects of project abandonment clients should undertake an adequate planning for the project at inception and should make provision for enough funds based on reliable estimate made by the quantity surveyor at the inception.

The government should also put in all efforts to reduce inflation and when there is change in political government, previously started job should not be abandoned for the new idea.

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