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To cite this article: S A Salam *et al* 2020 *IOP Conf. Ser.: Mater. Sci. Eng.* **849** 012004

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# Effect of mismanagement towards abandoned project in Malaysia

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**Abstract.** Over the years, Malaysian government has placed significant emphasis on the need for citizens to have their own house. Unfortunately, the abandoned housing projects are indeed a major hiccup for purchasers who dreams to have their own home become reality. The abandonment of housing projects has resulted in many adverse consequences to the economy, society and environment. Therefore, this paper discuss on the effects of mismanagement in contribution to the abandoned housing project. Together, the suitable solutions to mitigate the abandonment issues will also be proposed. The studies focus on collecting the data form local authorities and also by doing a questionnaire. The data was analyse based on the Likert's scale and using relative of important index. This study found that the mismanagement is cause by the inexperienced developer with lack of management skill will contribute to the abandoned housing project.

## 1. Introduction

The residential housing market is heavily affected by general economic conditions. Often, a slight increase in total demand will cause a substantial investment in construction, since many housing projects can be started at different locations by different individuals and developers at the same time. Because of the relative ease of entry, many new builders are attracted to the residential housing construction. Hence, this market is highly competitive, with potentially high risks as well as high rewards. One of the risk is project abandonment, it has become a severe and perpetual headache to the government, financial institutions and purchasers. This problem is indeed serious, and has to be resolved immediately irrespective of whom the finger should be pointed at.

Unoccupied housing or building and visible signs has been shows of physical distress is defined as abandoned in US [1]. Other researcher mention that, the abandonment of development projects is the act of discontinuing any activities or maintenance works on such development project within a time frame of the contract agreement and with no intention of returning back to the development [2]

In Malaysia, the abandoned housing is defining by the Ministry of Housing and Local Government (MHLG) is when the project was not complete within the sales and purchaser agreement (SPA) and found that there is no significant activity within 6months continuously. Moreover, when the winding up petition has been registered in the high court undersection 218 of company act and the developer is placed under the receiver and manager. The project also defines as abandoned when the developer acknowledges to the controller of housing for their incapability to finish the project [3] .

Abandoned housing projects are not unique to Malaysia as it is considered as a major problem in the construction industry and also in many other countries including US, Spain, Russia, Dubai and



Kuwait[4]. There are several factor that contribute to the abandoned housing project and the mismanagement before and during the construction was the one of the factors involve.

**2. Literature Review**

*2.1 Mismanagement*

Construction management is a long and extremely demanding process. It is the foundation for every project and the key to its success. The main purpose of construction management is to sharply control and monitor the progress of a project in terms of quality, cost and time[5]. The construction management consist of 5 basic stages which is initiating, planning, executing, monitoring and controlling and finally the project closing[6].

Initiation stage is highly instrumental in the life cycle of a project as it defines the boundaries of the project and gives clarity to all participants about the objectives, scope, cost and timescale of the project[7]. The improper feasibility study during initiation stage will reduce the smoothness of project run and will cause an abandoned project due to the additional cost incurred and time[8], [9].

Moreover, the improper managing the market signal and unattractive marketing strategy during this stage also will cause of abandoned project[9]. The author added, the developer should take serious information regarding the numbers of same development at the surrounding area, the customer needs such as housing feature, types or facilities and the funding policy for the mortgage to avoid oversupply and low demand. This scenario can be related with Figure 1 where it shows the stock and status of housing unit supplied in Malaysia from 2014 until 2018. As can see the overhang (unsold complete house) and unsold not constructed housing unit is keep on increasing year by year. The unsold housing under construction is increasing since 2014 until 2016 and is start to decrease a bit by 2017 until 2018.

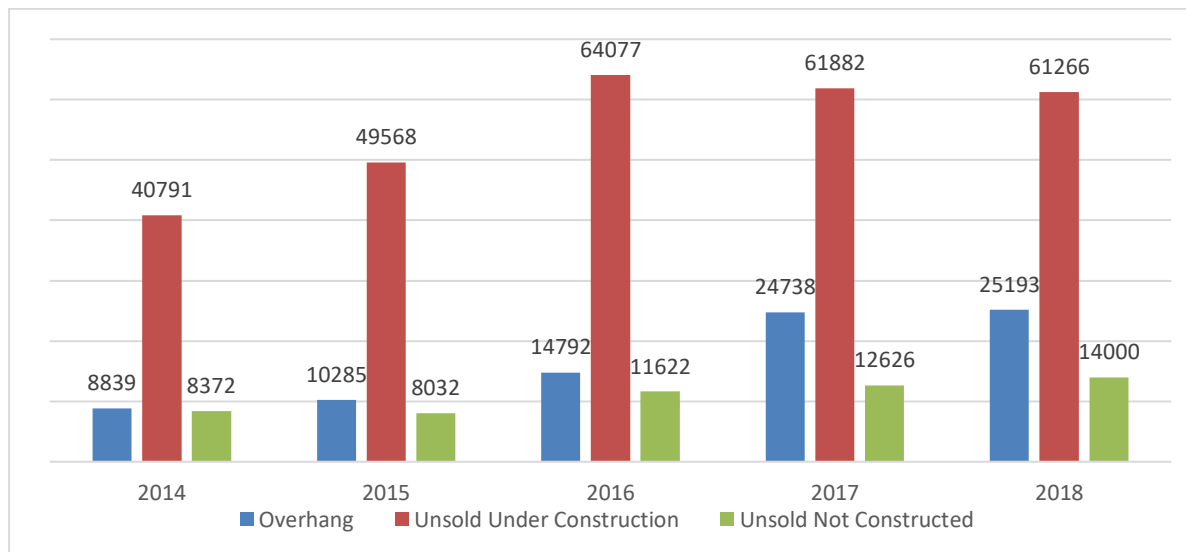


Figure 1: Unit stock and Status of housing supply in Malaysia since 2014 until 2018

Source: Department of Statistic Malaysia 2018

The improper management during the initiation stage for the selection of competence consultant or management team will give negative impact to the successful of projects[4], [10]. The incompetence main contractor will cause project delay and tend to led the project to be abandoned **Error! Reference source not found.**[11]. In addition, the inexperienced contractor with lack of skill in handling project will mismanage the project and finally led the project to be abandoned[12].

During the planning and executing phase, the competence project manager to handle the project is crucially needed. [13].

Table 1 **Error! Reference source not found.** describe the project manager responsibility of each management process that involve during construction[13]. The incompetence project manager with lack of project management knowledge will unable to control the construction project properly, unable to plan, organizing and coordinate the activities on site and the end product will be miserable[13].

Table 1: Description for each type of management process.

Type of management	Description
Time management	The process of recording and controlling time spent of all activities on site. The recorded time spend will help the project manager to control the amount time spend for each activity.
Cost management	The process by which cost or expenses incurred on the project are identified, approved and paid.
Quality management	Process by which quality is assured and controlled for the project using quality assurance and quality control techniques.
Change management	Process by which changes to the project scope, deliverables, timescales or resources are formally requested, evaluated and approved prior to implementation.
Risk management	Process in which risks to the project are formally identified, qualified and managed.
Issue management	Issue management is the method by which issues currently affecting the ability of the project to produce the required deliverable are formally managed
Procurement management	The process of sourcing products from an external supplier. Purchase orders are used to purchase products from suppliers, and a procurement register is maintained to track each purchase request through to its completion
Acceptance management	The process of gaining customer acceptance for deliverables produced by the project
Communication management	The process by which formal communications messages are identified, created, reviewed and communicated within a project.

Most of problematic project had an issues with poor management of time, unsuitable choice of procurement methods, problem with participation of shareholders, poor planning of construction works, lack of implementation of software, poor site records and others[11]. Thus these issues can lead to delays are insidious often resulting in time overrun, cost overrun, disputes, litigation, and abandonment of projects.

Not only that, the developer also plays an important role during execution stage. The improper financial management will cause a problem to the project cash flow and plunge into abandonment[14]. Financial problem also may occur with the existence of fraudulent claim in a project and its due to lack of monitoring by the developer[9]. [3] also found that the fraud may also be due to extravagant dissipation of purchaser's fund that leads to the abandonment of housing projects.

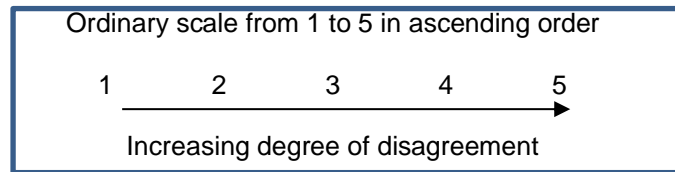
The abandoned project gives many negative effects to the environment, economy, and society in Malaysia. Thus this study is to identifying the factor contribute to project mismanagement towards the abandoned project. Furthermore, the suitable solution in preventing the abandoned project occur will be suggested.

### 3. Methodology

In order to achieved the listed objective, the quantitative research methodology that involves the measurement of variables and their interrelationships was conducted. The data obtained using the quantitative method is quantified data which measurable using scientific techniques and instruments. Data from the quantitative method are normally analysed by using statistical procedures [15]. Analyses of the data yield quantified results and conclusions derived from evaluation of the results in the light of the theory and literature[16].

3.1 Data Collection

Data collection techniques would be split into several stages to get information that is orderly. In early stage, a structure work shaped to get picture on study journey. This structure will divide to various parts namely data observation and questionnaire survey. Likert’s Scale is used in the multiple choices question in questionnaire which is five ordinal measure of agreement for each statement from 1 to 5.



.Figure 2: Likert’s scale

Each scale represents the following rating:

- 1 = Totally Agree
- 2 = Agree
- 3 = Moderate
- 4 = Disagree
- 5 = Totally Disagree

3.2 Data Analysis

Relative Index Inequality (RII) is adopted to evaluate the ranking of different factors by the respondents. The higher index value donates higher unnecessary statement with maximum index value factor. The classification of the rating scale is following below:

Table 2: Relative Importance Index

Rating Scale	Relative Index	Category
1	0.00 ≤ Relative Index < 0.20	Totally Agree
2	0.20 ≤ Relative Index < 0.40	Agree
3	0.40 ≤ Relative Index < 0.60	Neither agree or disagree
4	0.60 ≤ Relative Index < 0.80	Disagree
5	0.80 ≤ Relative Index < 1.00	Totally Disagree

The formula for Relative Importance Index is as follows:

$$RII \text{ Value} = \frac{\sum w}{A \cdot N} \quad (0 \leq RII \leq 1) \tag{Eq. 1}$$

- RII : relative importance index
- W : the weight given to each factor by the respondents and ranges from 1 to 5, (where ‘1’ is “strongly agree” and “5” is “strongly disagree”)
- A : the highest weight (i.e. 5 in this case)
- N : the total number of respondents

4. Result and Discussion

4.1 Respondent background

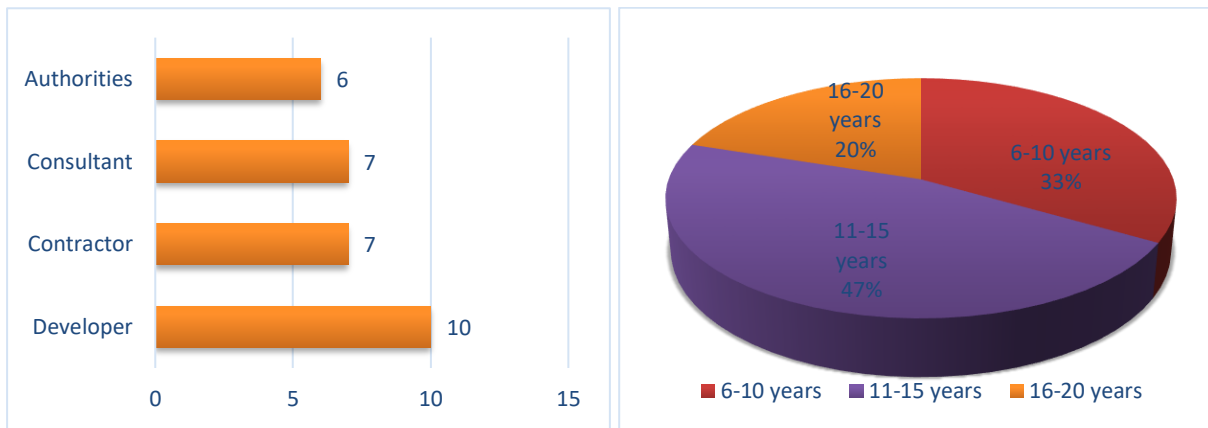


Figure 3: Numbers of Respondent and year of experience in housing industry

Figure 3 represent the numbers of respondent from construction expertise such as developers, consultants, contractors and government authority been collected and analysed. The total of 30 numbers respondent were selected for this research. Most of the respondent are experienced in abandoned housing project and some of them involved in housing development industry more than 10 years.

Mismanagement is the failure of the organization to control or to maintain the project that has been discuss in literature review. There were another factors but this study is to know how much the mismanagement could influence the abandoned housing project in Malaysia, so the respondents were asked whether they were agreed that mismanagement was the cause of abandoned housing project in Malaysia.

Based on Figure 4, 52% of the respondent agree that the mismanagement is one of the factor contribute to abandoned project. Followed by 43% strongly agree and 5% more are moderately think that abandoned project is cause by mismanagement. The inappropriate project planning and scheduling, project control, poor quality control, poor safety management on site, problems in communication and coordination at every stage in construction and bureaucracy within the project is in the category of project management [17]. [18] Found that the mismanagement of cost planning during the design stage will cause uneconomically design and can contribute to abandoned project. The incompetence project manager through project implementation will cause an improper project planning and contribute to abandoned project[19].

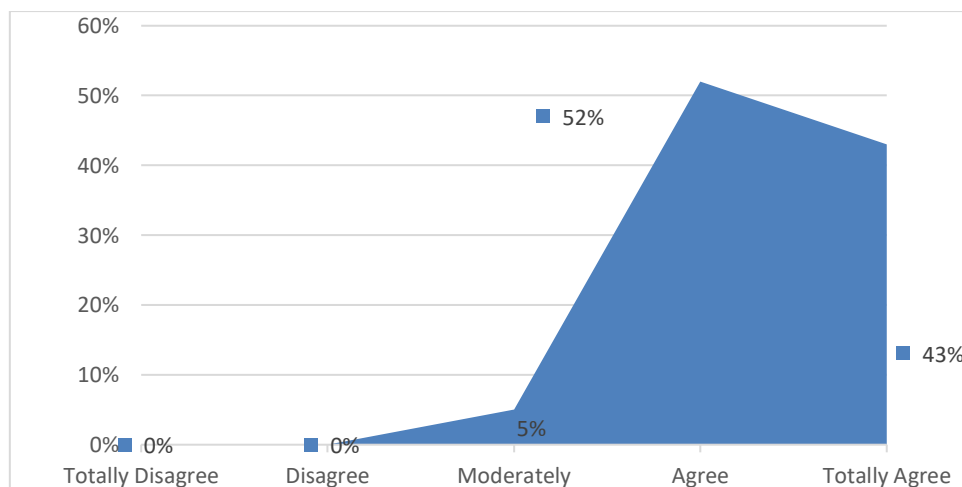


Figure 4: Percentage of respondent agreement on mismanagement as one of the factor that cause abandoned housing project.

4.2 Causes of mismanagement

Table 3: relative important index for causes of mismanagement in construction

Rank	Causes	RII Value
1	Lack of management skill by inexperienced Developer	0.89
	Lack of management skill by inexperienced Contractor	
	Incompetence Consultant	
2	Inappropriate feasibility study	0.87
	Inappropriate financial control	
	Communication problem	
3	Lack of monitoring & controlling by developer	0.81
	Fraudulent	

Result in Table 3 show the ranking for causes of mismanagement in construction industry. As can see the rank 1 causes with RII value 0.89 is lack of management skill due to inexperienced developer and contractor and also due to incompetence consultant for the projects. [12]also found that the mismanagement by main contractor is due to lack of management skill in handling project. [20] also mention the important of choosing the right project team before project initiation.

While the rank 2 for causes of mismanagement with RII value 0.87 is due to inappropriate feasibility study. Feasibility study is a very important in order to evaluate the viability of development project[21]. Secondly it causes by inappropriate financial control. The improper financial management will affect the whole operational of project[22]. Thirdly is problem in communication between project team. Poor communication can result in misunderstandings, delays and issues down the road[23].

Another causes of mismanagement on the third rank with RII value 0.81 is lack of monitoring and controlling by developer and fraudulent. Both of the causes is actually interconnected to each other. The efficient monitoring and controlling is crucial for every phase in construction life cycle to make sure the successful of the project **Error! Reference source not found.**[24]. The fraudulent claim is happening due to lack of monitoring and controlling by the developer and when the risks is unbearable the bankruptcy may happen[25].

4.3 Solution of mismanagement

The potential solutions to the problems have been investigated via multi choice question of questionnaire survey and the results are presented in figure 5 below. Most of the respondent agree that the developer should strengthen their monitoring and controlling skill to prevent the mismanagement from their side. The proper monitoring and controlling by developer will help them to achieve the requirement needed and able to handle any chances of problem occur[24].

Secondly, with the RII value 0.89, the respondent agree that the management problem could be solve with an adequate feasibility study done before the project could be execute. The proper identifying the circumstances of obstacle, aims, requirement, performance and also cost incurred of every selected procedure during earlier stage of project life cycle might help the smoothness of project run[26].

The third solution choose by respondent with the RII value 0.82 is the developer should award the project to the competence consultant and experienced contractor. Sufficient competencies enable the construction project manager monitor and control the progress of the project smoothly. Competence consultant is able to establish the strategy, able to handle the related management, planning, operate and having the creative thought and knowledge[27]. Moreover, according [28] among the construction parties, project manager is important and vital to project success.

Finally, the fifth solution with RII value 0.78 is by having continuous project management and communication training to all project team. Effective communication is vital to the successful completion of any construction project. Good communication can improve teamwork and lead to better project collaboration[23].

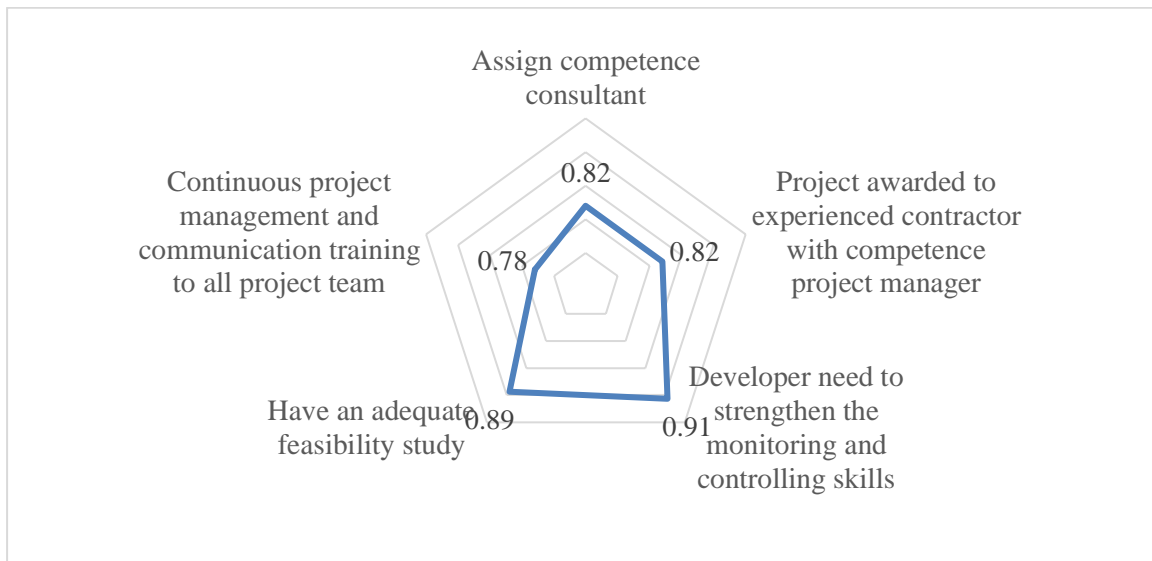


Figure 5: Relative Importance Index for solution to the management problem

**5. Conclusion**

Successful project management in construction requires a wide range of qualities and skills. Not only do projects need to be finished on time and within budget but also need to adhere to specific regulations. This study found that mismanagement is one of the factors contributing to abandoned projects. The causes of mismanagement have been analysed and the results show a lack of management skill by inexperienced developers, inexperienced contractors, and incompetent consultants as the most negative influence on successful project management. This study also suggested some solutions to prevent mismanagement, and the top solution is for developers to strengthen their monitoring and controlling skills.

**Acknowledgment**

The authors are grateful to the Ministry of Higher Education, Malaysia (MOHE) and Research Management Centre (RMC), University Malaysia Pahang (UMP) for financial support under grant RDU170341.

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