

Project Performance Impact Factors among Developers in Malaysian Private Projects

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Abstract

Project performance indicator as of time, quality and cost are all indicators used to determine the successful of the project. Poor project performance, on the other hand, has always become a drawback for construction players especially the developer. Therefore, the research aims to investigate the impact factors that affect in project performance among the developers. The objective of the research is to identify the challenges faced by developers that contribute to project performance under private projects. Questionnaire survey were distributed to 226 respondents within the Johor State with 69% of questionnaire returned rate. Descriptive analysis has been used for the data analysis by using the Statistical Packages for Social Sciences (SPSS) version 28. Based on the analysis, respondents agreed that financial problems during the construction process and late making decisions were the major challenges faced by the developers in project performance. The recommendation that was suggested in this research can be taken to action to improve the project performance under private project in Johor.

Keywords: Impact, Challenges, Developers, Project Performance, Private Projects

Research Background

The construction industry is an industry which involves various stakeholders consist of clients, consultants and, contractors. According to Jatarona et al (2016); Samarah and Bekr (2016); Ullah et al (2017) these stakeholders play an important role to achieve a successful project. Jatarona et al (2016) opined that the responsibilities and the accountability carried by each party determine the success of a project. Oppong et al (2017) also share the same opinion that the performance of the construction industry stakeholders will influence the project result whether the project would be a successful or a failure. Ogunlana et al (2010) stated the criteria of good project performance which are meeting the dateline, budget and, client's specification. In addition, the criteria of good project performance are when the

project is free from any defects and no conflict or dispute among the construction industry stakeholders.

A developer is the owner of the proposed project or also known as the 'client' is an individual or an organization who has a career background of taking risks on things that do not guarantee a profit and also taking risks to a possible loss due to the poor project performance. The impact of the poor project management leads problem for the overall project performance which lead to project abandoned. In the words of Minister of Housing and Local Government (KPKT) Datuk Seri Reezal Merican Naina Merican (News Straits Times, 2021) a total of 78 private sector projects involving 17,605 housing units with 11,735 buyers involved has been classified as 'abandoned' in Peninsular Malaysia. KPKT is also studying how to improve the project rehabilitation criteria with government funds in addressing the problem of abandoned private housing project. Theoretically, what can be identified the causes of these abandoned projects, as a result of the failure to monitor and manage the project effectively, the significant impact on the developer is a bad reputation, excessive project costs, project delays, abandoned projects and poor-quality project. As defined by Gardezi et al (2014); Samarah and Bekr (2016); Ullah et al (2017) a cost overrun create the major effect of poor project performance while time overrun will cause a delay in the overall completion of the project. Therefore, (Ojoko et al., 2016) opined that due the prolongation of the time taken in completing the project, it creates low-profit margin to the developers. If this problem continues, then it will disrupt the company's cash flow. In the event when the developer uses bank loan facilities, it definitely may increase the bank interest and the worst-case scenario, the impact may lead to bankruptcy (Badroldin et al., 2016). Obviously, it can cause demotivation of the project team and among the stakeholders in the construction business. Therefore, it is significant to identify the contribution of the impact factors in order to find a solution faced by the developers.

Literature Review

Project performance is correlated with time, quality, and cost (Ingle and Mahesh,2020). The determining factors of the project performance depend on the 3 indicators which are time, quality and cost. If the project has a good project performance, the time taken to complete the project is based on the agreed date without any unnecessary delay, the final cost does not exceed the estimated cost and the client's requirement and specification are followed. Meanwhile, if the project performance is poor, the project will not finish on the agreed time, the final cost increases drastically from the estimated cost and the project has a lower quality than the client's requirements and specifications (Idrees and Shafiq, 2021)

Poor project performance is not solely caused by the contractor. It may also be due to the setbacks from the client as well as the consultant. According to Jatarona et al (2016) there are 3 main impact factors to the contribution of poor project performance which are the client factor, consultant factor, and contractor factor.

Cost Overrun

One of the consequences of a building project's poor performance is a cost overrun (Samarah and Bekr, 2016) which refers to the increased cost from the original one that was agreed upon in an earlier stage of construction (Subramani et al., 2014). According to Jatarona et al (2016) a non-performance project increase construction cost. Ullah et al (2017) agreed on the concept which emphasizes that the cost overrun results in a cost increase in the final cost. It indicates that the client's budget will need to be increased due to the rise in

the final cost. The cost of a project determines whether it is a success or a failure. The project's performance is good if it is successful. However, poor project performance would pose issues for construction industry stakeholders as well as the environment. A good project performance, according to Shibani and Arumugam (2015), can overcome the project's cost limitation problem. As a result, several projects are currently experiencing cost overruns. There were 191 ill projects recorded in 2013, according to (Jatarona et al., 2016). To overcome the project's illness difficulty, the client had to boost the building expenditure. Client or developer, contractor, and consultant are the parties to be held accountable for cost overruns (Ullah et al., 2017). Other studies, such as Nyangwara and Datche (2015), reached the same conclusion, the client, contractor, and consultant are all liable for the construction project's non-performance.

Time Overrun

Aside from cost overrun, one of the consequences of poor project performance is time overrun. One of the most critical criteria for ensuring a good project performance is time. It is because the client took a chance by completing the project without knowing what would happen in the future, such as whether the project would be completed successfully or not. According to Ullah et al (2017); Alade et al (2019), time overrun refers to when a project's completion time exceeds its original estimation. The effect of poor performance projects throughout the construction process will cause a delay in the construction process as well as a time overrun. As agreed by Gardezi et al (2014), delays will affect project performance and cause late completion. Time overruns can be caused by a variety of factors, including the contractor, client, and consultant involved (Jatarona et al., 2016). At the same time, Obodoh et al (2016) agreed that the client, contractor, and consultant are the parties responsible for the time overrun.

Abandoned Projects

One of the impacts caused by challenges that affect the developer's project performance is project abandonment (Samarah and Bekr, 2016). The researcher did not go into great detail on why the project was abandoned, nonetheless. The developers' finances will be impacted if the project is abandoned. For instance, to fund their projects, developers or clients typically need bank loans (Ojoko et al., 2017). The developers will suffer losses in addition to not making a profit if the project is abandoned. Developers are required to pay interest to the bank, which results in more money leaving the system than coming in.

Dispute Among Construction Stakeholders

The participants in each construction must effectively carry out their assigned tasks. In the building industry, clients, consultants, and contractors each play specific responsibilities. However, if any of them fails to carry out their obligations. The dispute among construction stakeholders may arise. To illustrate, when the client delays in paying the contractor (Ullah et al., 2017) it will cause low-quality materials to be used by the contractors. The issue escalates if questions posed to the consultants are never answered. These entire examples explain how disputes between the client, contractor, and consultant may arise. Researchers who investigated the disagreement among stakeholders in the construction business are likewise few in number. However, the effects of this debate could also have an impact on developers' project completion times and financial resources.

Poor Quality of End Product

According to Jatarona et al (2016) the quality of work can be described as the work following the client's specification. The low quality of work can cause a lot of problems and one of them is causing poor project performance. The factor occurs usually caused by the contractor. It is because the contractor is the one who will provide the material and equipment to execute the project. As a result of the poor quality of the end product, works such as rework, re-testing and redesign need to be implemented to replace poor quality materials and services and materials, and services that do not follow the client's requirements (Mallawaarachchi and Senaratne, 2015). It happens because of the lack of supervision by the client and consultant. If the contractor uses low quality material, it can affect the user. If the project is making a building, it may affect the users of the building. Therefore, the three main construction industry players play an important role to ensure the quality of the project and at the same time the project performance.

Research Methodology

A quantitative method has been used in this research by distributing the questionnaire to the residential developer, local G7 contractor, and consultant of quantity surveyor in Johor Bahru. The population was 540. Based on Krejcie and Morgan (1970), the sample of the research was 226. According to Medway and Fulton (2012) the percentage number of respondents for web-based and email-based approximately would be between 10% to 20% of the total number of the samples. Therefore, the minimum number of respondents that is needed is 45 respondents. A medium that has been used for preparing the questionnaire is by using Google Form. Then, the Google Form will be distributed through E-mail, LinkedIn, WhatsApp, and Telegram. The descriptive analysis was used to analyze the data obtained by using the Statistical Package for the Social Science (SPSS).

Analysis and Discussion

The total number of returned questionnaires received is 69. The questionnaire has been sent through e-mail of the company, WhatsApp, LinkedIn, and Telegram. The questionnaire was asked by using the Numerical Likert Scale. Numerical Likert scale was employed in the questionnaire. The level of impact was shown based on ranks, from the lowest to the highest which were numbered from 1 to 5.

The Impacted Factors to the Poor Project Performance

A reliability test has been conducted to identify the validity and accuracy of data obtained based on Cronbach's Alpha. The result of the reliability test was 0.903 which can be classified as Excellent. As a result, most of the respondents are knowledgeable about all variables in the questionnaire.

Based on the previous research, there are 5 numbers most affected factors faced by developers in project performance that have been highlighted. A summary of the findings on the most affected factors contribute to the developers in project performance under private project is shown in Table 1 below:

Table 1

The Impact Factor Faced by Developers in the Project Performance under the Private Project

Rank	The Impact Factor Faced by Developers in the Project Performance under the Private Project	Mean Value
1	Cost Overrun	4.26
2	Time Overrun	4.23
3	Poor Quality of End Product	4.14
4	Abandoned project	4.13
5	Dispute Between Construction Stakeholders	3.97

Table 1 shows that the highest mean value was a cost overrun during the construction process (4.26). Meanwhile, the lowest mean value was dispute between construction stakeholders (3.97). Based on Table 1 the challenges faced by developers in project performance were cost overrun (4.26). It is followed by time overrun (4.23). Meanwhile, poor quality of end product, abandoned project, and dispute between construction stakeholders were rated as the least contribution to the most impact factors faced by the developers in project performance.

Conclusion

The objective for this research paper had been achieved by rank of mean for each strategy categories listed. Thus, this can be concluded that cost overrun was the most significant impact on project performance is cost overrun. A substantial cost rise is a result of poor project performance which is known as cost overrun. To address this issue, developers had to raise a large sum of money. The developers will confront a number of financial challenges, including an increase in bank interest rates. All in all, the financial factor guarantees that the project can be completed successfully.

In conclusion, the challenges that contribute to developer's project performance may affect not only to the project itself, but it also affects the developers directly. Therefore, the developer is not the only one who needs to think about the project performance. All parties involved in the construction project, however, must pay attention to the project performance. In due course, this study is believed to benefit the private organisations and construction industry players in general which has benefited the Malaysian construction industry. With these findings, the risk that had to be borne as a result of impact factors such as cost overrun, time overrun, poor quality of end product, abandoned project as well as demotivation among the staff and construction stakeholders can be mitigated. This study is expected to facilitate the administration of private projects, especially in dealing with the issues of project performance impact factors, which can eventually would otherwise dampen down the progress of the project. Ultimately, the awareness of the developers and construction players with these impact factors is important to ensure the success of the project.

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