**STAKEHOLDER IMPACTS OF DELAY IN PROJECT EXECUTION: A CASE OF NSAWAM - SUHUM ROAD PROJECT**

ABSTRACT

The study intends to evaluate construction stakeholder impacts on projects execution, evaluate the effects of delays on construction project delivery and to devise a method by which these could be minimized in stakeholder’s perception. The construction industry is large, volatile, and requires tremendous capital outlays. A unique element of risk in the industry is the manner in which disputes and claims are woven through the fiber of the construction process. There is no standardized form of research design and therefore the selection of a suitable research design greatly depends on the research problem. This suggests, therefore, that there are alternative ways and means to solve the research problem. In order to achieve the objectives of this research a case study approach was used. Engagement and participation instills pride of ownership, leading to better results, delivered in a more productive manner.  The ability to “engage” begins with a full understanding of stakeholder identity and assigned role, vested interest, accountability, and the power to influence resulting outcomes. In procedural terms, this “understanding” is obtained through the stakeholder analysis.

Keywords: stakeholder analysis, projects execution, capital outlays, construction industry

INTRODUCTION

There are many challenges facing the construction industry in the world, mostly in the developing countries. The need for road construction is pervasive in all walks of life. Delays are one of the biggest problems which construction firms face (Tumi, 2009; Sambasivan & Soon, 2007). Keeping construction projects within estimated costs and schedules requires sound strategies, good practices, and careful judgment. However, to the dislike of owners, contractors and consultants, many projects experience extensive delays and thereby exceed initial time and cost estimates (Enshassi, Al-Najjar, and Kumaraswamy, 2009). Construction delay is a major problem facing the Ghanaian construction industry. It is endemic and its economic and social impact is often discussed. However, studies on the causes could not be found in the published literature except the study by Frimpong and Oluwoye (2003) which investigated the significant factors that cause delay and cost overruns in the construction of underground projects in Ghana. The authors reported that to a large extent, consultants, owners, and contractors agreed that project financing, economic and natural conditions and material supply were the four major categories of causes of delay and cost overrun factors.

The demand of construction clients for the timely delivery of construction projects and the susceptibility of projects to delays and cost overruns has attracted the attention of researchers all over the world, most of who tried to identify the immediate as well as the root causes of project delay. However, despite the various study and investigation into the causes of delays, it has continued to be a deadly monster which plagues the construction industry. The construction industry is large, volatile, and requires tremendous capital outlays. A unique element of risk in the industry is the manner in which disputes and claims are woven through the fiber of the construction process. Delays occur in every construction project and the significant of these delays varies considerably from project to project. An incident of delay can originate from within the contractor’s organization or from any of the other factors interfacing upon construction project. Some projects are only a few days behind the schedule; some are delayed over a year. So it is essential to define the actual causes of delay in order to minimize delays in any construction project.

Internal stakeholders are accountable for or held responsible for particular project planning activities and are required to participate in certain activities, whereas external stakeholders generally are not. Like external stakeholders, internal stakeholders are also incidentally involved in or consulted regarding other activities for which they have no direct responsibility. Planning activities in which internal stakeholders participate with differing levels of involvement include project scope estimation; definition of work product, task attributes and project life cycle; projection of effort and cost; creation of budget and project schedule; identification of project risks; planning for data management, project resources, personnel, stakeholder involvement and training; creation and review of project plan; reconciliation of work and resource requirements; and gaining stakeholder commitment to the project plan (Nordmeyer, 2015).

Project planning activities in which external stakeholders participate are frequently identical to those of internal stakeholders. However, roles of external stakeholders are limited to that of consultants rather than team members directly accountable for individual project planning activities (Nordmeyer, 2015).

Therefore, the study intends to evaluate construction stakeholder impacts on projects execution, evaluate the effects of delays on construction project delivery and to devise a method by which these could be minimized in stakeholder’s perception. This is envisioned to help the stakeholders: construction clients, contractors and consultants to understand the dynamics of delays associated with construction projects.

METHODS

## 3.2.1 Research Design

Greener (2008) sees a research design as a grand plan of approach to a research topic. A research design according to (LeCompte and Schensul, 1999, p. 61) is a ‘detailed set of questions, hunches and procedures and plan of action for the conduct of a research project’. For Bryman and Bell (2007, p. 40) ‘a research design provides a framework for the collection and analysis of data. It represents a structure that guides the carrying out of a research method and the investigation of the subsequent data’.

There is no standardized form of research design and therefore the selection of a suitable research design greatly depends on the research problem. This suggests, therefore, that there are alternative ways and means to solve the research problem. In order to achieve the objectives of this research a case study approach was used. A case study as cited by Kusi (2012) in Gall, Gall and Borg, 2007 is ‘(a) the in-depth study of (b) one or more instances of a more phenomenon (c) in its real-life context that (d) reflects the perspective of the participants involved in the phenomenon’ (p.447).

The researcher conducted a case study of the Nsawam to Suhum road and China Geo-Engineering Construction Company was used as the case study organisation. The work was carried out through the use of the data collected from the case study. This helped to assemble data on the major scope of interest.

##

## 3.2.2 Population and Sampling Procedure

**Population**

According to Ary, Jacobs and Rezavieh (2002), population is used to refer to the entire group of individuals to whom the findings of a study apply. It is whatever group the investigator wishes to make inferences about. Population according to Moore (1983) means all the people or objects under observation. Therefore within the above context, the population under this study is made up of two thousand (2000) respondents.

The population of the study comprises of clients, architectural and quantity surveyors, consulting firm, Populace and construction firm. The sample size of 200 respondents was estimated comprising of 9 quantity surveyors, 8 architects, 1 consulting firm, clients, and 180 inhabitants.

The reasons for the choice of these numbers from these categories are that, the management define and formulate the organizational policies, to the construction firm for them to implement the policies.

**Sampling**

Sampling is the process of selecting units (e.g., people, organizations) from a population of interest so that by studying the sample the researcher may fairly generalize his results back to the population from which they were chosen(www.social research.com).

Sampling is that part of statistical practice concerned with the selection of individual observations within a population of individuals intended to yield some knowledge about the population of concern, especially for the purposes of making predictions based on statistical inference (www.social research.com).

Probability sampling method is any method of sampling that utilizes some form of random selection. In order to have a random selection method, you must set up some process or procedure that assures that the different units in your population have equal probabilities of being chosen (www.social research.com).

Non probability sampling means that it cannot depend upon the rationale of probability theory. At least with a probabilistic sample, you know the odds or probability that you have represented the population well. You are able to estimate confidence intervals for the statistic. With non-probability samples, you may or may not represent the population well, and it will often be hard for us to know how well you have done so (www.social research.com).

The researcher used probability sampling as the technique for the data based on the reason that, the population selected for the case was based on random picking and also as compared to non-probability sampling, it is more accurate and rigorous. Random sampling was used to select consultants and inhabitants. According to Kombo and Tromp (2006), random sampling is the probability whereby people, place or things are randomly selected. Clients were selected using purposive sampling. Also, since the research was a case study, it was limited to one group (construction industry) with a similar characteristic, the questionnaires for the organization staff was based on the use of non-probability sampling.

##

## 3.2.3 Sources of Data

The source of the data for this research work was from two sources: Primary data and secondary data.

**Primary data**

This is defined as raw data collected on source which has not been subjected to processing or any other manipulation (Rouse, 2009). Primary data to be collected was in the form of questionnaires and personal interviews.

**Secondary data**

Secondary data is the type of data collected by someone other than the user (Rouse, 2009). Common sources include textbooks, journals, articles, magazines, newspapers and essentially, the internet. More importantly, data was gathered from company reports, newsletters and magazines. The researcher used this in order to reduce the cost of data collection with respect to time and money.

**3.2.4 Data Collection Instrument**

The main research instrument used for the study comprised a set of question put together into an interview schedule which was given to the selected person before the interview dates. The actual interview was questionnaire guided interview (Rouse, 2009).

##

## 3.2.4.1 Data Collection Tools

This talks about instruments or processes which were exploited by the researcher to collect data from targeted respondents. As stated earlier, questionnaires and personal interviews were used.

**Questionnaires**

A questionnaire, according to Creswell (2002), is a form used in a survey design that participants in a study complete and return to the researcher. The author further stated that, participants mark choices to questions and supply basic personal or demographic information. Sidhu (2002) posits that, a questionnaire is that form of inquiry which contains a systematically compiled and organized series of questions that are to be sent to the population samples. Best and Kahn (1995) highlighted that questionnaire is used when factual information is desired.

A questionnaire is a form containing a set of questions; submitted to people to gain statistical information. The type of questions in the questionnaire will be both open-ended and close-ended. The researcher used close-ended questions because it will be used to seek for answers with no explanation and open-ended questions were used in situations where the researcher may need to probe further in areas where close-ended questions fell short. The questionnaires are convenient method of data collection because they can be completed at the respondents own time.

**Interviews**

Creswell (2002) defined an interview survey as a form in which the researcher records answers supplied by the participant in the study. Ary et al., (2002) also posits that an interview is used to gather data on subjects’ opinions, beliefs, and feelings about the situation in their own words. Kruger (1994) cited in Creswell (2002) posits that, focus groups provide for interaction among interviewees, collection of extensive data and participation by all individuals in the group. According to Ary et al., (2002), these are helpful because they bring several different perspectives into contact. The researcher gains insight into how the participants are thinking and why they are thinking as they do. Creswell (2002) posits that focus groups typically consist of four to six people and they are helpful when a researcher is studying a topic that is new or one for which little information is available.

Face-to-face interview was administered for the inhabitants, consultants, selected staff of the construction firm, clients, architects and quantity surveyors on different dates scheduled by both the researcher and the participants. The researcher administered the interview, making sure they understood the purpose of the interview. The researcher himself administered the interview. Everybody took part in the discussion which provided diversity in perspective. Noting the fact that questionnaires do not provide an in-depth investigation of specific phenomenon, the researcher had to supplement the information acquired with interview. The responses were handwritten alongside the tape recording for easy analysis.

The researcher used this to enable him probe further and asked relevant questions relating to the field of study. Responses from interviews will be of good facts. In addition, most questions demanding clarity will be sought satisfactorily

RESULTS

Some statistical tools that were used to analyze and present data retrieved from respondents were frequency tables, pie and bar graphs or charts. A frequency distribution table for variables was made after acquiring the frequency. Frequencies measure the number of occurrences of a study. This presents the frequency data in size of order mostly. These were recorded in frequency distributions and percentages. The percentages would help the researcher to reduce the frequencies to a common base making comparisons of the results much easier.

Frequency data and tables, charts and graphs were used to help summarize and present data retrieved from respondents. These are good methods used to present and summarize frequency data and tables. Excel and SPSS were also be made use of to enhance easier analysis. The discussions and interpretations of the study were connected with the literature review and also be based on the researcher’s personal objectives and judgments relative to data collated.

A bar chart is a chart with rectangular bars with lengths proportional to the values that they represent. The researcher used bar charts because of its relevance in analyzing data. They are used for plotting data which has separate values. This is due to the ease of comparing different sets of data and its attractiveness.

##

## 4.4 Data Analysis

This chapter is concerned with the analysis of data that was collected based on the objectives of the study. For easy analysis of the questionnaire schedule, the researcher decided to present the data in the form of frequencies and percentages.

##

## 4.5 Personal Data

Information was sought about the gender, qualification and length of service of stakeholders.

Table 1: Gender of Respondents

|  |  |  |
| --- | --- | --- |
| **Gender**  | **Frequency**  | **Percentage**  |
| Male  | 150 | 75 |
| Female  | 50 | 25 |
| Total  | 200 | 100 |

**Field data, March 2016**

From table 1 above and figure 1 below, one hundred and fifty (150) respondents representing 75% were males whilst fifty (50) respondents representing 25% were females. Gender balance favours the male according to the analysis made above. The male population play greater role in the growth and productivity of the construction company based on the analysis presented above but the female population cannot be left out even though their effort is minimal as compared to the male.

Figure 1: Gender of Respondents

:

**Field data, March 2016**

Table 2: Level of Education

|  |  |  |
| --- | --- | --- |
| **Qualification** | **Frequency**  | **Percentage**  |
| Degree  | 100 | 50 |
| Higher National Diploma | 50 | 25 |
| Diploma  | 50 | 25 |
| Total  | 200 | 100 |

**Field data, March 2016**

The above table and figure below indicate the educational backgrounds of respondents. It can be drawn from the table that, one hundred and fifty (150) employees with a percentage of 50% are those who completed their first degree. Respondents with Higher National Diploma are fifty (50) with a percentage of 25% and fifty (50) respondents had diploma represented by 25%.

Figure 2: Level of Education

**Field data, March 2016**

**SECTION B: Stakeholders Causes of Project Execution Delays**

Table 3: Inhabitants Related Response

Agree (A); Strongly Agree (SA); Neutral (N); Disagree (D); Strongly Disagree (SD)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Stakeholders’ causes of delay** | **A**  | **S A** | **N**  | **D**  | **S D** |
| Design changes | 80 | 100 | 0 | 0 | 0 |
| Delays in payment to contractors | 80 | 100 | 0 | 0 | 0 |
| Information delays | 80 | 100 | 0 | 0 | 0 |
| Funding problems | 80 | 100 | 0 | 0 | 0 |
| Poor project management | 80 | 100 | 0 | 0 | 0 |
| Compensation issues | 80 | 100 | 0 | 0 | 0 |
| Disagreement on the valuation of work done | 80 | 100 | 0 | 0 | 0 |
| Conflicts among the involved parties | 90 | 90 | 0 | 0 | 0 |
| Project schedule changes | 90 | 90 | 0 | 0 | 0 |
| Supply / procurement problems | 90 | 90 | 0 | 0 | 0 |
| Bureaucracy | 90 | 90 | 0 | 0 | 0 |
| Multiple projects by contractors | 90 | 90 | 0 | 0 | 0 |
| Incompetent contractors | 90 | 90 | 0 | 0 | 0 |
| Contractual claims | 80 | 80 | 20 | 0 | 0 |
| Unexpected ground conditions | 80 | 80 | 20 | 0 | 0 |
| Government interference | 80 | 80 | 20 | 0 | 0 |
| Poor understanding of the project | 80 | 80 | 20 | 0 | 0 |
| Shortage / lack of equipment | 80 | 80 | 20 | 0 | 0 |
| Shortage of materials | 80 | 80 | 20 | 0 | 0 |
| Skills shortage / unavailability | 80 | 80 | 20 | 0 | 0 |
| Acts of God | 80 | 80 | 20 | 0 | 0 |

**Field data, March 2016**

In table 3, results indicated that 80 respondents agree to the fact that Design changes, Delays in payment to contractors, Information delays, Funding problems, Poor project management, Compensation issues, and Disagreement on the valuation of work done were stakeholders’ causes whilst 100 respondents strongly agree to it.

Also, 90 respondents agree and strongly agree that Conflicts among the involved parties, Project schedule changes, Supply / procurement problems, Bureaucracy, and Multiple projects by contractors, Incompetent contractors were stakeholders’ causes of project delivery.

Finally, 80 respondents agree and strongly agree that Contractual claims, Unexpected ground conditions, Government interference, Poor understanding of the project, Shortage / lack of equipment, Shortage of materials, Skills shortage / unavailability, and Acts of God were stakeholders’ causes of project delivery whilst 20 respondents were neutral.

Table 4: Clients Related Response

Agree (A); Strongly Agree (SA); Neutral (N); Disagree (D); Strongly Disagree (SD)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Stakeholders’ causes of delay** | **A**  | **S A** | **N**  | **D**  | **S D** |
| Design changes | 1 | 1 | 0 | 0 | 0 |
| Delays in payment to contractors | 1 | 1 | 0 | 0 | 0 |
| Information delays | 1 | 1 | 0 | 0 | 0 |
| Funding problems | 1 | 1 | 0 | 0 | 0 |
| Poor project management | 1 | 1 | 0 | 0 | 0 |
| compensation issues | 1 | 1 | 0 | 0 | 0 |
| disagreement on the valuation of work done | 1 | 1 | 0 | 0 | 0 |
| Conflicts among the involved parties | 1 | 1 | 0 | 0 | 0 |
| Project schedule changes | 1 | 1 | 0 | 0 | 0 |
| Supply / procurement problems | 1 | 1 | 0 | 0 | 0 |
| Bureaucracy | 1 | 1 | 0 | 0 | 0 |
| Multiple projects by contractors | 2 | 0 | 0 | 0 | 0 |
| Incompetent contractors | 0 | 1 | 0 | 1 | 0 |
| Contractual claims | 0 | 1 | 0 | 1 | 0 |
| Unexpected ground conditions | 0 | 1 | 0 | 1 | 0 |
| Government interference | 0 | 1 | 0 | 1 | 0 |
| Poor understanding of the project | 0 | 1 | 0 | 1 | 0 |
| Shortage / lack of equipment | 0 | 1 | 0 | 1 | 0 |
| Shortage of materials | 0 | 1 | 0 | 1 | 0 |
| Skills shortage / unavailability | 0 | 1 | 0 | 1 | 0 |
| Acts of God | 0 | 1 | 0 | 1 | 0 |

**Field data, March 2016**

In table 4 above, results indicated that 1 respondent agree to the fact that Design changes, Delays in payment to contractors, Information delays, Funding problems, Poor project management, Compensation issues, and Disagreement on the valuation of work done, Conflicts among the involved parties, Project schedule changes, Supply / procurement problems, and Bureaucracy were stakeholders’ causes whilst 1 respondent strongly agree to it.

Also, 2 respondents agree that multiple projects by contractors was stakeholders’ causes of delay, and 1 respondent strongly agree that incompetent contractors, Contractual claims, Unexpected ground conditions, Government interference, Poor understanding of the project, Shortage / lack of equipment, Shortage of materials, Skills shortage / unavailability, and Acts of God were stakeholders’ causes of project delivery whilst 1 respondent disagree to it.

Table 5: Architects Related Response

Agree (A); Strongly Agree (SA); Neutral (N); Disagree (D); Strongly Disagree (SD)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Stakeholders’ causes of delay** | **A**  | **S A** | **N**  | **D**  | **S D** |
| Design changes | 4 | 4 | 0 | 0 | 0 |
| Delays in payment to contractors | 4 | 4 | 0 | 0 | 0 |
| Information delays | 4 | 4 | 0 | 0 | 0 |
| Funding problems | 4 | 4 | 0 | 0 | 0 |
| Poor project management | 4 | 4 | 0 | 0 | 0 |
| compensation issues | 4 | 4 | 0 | 0 | 0 |
| disagreement on the valuation of work done | 4 | 4 | 0 | 0 | 0 |
| Conflicts among the involved parties | 4 | 4 | 0 | 0 | 0 |
| Project schedule changes | 4 | 4 | 0 | 0 | 0 |
| Supply / procurement problems | 4 | 4 | 0 | 0 | 0 |
| Bureaucracy | 4 | 4 | 0 | 0 | 0 |
| Multiple projects by contractors | 5 | 0 | 0 | 3 | 0 |
| Incompetent contractors | 5 | 0 | 0 | 3 | 0 |
| Contractual claims | 5 | 0 | 0 | 3 | 0 |
| Unexpected ground conditions | 5 | 0 | 0 | 3 | 0 |
| Government interference | 5 | 0 | 0 | 3 | 0 |
| Poor understanding of the project | 5 | 0 | 0 | 3 | 0 |
| Shortage / lack of equipment | 5 | 0 | 0 | 3 | 0 |
| Shortage of materials | 5 | 0 | 0 | 3 | 0 |
| Skills shortage / unavailability | 5 | 0 | 0 | 3 | 0 |
| Acts of God | 5 | 0 | 0 | 3 | 0 |

**Field data, March 2016**

In table 5 above, 4 respondents agree to the fact that Design changes, Delays in payment to contractors, Information delays, Funding problems, Poor project management, Compensation issues, and Disagreement on the valuation of work done, Conflicts among the involved parties, Project schedule changes, Supply / procurement problems, and Bureaucracy were stakeholders’ causes whilst 4 respondents strongly agree to it.

Finally, 5 respondents agree that multiple projects by contractors, incompetent contractors, Contractual claims, unexpected ground conditions, Government interference, Poor understanding of the project, Shortage or lack of equipment, Shortage of materials, Skills shortage / unavailability, and Acts of God were stakeholders’ causes of project delivery whilst 3 respondents disagree to it.

Table 6: Quantity Surveyors Related Response

Agree (A); Strongly Agree (SA); Neutral (N); Disagree (D); Strongly Disagree (SD)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Stakeholders’ causes of delay** | **A**  | **S A** | **N**  | **D**  | **S D** |
| Design changes | 5 | 4 | 0 | 0 | 0 |
| Delays in payment to contractors | 5 | 4 | 0 | 0 | 0 |
| Information delays | 5 | 4 | 0 | 0 | 0 |
| Funding problems | 5 | 4 | 0 | 0 | 0 |
| Poor project management | 5 | 4 | 0 | 0 | 0 |
| compensation issues | 5 | 4 | 0 | 0 | 0 |
| disagreement on the valuation of work done | 5 | 4 | 0 | 0 | 0 |
| Conflicts among the involved parties | 5 | 4 | 0 | 0 | 0 |
| Project schedule changes | 5 | 4 | 0 | 0 | 0 |
| Supply / procurement problems | 5 | 4 | 0 | 0 | 0 |
| Bureaucracy | 5 | 4 | 0 | 0 | 0 |
| Multiple projects by contractors | 4 | 4 | 0 | 1 | 0 |
| Incompetent contractors | 4 | 4 | 0 | 1 | 0 |
| Contractual claims | 4 | 4 | 0 | 1 | 0 |
| Unexpected ground conditions | 4 | 4 | 0 | 1 | 0 |
| Government interference | 4 | 4 | 0 | 1 | 0 |
| Poor understanding of the project | 4 | 4 | 0 | 1 | 0 |
| Shortage / lack of equipment | 4 | 4 | 0 | 1 | 0 |
| Shortage of materials | 4 | 4 | 0 | 1 | 0 |
| Skills shortage / unavailability | 4 | 4 | 0 | 1 | 0 |
| Acts of God | 4 | 4 | 0 | 1 | 0 |

**Field data, March 2016**

From the table above, 5 respondents agree to the fact that Design changes, Delays in payment to contractors, Information delays, Funding problems, Poor project management, Compensation issues, and Disagreement on the valuation of work done, Conflicts among the involved parties, Project schedule changes, Supply or procurement problems, and Bureaucracy were stakeholders’ causes whilst 4 respondents strongly agree to it.

Again, 4 respondents agree and strongly agree respectively that multiple projects by contractors, incompetent contractors, Contractual claims, unexpected ground conditions, Government interference, Poor understanding of the project, Shortage or lack of equipment, Shortage of materials, Skills shortage or unavailability, and Acts of God were stakeholders’ causes of project delivery whilst 1 respondent disagree to it.

Table 7: Consultant Related Response

Agree (A); Strongly Agree (SA); Neutral (N); Disagree (D); Strongly Disagree (SD)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Stakeholders’ causes of delay** | **A**  | **S A** | **N**  | **D**  | **S D** |
| Design changes | 1 | 0 | 0 | 0 | 0 |
| Delays in payment to contractors | 1 | 0 | 0 | 0 | 0 |
| Information delays | 1 | 0 | 0 | 0 | 0 |
| Funding problems | 1 | 0 | 0 | 0 | 0 |
| Poor project management | 1 | 0 | 0 | 0 | 0 |
| compensation issues | 1 | 0 | 0 | 0 | 0 |
| disagreement on the valuation of work done | 1 | 0 | 0 | 0 | 0 |
| Conflicts among the involved parties | 1 | 0 | 0 | 0 | 0 |
| Project schedule changes | 1 | 0 | 0 | 0 | 0 |
| Supply / procurement problems | 1 | 0 | 0 | 0 | 0 |
| Bureaucracy | 1 | 0 | 0 | 0 | 0 |
| Multiple projects by contractors | 1 | 0 | 0 | 0 | 0 |
| Incompetent contractors | 0 | 1 | 0 | 0 | 0 |
| Contractual claims | 0 | 1 | 0 | 0 | 0 |
| Unexpected ground conditions | 0 | 1 | 0 | 0 | 0 |
| Government interference | 0 | 1 | 0 | 0 | 0 |
| Poor understanding of the project | 0 | 1 | 0 | 0 | 0 |
| Shortage / lack of equipment | 0 | 1 | 0 | 0 | 0 |
| Shortage of materials | 0 | 1 | 0 | 0 | 0 |
| Skills shortage / unavailability | 0 | 1 | 0 | 0 | 0 |
| Acts of God | 0 | 1 | 0 | 0 | 0 |

**Field data, March 2016**

As stated in the table above, 1 respondent agree to the fact that Design changes, Delays in payment to contractors, Information delays, Funding problems, Poor project management, Compensation issues, and Disagreement on the valuation of work done, Conflicts among the involved parties, Project schedule changes, Supply / procurement problems, Bureaucracy and multiple projects by contractors were stakeholders’ causes of project delivery whilst 1 respondents strongly agree that incompetent contractors, Contractual claims, unexpected ground conditions, Government interference, Poor understanding of the project, Shortage / lack of equipment, Shortage of materials, Skills shortage / unavailability, and Acts of God were stakeholders’ causes of project delivery. No respondent was neutral, disagree or strongly disagree to it.

Table 8: Inhabitants Related Response

Agree (A); Strongly Agree (SA); Neutral (N); Disagree (D); Strongly Disagree (SD)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Effect of delay** | **A**  | **S A** | **N**  | **D**  | **S D**  |
| Cost overrun | 150 | 0 | 0 | 30 | 0 |
| Time overrun | 0 | 150 | 0 | 30 | 0 |
| Negative social impact | 90 | 0 | 0 | 90 | 0 |
| Idling resources | 90 | 0 | 0 | 90 | 0 |
| Disputes | 90 | 0 | 0 | 90 | 0 |
| Arbitration | 0 | 150 | 0 | 30 | 0 |
| Delaying by the client to return the loans | 90 | 0 | 0 | 90 | 0 |
| Poor quality of work due to hurry  | 90 | 0 | 0 | 90 | 0 |
| Delaying in getting profit by clients | 90 | 0 | 0 | 90 | 0 |
| Bankruptcy | 90 | 0 | 0 | 90 | 0 |
| Litigation | 0 | 150 | 0 | 30 | 0 |
| Create stress on contractors | 90 | 0 | 0 | 90 | 0 |
| Total abandonment | 150 | 0 | 0 | 30 | 0 |
| Acceleration losses | 90 | 0 | 0 | 90 | 0 |
| Rescheduling and rearrangement | 90 | 0 | 0 | 90 | 0 |

**Field data, March 2016**

From the table above, one hundred and fifty (150) respondents agree that cost overrun and total abandonment affect project execution delay whilst thirty (30) respondents disagree to it. Again, one hundred and fifty (150) respondents strongly agree that time overrun; arbitration; and litigation affect delay in project execution whilst thirty (30) of them disagree to it. Finally, ninety (90) respondents agree that negative social impact; idling resources; disputes; delay by clients to return loan for the project; poor quality of work due to hurry; delay in getting profit by clients; bankruptcy; create stress on contractors; total abandonment; acceleration losses; and rescheduling and rearrangement affect project execution delay whilst ninety (90) respondents disagree to it.

Table 9: Clients Related Response

Agree (A); Strongly Agree (SA); Neutral (N); Disagree (D); Strongly Disagree (SD)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Effect of delay** | **A**  | **S A** | **N** | **D**  | **S D** |
| Cost overrun | 0 | 2 | 0 | 0 | 0 |
| Time overrun | 0 | 2 | 0 | 0 | 0 |
| Negative social impact | 2 | 0 | 0 | 0 | 0 |
| Idling resources  | 2 | 0 | 0 | 0 | 0 |
| Disputes | 2 | 0 | 0 | 0 | 0 |
| Arbitration | 0 | 2 | 0 | 0 | 0 |
| Poor quality of work due to hurry  | 2 | 0 | 0 | 0 | 0 |
| Bankruptcy | 2 | 0 | 0 | 0 | 0 |
| Litigation | 2 | 0 | 0 | 0 | 0 |
| Create stress on contractors | 2 | 0 | 0 | 0 | 0 |
| Total abandonment | 0 | 2 | 0 | 0 | 0 |
| Acceleration losses | 2 | 0 | 0 | 0 | 0 |
| Rescheduling and rearrangement | 0 | 2 | 0 | 0 | 0 |

**Field data, March 2016**

From the above table and figure, the clients being the Government of Ghana and the ministry of roads and highways all strongly agree that cost overrun; time overrun; arbitration; total abandonment; and rescheduling and rearrangement whilst they also agree on negative social impact; idling resources; disputes; poor quality of work due to hurry; bankruptcy; litigation; create stress on contractors and acceleration losses. This implies that the clients should do everything possible to ensure that the effects of project execution are tackled effectively so as to prevent those effects from delaying the construction project.

Table 10: Architects Related Response

Agree (A); Strongly Agree (SA); Neutral (N); Disagree (D); Strongly Disagree (SD)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Effect of delay** | **A**  | **S A** | **N**  | **D**  | **S D** |
| Cost overrun | 4 | 4 | 0 | 0 | 0 |
| Time overrun | 4 | 4 | 0 | 0 | 0 |
| Negative social impact | 4 | 4 | 0 | 0 | 0 |
| Idling resources | 4 | 4 | 0 | 0 | 0 |
| Disputes | 4 | 4 | 0 | 0 | 0 |
| Arbitration | 4 | 4 | 0 | 0 | 0 |
| Delaying by the client to return the loans | 4 | 4 | 0 | 0 | 0 |
| Poor quality of work due to hurry  | 4 | 4 | 0 | 0 | 0 |
| Delaying in getting profit by clients | 4 | 4 | 0 | 0 | 0 |
| Bankruptcy | 4 | 4 | 0 | 0 | 0 |
| Litigation | 4 | 4 | 0 | 0 | 0 |
| Create stress on contractors | 4 | 4 | 0 | 0 | 0 |
| Total abandonment | 4 | 4 | 0 | 0 | 0 |
| Acceleration losses | 4 | 4 | 0 | 0 | 0 |
| Rescheduling and rearrangement | 4 | 4 | 0 | 0 | 0 |

**Field data, March 2016**

From table 10 above, the four (4) architects strongly agree that time overrun; disputes; arbitration; delay by clients to return loan for the project; litigation; and total abandonment affect delay in project execution whilst the remaining four only agree that cost overrun; negative social impact; idling resources; poor quality of work due to hurry; create stress on contractors; acceleration losses; delay in getting profit; bankruptcy; and rescheduling and rearrangement affect project execution delay.

**Table 11: Quantity Surveyors Related Response**

Agree (A); Strongly Agree (SA); Neutral (N); Disagree (D); Strongly Disagree (SD)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Effect of delay** | **A**  | **S A** | **N**  | **D**  | **S D** |
| Cost overrun | 5 | 4 | 0 | 0 | 0 |
| Time overrun | 4 | 5 | 0 | 0 | 0 |
| Negative social impact | 5 | 4 | 0 | 0 | 0 |
| Idling resources | 5 | 4 | 0 | 0 | 0 |
| Disputes | 5 | 4 | 0 | 0 | 0 |
| Arbitration | 5 | 4 | 0 | 0 | 0 |
| Delaying by the client to return the loans | 5 | 4 | 0 | 0 | 0 |
| Poor quality of work due to hurry  | 5 | 4 | 0 | 0 | 0 |
| Delaying in getting profit by clients | 5 | 4 | 0 | 0 | 0 |
| Bankruptcy | 5 | 4 | 0 | 0 | 0 |
| Litigation | 4 | 5 | 0 | 0 | 0 |
| Create stress on contractors | 5 | 4 | 0 | 0 | 0 |
| Total abandonment | 4 | 5 | 0 | 0 | 0 |
| Acceleration losses | 5 | 4 | 0 | 0 | 0 |
| Rescheduling and rearrangement | 5 | 4 | 0 | 0 | 0 |

**Field data, March 2016**

Table 11 above indicate that five (5) respondents strongly agree that time overrun; litigation and total abandonment affect project execution delay whilst four (4) agree that cost overrun; negative social impact; idling resources; disputes; arbitration; delay by clients to return loan to complete the project; poor quality of work due to hurry; delay in getting profit by clients; bankruptcy; create stress on contractors; acceleration losses; and rescheduling and rearrangement also affect project execution delay.

Table 12: Consultant Related Response

Agree (A); Strongly Agree (SA); Neutral (N); Disagree (D); Strongly Disagree (SD)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Effect of delay** | **A**  | **S A** | **N**  | **D**  | **S D** |
| Cost overrun | 1 | 0 | 0 | 0 | 0 |
| Time overrun | 0 | 1 | 0 | 0 | 0 |
| Negative social impact | 1 | 0 | 0 | 0 | 0 |
| Idling resources | 1 | 0 | 0 | 0 | 0 |
| Disputes | 0 | 1 | 0 | 0 | 0 |
| Arbitration | 0 | 1 | 0 | 0 | 0 |
| Delaying by the client to return the loans | 1 | 0 | 0 | 0 | 0 |
| Poor quality of work due to hurry  | 1 | 0 | 0 | 0 | 0 |
| Delaying in getting profit by clients | 0 | 1 | 0 | 0 | 0 |
| Bankruptcy | 0 | 1 | 0 | 0 | 0 |
| Litigation | 1 | 0 | 0 | 0 | 0 |
| Create stress on contractors | 1 | 0 | 0 | 0 | 0 |
| Total abandonment | 1 | 0 | 0 | 0 | 0 |
| Acceleration losses | 1 | 0 | 0 | 0 | 0 |
| Rescheduling and rearrangement | 1 | 0 | 0 | 0 | 0 |

**Field data, March 2016**

From table 12 above, one (1) respondent strongly agree that time overrun; disputes; arbitration; delay in getting profit; and bankruptcy affect delay in project execution whilst that respondent only agree that cost overrun; negative social impact; idling resources; delay by clients to return loan for the project; poor quality of work due to hurry; litigation; create stress on contractors; total abandonment; acceleration losses; and rescheduling and rearrangement affect project execution delay. This implies that the consultants should give accurate reports and recommendations since the quantum to be paid to contractors largely depends on these reports

## 4.6 Key managerial issues

There are attempt to develop their support and change their view by ensuring they fully understand the project and the benefits it will deliver. Their resistance maybe due to lack of information or understanding. There are attempt to build their confidence in you and in the team. To find out what is important to them, if you can help them out or minimize negative impact on them they may be more helpful. Demonstrate that you are doing your best to limit adverse effects on them. Counter any negative influence they may have on others. Frimpong (2003)

The unique characteristic of the construction industry is epitomized in the project. This has meant that every project is different, a situation which emanates from the project’s own characteristics, that is, its type, its size, its geographic location, personnel involved in the project, those emanating from the other subsystems within the industry, and also those from the super-system. Hence project execution is inherently risky and the lack of appropriate approach to addressing these risks has led to a lot of undesirable results in project execution in the construction industry of most developing countries. Most of the problems militating against the achievement of the desired effect on the construction industry of any country have to do with the project execution challenges, namely, the difficulty in achieving the main objectives of the project. Traditionally, this is seen in the failure of the project to achieve its cost, time, quality and other targets due to inefficiencies in the execution process. This ultimately, causes dissatisfaction among all the stakeholders.

DISCUSSION

Stakeholders are those who can positively or negatively impact the output of the projects. It is very important for an efficient project manager to identify the names of stakeholders during the initiation stage of the projects. The stakeholders can be external and internal both. Few examples of stakeholders can be the customers, the clients, the project team members, the functional managers, the account managers, the operation managers, sellers, buyers, sponsors etc. It is mandatory for a project manager to identify the stakeholders and manage their expectations throughout the life-cycle of the project(s).

Internal stakeholders include other managers and employees and are those that are situated within the company and affect the daily routine of the project. External stakeholders are those who are not directly linked to the projects but can influence the activities of the project through various ways. They include the Government, neighbours, pressure groups, political groups, local councils, and the surrounding communities. Ideally a project manager should identify the stakeholders at the initial stages as it will cost hugely if you missed out any key stakeholders during that period. As per PMI, it is an initiation process in communication knowledge area.

##

## 5.1 Issue 1- Impact of stakeholders on the project.

It can be very costly if you ignore any of the stakeholder’s expectations and it can hugely impact the project negatively like delay in deliveries. Suppose you need the resources for running the project as planned and if you have managed the expectations of Human Resource manager positively then you will surely get a soft support from your Human Resource manager because you have managed his/her expectations at the initial stage and the result can be vice-versa in case you have not managed his/her expectations initially.

5.2.1 Alternative 1 - Co-ordination with a geographically located team:

If you are working with a team which is geographically placed then in that case you should be aware of what are the best ways of communication with that team so that you can work effectively. And these things should be drafted at the initial stage of the project which should be communicated to them in advance in the required language. In this way you can manage a team globally without any trouble. You can save enormous time in your project through it.

5.2.2 Alternative 2 - Mode of effective communication with stakeholders:

A project manager should know the mode of communication and time of communication (in case of virtual team) of all the identified stakeholders. A well-discussed format of report (MS-Word, MS-Excel, Power point) can reduce the problem of communication a lot.

## 5.2.3 Recommendation and Justification

A project manager must manage the influence of all the stakeholders in relation to the project requirements to ensure a required output. The project manager should take care of the interests of the stakeholders balancing the requirements of the project. So, a project manager should know the right format which the stakeholders require for viewing progress report, work status, trend report etc. A lot of controversies can be reduced adopting these systems of reporting.

## 5.3 Issue 2- How stakeholders negatively impact a project

Every project has different groups of stakeholders. In a corporation, the stakeholders are the board of directors, company management, employees, shareholders, suppliers, customers and the municipalities in which the corporation operates. Each group has its own personal needs in addition to its responsibilities with respect to its function as stakeholder. Social and municipal development projects have similar groups of stakeholders that include those who will be affected financially, politically, socially and physically from the project and its results.

## 5.3.1 Alternative 1 - Identifying Stakeholders

A successful project addresses stakeholder needs throughout the project life cycle. In planning the project, one of the first steps is identifying all possible stakeholders. If this is not done thoroughly, there is a risk of project delays and, potentially, cancellation. In identifying stakeholders, consider the societal consequences of the project with respect to differing views of the concepts of justice, equity and social rights. These are broadly influential aspects of a project and can be in direct opposition to the financial and functional stakeholders who expect to draw benefit from the project.

## 5.3.2 Alternative 2 - Stakeholder Influence

If a road is to be constructed between two cities, the financial stakeholders include the contractors building the road, the companies who will use the road to increase commerce, their employees and municipal taxing authorities. On the other hand, conservationists may oppose the road as harmful to the breeding ground of rare species. Environmentalists may oppose the potential for air pollution along the road. Land owners along the route may oppose the disruption to their ownership of land and buildings. Each group can mount a campaign that can start, change or stop the road project.

## 5.3.3 Alternative 3 - Negative Influence

Financial stakeholders, such as unions and materials suppliers, can use their influence and production to demand greater financial benefit. Contractors can negatively affect the project through time and cost overruns. When a delay is caused by a special-interest group, it can increase the cost of the project by adding the expense of legal proceedings. Political stakeholders can also use the project to ingratiate themselves to voting blocks and political donors.

## 5.3.4 Recommendation and Justification

The best way to manage the potential negative influence of stakeholders on a project is to identify all potential stakeholders, all potential problems associated with those stakeholder groups and take steps to settle the problems prior to planning the project. This involves assessing the relative strength of the influence of each stakeholder group and planning the project around the requirements of the stakeholder groups, attaining their buy-in and active support for the project before it is begun, or even announced.

##

## 5.4 Issue 3-Effect of not managing stakeholders expectation

Project can hampered effectively if you missed out any key stakeholders and their expectations. The stakeholders are known as the skeleton for any project. You cannot run project smoothly without their involvement. In any case if you have missed out key stakeholders, you have invited trouble for your project. They can create a lot of unwanted trouble in your project. They can demand for an unacceptable scope change which can impact on pricing, timing, and the schedule. So, smartly you should define scope involving the key stakeholders so that you can monitor the scope effectively as per scope baseline. This is sure, if you have failed to identify and manage the stakeholder’s – your project will be over-budgeted and behind the schedule (Chandana, 2013).

5.4.1 Alternative 1 - Analyzing Stakeholder Role, Interest and Influence

Every project has “stakeholders”, forming the “human element” of the project management paradigm. This “stake” drives behaviour, and behaviour drives results. If you want your project to succeed, with minimal conflicts, you need to get every stakeholder fully “engaged” and motivated. Engagement and participation instills pride of ownership, leading to better results, delivered in a more productive manner.  The ability to “engage” begins with a full understanding of stakeholder identity and assigned role, vested interest, accountability, and the power to influence resulting outcomes. In procedural terms, this “understanding” is obtained through the stakeholder analysis.

## 5.4.2 Recommendation and Justification

It is always a plus for your project if you have successfully identified your internal and external stakeholders. Ideally, you should involve your key stakeholders starting from contracts, SOW, creating project charter (if project manager is doing this) and he/she should involve in effective planning stages. As a project manager you should monitor their expectations regularly so that you can align the project requirements with their requirements. In the meantime, you have to maintain your milestone dates, quality planning, cost budgeting as a whole your performance baselines balancing the stakeholder’s expectations. If you are managing all these – your project are all right in every aspects. You can save time and money if you are managing the stakeholder’s expectations effectively.

In order for effective project execution on road construction, most countries relied on regular recurrent budget funding through the treasury to finance road construction - the budgeted amounts normally fell well short of requirements and what has been budgeted was rarely fully allocated. Some countries sought to set up Road Funds (RFs) (referred to as the - first generation” road funds) usually as a line item in the national budget. This represented a type of earmarking of government revenues to finance a service, administered and largely delivered by government departments and allocated according to more or less pre-defined priorities. The RFs generally fell well short of their goals as manifested in poor governance (diversion and inappropriate usage of funds, lack of auditing), poor collection and disbursement and inadequate contribution for yearly construction of the country’s road network.

A summary table such as this should be included

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Issue | Recommended Action | Activities | Responsibility | Estimated duration |
| Talent Shortage | need to setup and promote training centres | Regular training of skilled workforce | contractor | 2 years |
|  |  |
|  |  |
|  |  |
| Scope | ensure that projects are initiated after due diligence,Finalisation of scope must be based on feasibility studies, local conditions, and prevailing socio-political structure |  |  |  |
| scope has been overestimated and tenders have been floated accordingly | Funding agencies and contractor | 3 years |
|  |  |  |
|  |  |  |
|  |  |  |
| Inadequate Funds or Intermittent Fund Flow | implement tax holidays, encourage investments  | Timely financial closure and insufficient funds | Funding agencies | 4 years |
|  |  |  |
|  |  |  |
| Value Engineering | new technologies that can be implemented are use of corrosion resistant steel, closed structural sections, pre-engineered buildings, and engineered steel guardrail system | Focused value engineering can save around 5 per cent-10 per cent of project cost | Contractor and clients | 2 years |
| Approvals and Clearances | obtain numerous approvals and clearances from various regulatory and statutory bodies | lack of transparency and cumbersome approvals | Regulatory and statutory bodies | 2 years |

CONCLUSION

Construction delay is a critical function in executing construction projects. The study concludes that there still exist a number of effects that put construction projects at great risk that have an effect on their performance. A construction project is commonly acknowledged as successful when the aim of the project is achieved in terms of predetermined objectives that are mainly completed on time, within budget and specified quality in accordance with the specifications and to stakeholders’ satisfaction. One of the most important problems that may arise in executing construction project is delays and the magnitude of these delays varies considerably from project to project.

According to delay categories that were contractor related, client related, consultant related, labor related and external related, the study revealed the six major effects of delay that were time overrun, cost overrun, dispute, arbitration, total abandonment, and litigation. The study also revealed the following as stakeholders’ impact on project execution: Design changes, Delays in payment to contractors, Information delays, Funding problems, Poor project management, Compensation issues, and Disagreement on the valuation of work done, Conflicts among the involved parties, Project schedule changes, Supply / procurement problems, Bureaucracy, multiple projects by contractors, incompetent contractors, Contractual claims, unexpected ground conditions, Government interference, Poor understanding of the project, Shortage / lack of equipment, Shortage of materials, Skills shortage / unavailability, and Acts of God.

The research results indicated that the majority of delay factors are relevant to client factor. It is concluded from the survey for dipping in delay client must have strong economical ability and financial arrangement for project, correctly time decision. Most factors related to consultants are due to not understanding the client necessities, not having proper project information, absence of some details in drawing etc. It is examine from contractor related factors that mostly delay occur because of deficient in obtaining up-to-date equipment, and unwarranted material used in construction.

Finally, in other factors due to which delay occurs are project conditions like site, complexity, complication in work due to weather. Delay also occurs due to external factor like change in government, regulation and location etc. Client must be mentally and financially strong for starting a new project due to which we can reduce delay in projects.

Reference

Aibinu, A. A., & Jagboro, G. O. (2002). The effects of construction delays on project delivery in Nigerian construction industry. *International Journal of Project Management*, *20*, 593–9.

Aiyetan, O. A., Smallwood, J. J., & Shakantu, W. (2008). Influences on construction project delivery time performance. In the proceeding of Third Built Environment conference, Cape Town, South Africa

Akinsola A. O. (1996). A Neutral network model for predicting Building projects’ Contingency. Conference: Proceedings of Association of Researchers in Construction Management, ARCOM 96, Sheffield Hallam University, England, 11–13, pp. 507–516.

Al-Kharashi, A., & Skitmore, M. (2009). Causes of delays in Saudi Arabianpublic sector construction projects. *Construction Management and Economics, 27*(1)3-23. www.eprints.qut.edu.au Accessed 4/9/2012.

Al-Momani, A. H. (2000). Construction delay: a quantitative analysis. *Journal of Project Management,* *18*, 51-59

Ankara Turkey, Dayi (2010). *Project Management* *(6th ed).* Gower, Aldershot.

Article on “Roles and Responsibilities of Key Stakeholders”: By Christian McMahon

Article on “The Roles of Stakeholders in the Planning Process”: by Billie Nordmeyer, Demand Media

Ary, J., & Rezavieh (2002). *Methods of social research (4th ed.).* Free Press, New York

Baloi, S., & Price, L. (2003). Understanding Construction Schedule Delays, Professional Investigative Engineers.

Basu, J. (2005). *How to design and evaluate Research in Education, (4th ed.).* McGraw-Hill Higher Education. New York

Bryman, A., & Bell, E. (2007). *Business Research Methods.* OUP. Oxford.

Carroll, A. B., & Buchholtz, A. K. (2006). *Business & Society: Ethics, Sustainability and Stakeholder Management*. Nelson Education

Chinyio, E., & Olomolaiye, (2010). *Construction Stakeholder Management (4th ed.).* McGraw Hill

Cleland, D. I. (1986) Project stakeholder management. *Project Management Journal,* *17*(4), 36–45.

Cohen, A., & Palmer, M. (2004) Cause of high cost of construction in Nigeria. *Journal of Construction Engineering and Management*

Collins, R. (2014). [“A Graphical Method for Exploring the Business Environment](http://users.ox.ac.uk/~kell0956/docs/PESTLEWeb.pdf)” (PDF). Retrieved 19 June 2014.

Creswell, J. (2002). *Organisational Research: A Practical Guide.* Sage Publications Limited, London

Doh, J. P., & Guay, T. R. (2006). Corporate social responsibility, public policy, and NGO activism in Europe and the United States: An institutional-stakeholder perspective.

Donaldson, T., & Preston, L. (1995). The stakeholder theory of the corporation: concepts, evidence, and implications. *Academy of Management Review, 20*(1), 65–91.

Enquist, B., Johnson, M., & Skale’n, P. (2006). Adoption of corporate social responsibility – Incorporating a stakeholder perspective.

Enshassi, Al-Najjar, & ,M. M. (2009). Construction Delays in Fast Growing Economy*. International Journal of Project Management,* *14* (1), 37-45.

Finnerty, H. (1996). *Advanced project management (3rd ed.).* Gower, Aldershot.

Frimpong, Y., Oluwoye, J., & Crawford, I. (2003). *Statistical Methods (2nd ed.).* Academic, New York.

Goodpaster, K. E. (1991). Business ethics and stakeholder analysis. *Business Ethic Quarterly, 1* (1)53-73

Graydon, W. (2012). *The implementation of project management (4th ed.).* Addison-Wesley, Reading, Mass.

Jergeas, G. F., Williamson, E., Skulmoski, G. J., & Thomas, J. L. (2000). Stakeholder management on construction projects.

Johnson, G., & Scholes, K. (1999). *Exploring Corporate Strategy.* Prentice Hall Europe, London.

Kennedy, T. (2000). Stakeholder Management in Construction Projects. The PM Coach

Kumaraswamy, M. M., & Chan, W. M. (2008). Contributes to construction delays, *Journal of construction Management & Economics, 16,* 17-29.

Kusi, H. (2012). Doing qualitative research: A guide for researcher. Emmpong Press, Accra Newtown.

LeCompte, M. D., & Schensul, J. J (1999). *Designing and conducting ethnographic research*. Ethnographer’s toolkit 6, Sage Publication, London

Levy, Q. (2006). Construction contracting/ Business and legal principles, N.J.

Lewis, B. (2011). *Construction contracting (4th ed.),* Wiley, New York.

Lock, D. (1996). *Project Management (6th ed).* Gower, Aldershot.

Manion, S., & Morrison, D. (2007). Visualising and mapping stakeholder influence. *Management Decision, 43*(5), 649–60.

Marshfield, M. A. Jawahar, I. M., & McLaughlin, G. L. (2001). Toward a descriptive stakeholder theory: an organizational life cycle approach. *Academy of Management Review, 26*(3), 397–414.

McElroy, B., &Mills, C. (2000). Managing stakeholders, in Turner, R.J. and Sinister, S.J. (eds) *Gower Handbook of Project Management, 3rd edn,* Gower Publishing Limited, Aldershot, pp. 757–75.

McManus, J. (2002). The influence of stakeholder values on project management. *Management Services, 46*(6), 8–14.

Mills, F. (2001). The stakeholder theory of the corporation: concepts, evidence, and implications. *Academy of Management Review.*

Mitchell et al., (1997). ‘Delay causes in road construction projects’, *ASCE Journal*

Mogbo T. C. (1998). An integrative approach to environmental reconstruction and Politics in Nigeria. *Journal of Environmental Science*, University of Jos, Nigeria, 1-7.

Mogbo T. C. (2004). Construction and National Integration strategies for achieving National unit through the redesign, construction and privatization of new Road and Railway Networks in Nigeria 1-2.

Moore, N. (1983). *How to do Research*. The Library Association, London P. 30

Mubarak, M. (2005). Turnkey construction for building in Malaysia, in Managing Construction Worldwide ,Vol. 3, Construction Management and Organization in Perspective Lanley , P.R and Harlow, P.A. (eds)Newcombe, R. (2003). From client to project stakeholders: a stakeholder mapping approach. *Construction Management and Economics, 21*(8), 841–8.

Ochoa, Y. (2013). Understanding Construction Schedule Delays, Professional Investigative Engineers.

Odeh, S., & Battaineh, P. (2002). ‘Cost deviation in road construction projects: The case of Palestine’*, Australasian Journal of Construction Economics and Building.*

Olander, S., & Landin, A. (2005) Evaluation of stakeholder influence in the implementation of construction projects. *International Journal of Project Management*, *23*(4), 321–8.

Olusegun, E., & Akinsiku, A. A. (1999). “Stakeholders’ Perception of the Causes and Effects of Construction Delays on Project Delivery”, *KICEM Journal of Construction Engineering and Project Management.*

[Parviz, A. K.](http://www.emeraldinsight.com/author/Koushki%2C%2BParviz%2BA), &  [Kartam](http://www.emeraldinsight.com/author/Kartam%2C%2BNabil), N. (2004). Impact of construction materials on project time and cost in Kuwait. *Engineering, Construction and Architectural Management, 11* (2) 126 - 132

Phillips (2003). *Delays in Construction (3rd ed.).* Wiley: NY

Pickavance, G. (2005). Causes of construction delays: traditional contracts. *Journal of Project Management*

PMI. (2001). A Guide to the Project Management Body of Knowledge.

Project Management Institute (2013) [A Guide to the Project Management Body of Knowledge](https://en.wikipedia.org/wiki/A_Guide_to_the_Project_Management_Body_of_Knowledge) (PMBOK® Guide), Fifth Edition, Newtown Square, PA, USA: Project Management Institute, p. 589. [ISBN 978-1935589679](https://en.wikipedia.org/wiki/Special%3ABookSources/9781935589679)

Polit, Q., & Hungler, S. (1999). *Research Methods: Techniques and Interpretation.* Academic Press. London

Sambasivan, M., & Soon, Y. K. (2007). Causes and effects of delays in Malaysian construction industry*. International Journal of Project Management*, *25*, 517–526,

Sidhu, R. (2002). *Business Research Methods.* Sue Greener and Ventus Publishing APS.

Smith, J., & Love, P. E. D. (2004). Stakeholder management during project inception: Strategic needs analysis. *Journal of Architectural Engineering*.

Sternberg, N. (1997). Factors influencing time and cost overruns on construction projects. *International Journal of Project Management.*

Toor, B., & Ogunlana, M. (2008). *Project Management.* New York: Amaco.

Trauner et al. (2009). *The Economic Theory and the Construction Industry (2nd ed.).* Macmillan

Tumi. S. A. H. (2009). “Causes of delay in construction industry in Libya,” in Proc. The International Conference on Economics and Administration, ICEA – FAA, Buchares, Romania, 257-265.

Vogwell, D. (2002). *Stakeholder Management.* Pearson Publication, New York.

Watt, F. (2013). Project stakeholder management. *Project Management Journal, 17*(4), 36–45.

Yin, R. (1994). *Case Study Research: Design and Methods (1st ed.).* Sage Publication, Beverly Hills, CA