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Factors of Failure for Abandoned Housing Projects

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ABSTRACT

Abandonment of projects is considered one of the most common and serious problems in the Malaysian construction industry. The numbers and the value of the projects involve are usually large. Not only the buyers are affected by this, but also other parties, such as the developer, contractor, supplier and also the financier. Abandoned projects may involve public fund to be revived. Even though this issue is a serious matter, the research regarding this matter is very scarce. Firstly, the literatures about this issue are reviewed. The potential causes of abandonment issues are summarized to be used in the questionnaire survey. The questionnaire survey had included an open-ended question which has given a good response when the respondents not only suggested the solution, but also included the possible causes for abandonment of projects. Quantitative analyses include the ranking of 37 potential causes of abandoning projects with Pearson's ranking correlation between different group of respondents and factor analysis with Cronbach's α reliability analysis. Qualitative analyses included the results of the open-ended question and the results from the case study. The discussion included interpreting the results of the questionnaire survey, open-ended question and case study.

Keywords: Housing project, abandoned, failure project.

1. INTRODUCTION

Constructions hold an important role in the development of any country. Especially in Malaysia which is a country that still trying to achieve the status of developed country. Construction holds 3% of domestic product from year 2008 to 2012. In year 2012, the construction field contributed RM 112.5 billion to the economy of the country. This field offers a lot of job opportunities to the people in Malaysia. The jobs included are from all levels of works that involve in any constructions. Behind this success story, there are abandoned projects that should be considered because this situation also contributed to the economic growth. Once the project kick-off, the growth of economics started parallel to project life cycle. Most of the project goals being discussed on the project success rather than project abandoned. Project abandoned being worst, once involved housing development because of the huge number of buyers involved. This paper

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identifies and evaluates the factors that contribute to an abandoned building project.

2. OBJECTIVES

The aim of this study is to determine the factors of failures for an abandoned project. This aim is achieved through the objectives of:

1. To study the current information regarding the abandoned project, and
2. To evaluate the factors related to an abandoned project.

3. METHODOLOGY

The research began with understanding the literature review of the factors and causes that leads to abandonment of the project. From the previous research conducted, the factors of abandonment of projects being evaluated. The literature that reviewed will also cover the factors that negatively contributed to the success of projects and the factors delaying projects because delayed projects have the potential to be abandoned. Next is by using a questionnaire survey among the key persons in projects which are the contractors, developers, consultants and other relevant parties. An open-ended question also be included to seek the respondent's opinion on how to minimize the factors affecting the abandoned projects. Selected few abandoned projects will be the case study to realize the factors that contribute to the project failure. The stages involved are include the project became abandoned, the parties involved and the method of abandoning. The reviving effort for this project will also be studied. The preventive action that should be taken before the project is abandoned will also be studied, because the research will perceive how effective are the action taken. The qualitative data from the survey are analysed using the basic descriptive method. The data are also ranked for their potential causes. The qualitative data are grouped into several categories. This research is finalized by writing up the discussion of the results, conclusion, and proposal to manage the problem, limitations and the implications.

4. LITERATURE REVIEW

4.1 Factors of Contribution

The numbers of housing project abandonment are far greater than the number of commercial project. Furthermore, abandoned housing project gives more impact to the public and government. According to most literature, five main factors are

the most that contributes to project's abandoned, which are financial, economics, policies, mismanagement and delivery system.

4.1.1 Financial Problems

Few sources indicate that financial problems are the causes for abandoned housing project (Rusli, 2006). But sometimes for housing projects, the financial problems only came after the projects are abandoned. The increases in project cost may due to other factors such as mismanagement, economic condition, lacks of study or marketing problems can also lead to project abandonment. This all causes can lead to financial problems and disturb the development of constructions.

4.1.2 Economic Condition

This factor also can affect the development of constructions and leads to abandonment of projects as noted in few literatures. Economic conditions such as the rise of price for raw materials such as cement also contribute to the unfavourable economic condition. The financial system also can be put to blame in this factor when the system 'betray' the user of the system. For example, the system that only covers the use of the system when the economic conditions are in better conditions, but refuse to help when the condition go bad (Yap & Tan, 2009). High interest charge also one of the poor economic conditions as potential buyers are discouraged from buying residential properties and thus decrease the profit for the projects.

4.1.3 Unfavourable Policies

There are policies made by the government that is unfavourable and causing the project to be abandoned. One of the policy is selling, then build. The sell then build system is a system to build more houses faster at a lower price (Yap & Tan, 2009). The houses are sold first before it will be built. This will enable more cash flow at the start of the project and less requirement of capital for the developer. This will help more developers with small capital to start the project. However, having small developers in sell-then-build system are the main cause of abandoned project. The developers with small capital are critically relying on their sales of houses to start, but if their sales cannot reach the target, the cash flow for the project might be affected. The effect of this can delay the project and the project may become abandoned. Despite the problems with the system, the risks of sell-then-build system versus the build-then-sell system are less as the bankers see. This will reduce the dependency of developer to the bankers.

4.1.4 Mismanagement

Mismanagement is one of the causes of abandoned projects and it's happened because of the developers' lack of experience. The developers are usually lacking in terms proper feasibility studies of the market, the unattractive marketing, fraud and poor financial management (Yap & Tan, 2009). It relates to the competency of developers in selling houses and to make sure the cash flow of the projects. The lack of feasibility studies of the market and inaccurate market research may result in an inaccurate forecast of demand and supply of certain properties. This may as well result an unsuitable project scheme to be undertaken in the market. Unattractive marketing will result less attractive scheme of the project and making fewer sales for their projects. This will bring a problem because in order to bridging a loan, developers need to have more than 80% sales from total of their project. Fraud in developing housing project is that the developers claiming the project are on schedule and continue to send progress billing to the buyers, but the actual projects are already late and may be abandoned. That the purchasers are not aware of the project actual progress are affected the most because the development of the houses that they hope to get are not going to be completed and they still need to pay for any loans they took from the bank. Poor financial management by the developers is usually the main cause for the abandonment of projects. Developers usually have more than one project in their care, but when they could not allocate the proper budget for all their projects, the projects are as good as abandoning. To control the cash flow of all the projects, the developers need to monitor the projects often so that they know at what stage the projects are actually at and they can change the budget of the projects if there are any suitable solutions.

4.1.5 Inefficient Delivery System

The delivery system is a means or procedure for providing a product or service to the public. Inefficient delivery system is the cause of abandoned project rather than unfavourable policies. The lack of enforcement and monitoring by the government are mentioned in few sources as the cause of abandoned projects. Ibrahim (2006) states, among others, that there should be stricter licensing for developers, better system to detect abandonment of projects, harsher punishment for errant developers, and less bureaucracy in the approval process of housing plans. The effort made, there are still developers that are rouged. The developers may use proxy to protect themselves in case of abandonment of projects (Yap & Tan, 2009).

4.2 Project Management's Factors

Project management factors are factors that are resulting from an ineffective project manager, such as problems of communication and coordination,

inappropriate project planning and scheduling, project control problems, and poor safety management on site.

4.2.1 Inappropriate Planning and Scheduling

Planning is about a detailed proposal for doing or achieving something, an intention or decision about what is going to have. And, to plan is to decide on and make arrangements for in advance, design or make a plan of (something to be done or built). According to Griffith and Watson (2004), planning is coupled with programming. Planning is defined as the process of determining, analysing, devising and organizing the resources required for a construction project, while programming is defined as sequencing of those resources. Accurate short-term planning is the key to maintaining progress and control. Inappropriate project planning and scheduling can result in a high frequency of schedule adjustments (Dissanayaka & Kumaraswamy, 1999).

4.2.2 Control Problems

Controlling involves comparing performance on costs, progress and the quality of materials and workmanship with a plan. A cost control system should enable a manager to observe current cost levels, compare them with a standard plan or norms, and institute corrective action to keep cost within acceptable bounds. Progress control involves progress monitoring, charting, evaluation and review at appropriate and regular meetings (Griffith & Watson, 2004). Project control problems such as problems of time and cost control might cause delays and cost overrun. Quality control is a process of inspecting and confirming that the finished installation or work has indeed met the design specifications stated in the contract documents. The causes of human errors which affect the quality of construction are failures in communications, errors caused by concurrency of several phases of a project, errors caused by changes, failures in checking, supervision and control, time pressures and lack of proper education and training (Yap & Tan, 2009). Also, project managers need to be vigilant of the temptations of bribery by subcontractors so as not to lose control of the quality of the construction work. Poor quality control may lead to delays.

4.2.3 Poor Safety Management

Poor safety management on site might cause serious disruption to a construction project. According to Griffith and Watson (2004), principal contracting organizations need to ensure that the health and safety aspects of a construction project are clearly recognized, risk-assessed, planned, organized, controlled, monitored, recorded, audited and reviewed in a systematic and robust way. One way to achieve this is to implement a health and safety management system. Apart from site safety officers, project managers also play an important role in instilling the right safety work culture (Yap & Tan, 2009).

4.2.4 Participant Factors

Project participants' related factors are mainly concerning clients, consultants, contractors, subcontractors, site workers, and suppliers. These include unavailability of materials and equipment, financial difficulties faced by the owner and contractor, problems related to change orders, and poor relationship among project team members. Clients on construction projects may consist of private and public clients, and they are usually the initiators and paymasters of the construction projects. As initiators, they are usually responsible for initial design requirements. Factors identified by Yap & Tan (2009) that are related to providing initial design requirements are client's experience, emphasis on high quality of construction, emphasis on quick construction, ability to brief and ability to make a decision. Besides, due to the competitiveness of subcontracting, client's emphasis on low construction cost could drive contractors and subcontractors into offering unrealistically low price, then cutting corners and offering bribes to recover their losses. Therefore, clients may influence the success of projects, and may lead to the abandonment of projects. For relationship among project team members could happen when its importance is overlooked, as in one off, non-local project where there is a lack of need to worry about long term business relationship. Other factors include involvement of a large number of participants of the project and unskilled site workers that could result in time and cost overruns.

5. ANALYSIS AND RESULTS

There are some factors which might be expected to cause projects to be abandoned, owing to the nature of housing provision which is highly regulated and governed by various institutions; these include formal and informal rules or institutions; institutions as organizations and signal mechanisms. Therefore, this study has highlighted a series of research questions, such as the appropriate theoretical approaches that are relevant in understanding the causes of abandoned projects; the institutions relevant in explaining the housing development, the institutions perceived as a barrier to the housing development; whether the institutions explain the existence of abandoned housing projects and how the information signalling interacts with project abandonment. The knowledge regarding abandoned project covered in the literature stage. From the interview and questionnaire results, there are 37 factors that defined by respondents which contribute to abandoned projects. That factor being rank using average index as in Table 1.

Table 1: Factors contribute to abandon the project by Average Index (AI)

Rank	Factors that contribute to abandon projects	A I
1	Financial problems	4.161
2	Contractor financial difficulties	4.052
3	The contract is not done completely	4.003
4	Lack of cooperation from local authorities	4.004
5	Poor economic condition	4.005
6	Lack of feasibility study of the market	4.006
7	Financial difficulties by client and contractor	3.977
8	Unexpected economic condition	3.958
9	Technical faulty in acquiring the site	3.929
10	Fraudulent and bribery	3.891
11	Poor financial management	3.891
12	Contract arrangements are not appropriate	3.871
13	Faulty tender process	3.871
14	Unattractive marketing	3.871
15	Unexpected location difficulties	3.842
16	Unfavourable policies	3.842
17	Inappropriate planning and scheduling	3.822
18	Construction mistakes and defective works	3.822
19	Lack of feasibility study before starting work	3.762
20	Control problems	3.762
21	Unavailability of materials and equipment	3.762
22	A poor site management	3.762
23	Size of projects is too large	3.682
24	Poor safety management	3.662
25	The projects are too complex	3.633
26	Contractors, subcontractors and site workers are incompetent	3.613
27	Inefficient delivery system	3.613
28	Material shortage	3.613
29	Poor relationships among team members	3.583
30	Equipment and tool shortage	3.583
31	Labour shortage	3.553
32	Coordination problems	3.473
33	Negative impact to society and environment	3.453
34	Adverse weather or act of God	3.393
35	Type of projects is difficult to design and build	3.263
36	Consultants failed to give details on the design	3.244
37	Client/Developer failed to give initial design requirements	3.004

The results of the Pearson's ranking correlations of different factors involved in abandonment of projects are shown in the table below. The result shows that all correlations are significant at 1% significance level. The Pearson's correlations

between unsuccessful projects, factors and abandon project factors and delayed project factors are 0.436 and 0.117 respectively. The Pearson's correlation between the abandoning project factor and unsuccessful project factors and delayed project factors are 0.436 and 0.185 respectively. Then the Pearson's correlation between delayed project factors and unsuccessful project factors and abandon project factors are 0.117 and 0.185 respectively. It seems that Pearson's correlation between unsuccessful project factors and abandon project factors and delayed project factors are rather high among all three correlations. However, it is noted that some of the causes of these three factors are almost the same, but with different views of perspective, therefore the correlations should not be too much different from each other.

6. CONCLUSION

The prevention of abandoning projects can be divided into two which are renewing the government regulations and raising the standard of party involve in construction projects in terms of knowledge and financial stability. For the short term, it is proposing that there should be a holistic condition for the developer, more effective policing of complexity and by using risk management to minimize the risk from uncertainties in projects. Tighter condition for the development means that the developer need to have experience in the construction for huge and complex type of building and also have the financial capability to continue with the projects. The use of risk management is good for any projects as it is to identify the risk, prioritize the risks, and then identifies the strategies to deal with the risk, by doing this; less risks are to be encountered during the projects in progress thus reducing the risks of abandonment of projects. For long term measures, it is proposed that there should be higher standards of educations; announce the latest research findings in constructions and implementation of BIM (Building Information Modelling). By the highest standards of educations means that to include the latest research findings into the syllabus of courses at institutions of higher learning. For the contemporary research, it should be introduced through publications, seminars for developers or directly disseminate to the developer. The ranking of the causes has helped to refine the data on the factors that causes abandonment of projects. The open ended question also helped in giving some ideas that can be used to prevent abandonment of projects from happening. The data from the case study also show that the data from the literature can be used in the country as the causes found in the case study have the similarities with the causes found in the literature. It is not appropriate to blame only the developer for abandonment of project since there are many other factors that cause by another party that also causing abandonment of projects. So it is the responsibility of all the parties to prevent abandonment of projects from happening. They should not blame each other, but try to work together in order to finish their work without any problems.

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