

Client-Related Factor Contributing to Delay in the Malaysia Public Projects

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Abstract

This paper presents the investigation of client-related factor towards delay in public projects by applying qualitative research method approach. Semi-structured interview was conducted involving contractor, architect and consultant with experience in project delay. The investigation managed to discover factors of delay which were ranked by using content analysis. The most significant client-related factor is a poor planning at initial stage by client, followed by late of payment by client, lack of awareness by client on latest progress done by staff, improper consultant selection by client, client select contractor with a weak cash flow, poor attitude of contractor selected by client, late of payment by client, lack of knowledge by client, new proposal request by new hired officer and lack of financial strength. This finding is very useful for practitioners in construction sector and very important for practitioners to be aware on these factors and focus to improve the cause of delay among client.

Keywords: JEL Classification: L74, M11, N75



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1. Introduction

Nowadays, the country's economy is heavily subsidized by the construction sector (Low *et al.*, 2015). In year 2010, both private and public construction sector has conquer the value of gross output as much 90% (Department of Statistics Malaysia, 2012). According to Sinar Online 12 April 2017, the growth of construction sector is expected to achieve 8% to RM170 billion in 2017. The economic growth in Malaysia is supported by infrastructure construction such as school, hospital, factories and other infrastructures that help to improve the living standard of society. Government of Malaysia is the largest consumer/client in construction industry (Jatarona *et al.*, 2016). The involvement of government in developing the economic growth most supported from public project in Malaysia.

However, construction sector has no exception in experiencing delay of project time completion. The phenomena of delay have been popular since construction sector introduce. According to Memon *et al.* (2012), 92% of construction projects were overrun and only 8% of project could achieve completion within contract duration. The participation of client seems very important to ensure the project success as client can influence the course of the project (Ekeskär and Rudberg, 2016). Therefore, client-related factor towards delay is investigated in order to improve the issue of delay cause by client.

2. Literature Review

Malaysia is a part of countries other than Nigeria, Australia and India which experience delay for almost 100% and above (Ismail *et al.*, 2014). Multiple of study has been carried out to investigate the factors of delay in construction industry. Based on recent study, many factors of delay has been founded in various related categories includes internal factor such as client-related factor, contractor-related factor, consultant-related factor and external factor. According of study conducted by Owolabi *et al.* (2014), a numbers of delay factor has been found which consists of lack of funds to finance the project to completion, changes in drawings, lack of effective communication among the parties involved, lack of adequate information from consultants, slow decision making and contractor's insolvency, variations among others, project management problem, mistake and discrepancies in contract document, equipment availability and failure, mistakes during construction, bad weather, fluctuation in prices of building

materials, inappropriate overall organizational structure linking to the project and labor. Previous study also stated that the most haunted issue in housing project in public sector is a delay (Sulaiman *et al.*, 2012).

Client is the government in public project and known as important organization which determine the purpose of project and have a power to briefing to project participant, enhance construction progress and effective decision making while face with the issue during construction activities. Participation of client in construction project is the most influence the performance of construction project through cellular activities between client and other team members such as contractor, consultant and architect.

However, previous study has noted that client involved in factor of delay rather than contractor, consultant and other participant of the project (Nasir and Nawi, 2016; Nasir *et al.*, 2016a; Nasir *et al.*, 2016b). Instead of client role in ensuring the project success, there still lack of value among client to play their role in effective way. A study by (Rahman, 2009) noted that poor financial status and business management and also attitude of client which withhold a payment is a part of client-related factor in construction delay. Furthermore, according to a few criteria which lead to delay by client are postponements of payment by client, delay to give permission on site, frequently make change in orders, delay in revising and approving design documents, delay in approving shop drawing and sample materials, inefficient of communication and coordination, problem in decision making process, conspiracy between joint-ownership of the project and suspension of work. It believed that the phenomena of delay cause by client are continuing occur in every public project in Malaysia but lack of study towards client-related factor recently. It is very important to have latest study in order to come out with improvement tools in the future study as a whole.

3. Methodology

This paper has applied qualitative research method approach in collecting, processing and analyzing the data collected. 3 case studies have been selected to investigating the client-related factor for delay in each case study through semi-structured interview. The population of this study is a public project in Malaysia located in three areas which are Pulau Pinang, Kedah and Perlis. There are six selected respondents has been interviewed based on their experience in project delay which involving 3 contractors, 2 consultants and 1 architect. Data collected is analyzed by applying content analysis method. This method is carrying out by examining the frequency of words (delay factor) in textual investigation to create a set of categories According to Silverman *et al.* (2007), technique of content analysis which is by examining the frequency of words is an accepted method of textual investigation to create a set of categories.

The number of occurrences was count in each category. Data collected was organized and analyst by using Atlas Ti Software. Every possible factors of delay was organized and categories under specific theme. Each possible category of factors will be list according to their ranking from the most affected factors and least affected factors towards delay in time completion of the project.

4. Data Analysis

The semi structure interview has been carried out towards selected respondent which have possibility to contribute towards finding of client-related factors towards delay in construction project. The demographic of respondents is presented as per below:

Table 2 indicates the respondents demographic in giving their expert opinion regarding client-related factor towards delay in Malaysian construction project and their experience in handling public construction projects in Malaysia. Majority of the respondents have a working experience for 15 years and above and experience in handling delay in time completion of the project.

Table-2. Interviewee background for case studies

Case study	Name	Background	Designation	Experience (years)
A	R1	Civil Engineer	G7 Contractor	More than 20
	R2	Civil Engineer	Architect	15
B	R3	Civil Engineer	G7 Contractor	More than 20
	R4	Civil Engineer	Consultant	26
C	R5	Civil Engineer	G7 Contractor	More than 20
	R6	Civil Engineer	Consultant	20

4.1. Ranking of Delay Factors

The process of ranking for all the client-related factors is done by list down the factors found. Each factor which have equivalent meaning are categorized into a specific group and themed. The significant of delay factors in Table 3 are explained in more specific in accordance to previous study with similar study in Malaysia which is to find out the factor of delay in term of client-related factors.

Table-3. 10 Most significant client-related factors of construction delay

Rank	Client Related Factor towards Delay in Construction project
1	Poor planning at initial stage
2	Late of payment by client
3	Lack of awareness on latest progress done by staff
4	Improper consultant selection by client
5	Client select contractor with a weak cash flow
6	Poor attitude of contractor selected by client
7	Late in decision making
8	Lack of knowledge
9	New proposal request by new hired officer
10	Lack of financial strength

4.1.1. Poor Planning at Initial Stage

Poor planning at initial stage of the project by client is considered as the most establish contributor towards delay in construction. The quality in planning of construction project has become a major cornerstone for every project to become successful (Dvir and Lechler, 2004). However, during the contract delivery to contractor, the project failed to get planning permission for construction.

The experienced contractor (R1) explained that;

'The client failed to get an approval for planning permission from 'Majlis Pemandaran Pulau Pinang where causes the client was unaware that the area will be developed for the project.' - Respondent R1

As the consequences, the contractor had to delay the construction until client clear the issue in providing the planning permission from council. In a mean time, poor planning in design of the building by client has caused additional task during construction project and incurred additional cost for client.

By referring this case study, R4 stated that they have to perform all the changes at construction stages and cause the construction becomes delay. Respondent R4 said;

'Client should be more detail during planning stage to avoid major changes at construction stage which involved a tools and other building component.' – Respondent R4

Meanwhile, R3 also agreed that the factor of delay for project B is due to some changes in drawing and also additional task from client. This kind of changes requires a few procedures which include getting approval from client to proceed for construction activities.

4.1.2. Late of Payment by Client

Late of payment by client to contractor has become second in ranking as a contributor towards delay in construction. Normally, the issue of late payment in construction is correlated with cash flow problem (Ye and Rahman, 2010). R1 believed that the late of payment from client rarely happens for some project. In reality, R2 believed that late of payment happened due to contractor that did not claim the money on time. In a mean time, R6 said source financial of client for this project is weak and any cost increment due to changes in construction would cause in constrains in making right decision. This condition also has caused the client to perform late of payment for variation order price (VOP) even though the client already gives a promise. Late of payment by client is a part reason of delay due to contractor have to pending or slow down the construction activities until receive a funding from client. R3 with 20 years' experience found that late of payment by client is a common thing that used to happen during handle this project. Other than that, R1 and R2 admit that there is a late payment from client. In addition, R1 claimed that the phenomenon of late payment from client is normal and it is part of delay factor because contractor is based on cash flow to perform construction activities. Contractor is able to financing the activities within 20%-30% from their own self supports. The fact is, contractor performance on construction progress is more than the percentage. Hence, late of payment from client would affect the work progress of the project as a whole.

4.1.3. Lack of Awareness on Latest Progress Done by Staff

Lack of awareness by client on latest progress done by staff is established through real experience by one of the contractor in this study. The failure in obtained planning permission by consultant after the contract has been handed to contractor shows that client is not aware on the latest progress done by his team.

Respondent R1 claimed that;

'...For this project, client failed to play their role as a project owner.' –Respondent R1

This issue has been followed up by the R1 with their consultant who acts as a planner for the project. He found that the consultant did not submit the document to Penang State for an approval for construction activities permission. R1 added;

'Consultant takes for granted and I can start the construction after 9 months' – Respondent R1

It shows the client does not aware with the progress of documentation process in getting an approval for construction. The client of the project also must ensure there is no disruption to start the construction project.

4.1.4. Improper Consultant Selection by Client

Improper consultant selection by client as part of team work has become a factor of delay in construction project. In other aspects, R1 claimed consultant failed to play their role and always take for granted. Respondent R1 explained;

'Consultant should know their job scope and their responsibilities in getting the approval from Majlis Pemandaran Pulau Pinang. Otherwise, they wouldn't know the area for school project' – Respondent R1

Meanwhile, R1 confidently claimed issue would be less if client select a good consultant for this project. In other words, client must be aware and be particular in selecting their consultant. The selection of consultant is the most important thing and client is a main initiator in having a good team work.

In his paper that the consultant is used by organizations to achieve their target goals. However, the consultant is not asked to participate in the designs implementations instead being hired for advice or change the design plan.

4.1.5. Client Select Contractor with a Weak Cash Flow

Some issue of delay in time completion of the project is due to weak cash flow by contractor while waiting for the payment from client. In other words, contractor unable to provide a payment to supplier and sub-contractor until receive a payment from client due to the weak cash flow by contractor. Most of the contractor that having financial difficulties is due to weak cash flows from the contractor. Financial difficulties among contractor is the top three cause of delay in construction sector (Aibinu and Odeyinka, 2006). Contractor is able to financing the activities within 20%-30% from their own self supports. The fact is, contractor performance on construction progress is more than the percentage. Hence, late of payment from client would affect the work progress of the project as a whole. Thus, the strong source of financial from contractor is important to back up the project.

4.1.6. Poor attitude of Contractor Selected by Client

R1 believed that the late of payment from client rarely happens for some project. In reality, R2 believed that late of payment happened due to contractor that did not claim the money on time. According to R5, the late of payment usually is not cause by client itself but due to mismanagement of money claiming by contractor.

Respondent R5 added;

'Once the project running, make sure monthly claim has been deliver to Ministry and it involve a few step and they must take action.' – Respondent R5

Respondent R5 stressed that;

'....contractor must understand once they start to claim today, they will get the money within 45 days.' – Respondent R5

Therefore, it is caused financial constraints for contractor to support the project due to the poor discipline in claiming the money on time and is likely pending to claim the money until months. The client should know more about their contractors and choose a contractor who has a good level of discipline in terms of money claim on time. This will give the client a convenience in the future.

4.1.7. Late Decision Making

Late decision making by client is the seventh among factors that affected the time completion of the project. Based on interaction between respondents, decision making by client is very time consuming and involve others parties before final decision is announce by client. R1 view that client having difficulties in decide to give an approval for a certain thing such as variation order. Therefore, this kind of problem has been issued into the meeting due to inabilities for client to make a decision. Respondent R1 claimed that;

'...For this project, client failed to play their role as a project owner.' – Respondent R1

The expectation of client as a project owner is high and good decision making is a part of element that ensures the success of the project. Good decision making will produce positive outcomes and bring towards benefits for stakeholders at low costs (Psychology and Review, 2000). Therefore, decision making sometimes has leads into time consuming in order to have opinion or strong reason for any kind of issue from other parties in a team.

4.1.8. Lack of Knowledge by Client

Lack of knowledge by client is established through late in decision making by client. This is proved by R1 which stated that client having difficulties in decide to give an approval for a certain thing such as variation order. Therefore, this kind of problem has been issued into the meeting due to inabilities for client to make a decision. At a same time, R2 also admitted that client are late in decision making. R2 explained that the process of decision making by client is time consuming due to they must go through for a few level from project manager, architect and last level until approve. Once approve, client able to make a final decision. This issue happened even though in simple problem and client need to ask other parties to get an answer or decision.

4.1.9. New Proposal Request by New Hired Officer

New proposal request by new hired officer is in the last two factors which affect the completion of the project. In some cases, experienced architect (R2) said;

'Normally, the change of officer in government is more often. Once we submit proposal, new officer that in charge to review the proposal will ask us to make a new proposal' – Respondent R2

It means, to make a new proposal additional time is required. Thus, it is a part of delay factors from client. However, the replacement of officer in construction sector which represent as a client is very rare issue.

4.1.10. Lack of Financial Strength

Lack of financial strength by client is the least factor that affects the time completion of the project. According to the study made by Fugar and Agyakwah-Baah (2010), client interviewed in his study admitted the inability to perform payment on time. However, in this study, only R6 said source financial of client for this project is weak. Meanwhile, other respondents agreed that client have no problem in term of financial strength but cause by other client-related factors.

5. Conclusions

All the client-related factors are discovered in this study and prioritize through ranking from the most important and less important/less impact. Poor planning at early stage of construction by the client is the most common factors of delay. Important for practitioner aware on these factor and focus to improve the cause of delay among client. Participation from client itself is very important to improve the cause of delay listed in this study. Based on the result of this study, it clearly shows that client must do an improvement at early planning stage as it able to give a most impact towards project success. By removing the factors of delay by the client, it is not impossible for Malaysia to become a developed nation by 2020.

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