

THE EFFECT OF PROJECT MANAGER COMPETENCE ON THE ACHIEVEMENT OF CONSTRUCTION PROJECT PERFORMANCEMuhammad Fauzan Surya¹, Anita Rauzana², Alfa Taras Bulba³

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Effect, Project manager competence, Achievement, Construction project performance

Abstract

The development of the construction services sector in Indonesia continues to experience rapid growth, encouraging construction industry players to have quality human resources. This research aims to identify project manager competency factors on construction projects in Banda Aceh City, analyse the relationship between these and project performance achievements, and evaluate their influence on construction project performance achievements in Banda Aceh City. The object of this research is the competency factors of project managers that influence construction project performance. This research was conducted at contractor companies domiciled in the Banda Aceh City area. The data sources used in this research are primary data and secondary data. The population of contractors at small, medium and large qualification levels is 71 contractors. The total sample was 42 contractors. The sampling technique used was purposive sampling. The variables used in this research include the independent variable (X) and the dependent variable (Y). The data analysis used in this research is descriptive, simple correlation analysis and multiple linear regression analysis. The research results show that knowledge, skills, and attitudes have a solid relationship. In contrast, management has a high relationship with project performance achievement. Overall, the project manager's competency factor significantly affects project performance, reaching 94.9%. Management is the most dominant competency factor influencing the achievement of project performance in Banda Aceh City. Thus, increasing the competence of project managers, especially in management, is expected to improve the quality of construction project implementation in the region.

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**INTRODUCTION**

The construction services sector continues to experience rapid development in Indonesia. Along with these developments, construction service industry players must have high-quality human resources (Azis & Wahyono, 2016). Among the human resources that must be possessed in a construction job is a project manager with competence in the scope of work (Heryanto & Triwibowo, 2015). Considering that project authority is entirely under the auspices of the project manager, who is the liaison between the project organization and the company. The project owner is to carry out coordination and communication so that the project goals and objectives are achieved (Safriyal et al., 2017).

The success of a construction project is the main target to be achieved with the final results expected during the project implementation process, which consists of 3 (three) targets: time, cost and quality (Al-Nady, Al-Hawary, & Alolayyan, 2016). The role of the project manager influences one factor in achieving project success. For a job to be carried out well, a reliable project manager who knows his duties as a job leader and the competency requirements needed is needed (Psyché, Tremblay, Miladi, & Yagoubi, 2023). According to

research, project manager competency can be measured by 4 (four) aspects: knowledge, skills, attitude and management (Oei et al., 2023).

A project manager is appointed responsible for project management activities for the organization's benefit (Safrial et al., 2017). Therefore, appointing someone in charge of the project must be balanced with technical expertise, the ability to solve managerial problems, and a willingness to face and answer various challenges during project implementation. Based on this description, this research examined the influence of project manager competence on achieving construction project performance in Banda Aceh City.

This research aims to identify project manager competency factors on construction projects in Banda Aceh City, analyse the relationship between these factors and project performance achievement, and evaluate their influence on construction project performance achievement in Banda Aceh City.

This research aims to provide information to contractors regarding the competency factors of project managers on construction projects in Banda Aceh City, as well as to reveal the relationship between these competency factors and the achievement of project performance and their influence on the project's final results.

RESEARCH METHODS

This research aims to identify project manager competency factors that influence construction project performance. This research was conducted on contractor companies domiciled in the Banda Aceh City area. The data sources used in this research are primary and secondary data. Primary data was obtained directly from the results of distributing questionnaires. The type of questionnaire used is a closed questionnaire. Secondary data used in this research is a map of the Banda Aceh City area and a list of contractors registered as members of the Indonesian National Construction Implementation Association (GAPENSI) in 2022. The population of contractors at small, medium and large qualification levels is 71 contractors. Based on this number, the slovin formula was used with a precision level of 10%, thus obtaining a sample size of 42 contractors. The sampling technique used was purposive sampling with considerations based on the contractor company. The variables used in this research include the independent variable (X) and the dependent variable (Y). The data analysis used in this research is descriptive, simple correlation analysis and multiple linear regression analysis.

RESULTS AND DISCUSSION

In this research, questionnaires were distributed to 42 contractor companies domiciled in Banda Aceh City, and all of them returned the questionnaire with complete answers. The contractor company has qualifications K_1 , K_2 , K_3 , M_1 , M_2 , B_1 and B_2 . It is registered as a member of the National Construction Implementation Association (GAPENSI) in 2022.

The characteristics of respondents in this study consisted of gender, age, highest level of education, experience in the construction sector and company qualifications (Khan & Rasheed, 2015). The respondents were intended to be project managers from contractor companies in Banda Aceh City, with 42 respondents. The results of the recapitulation of respondent characteristics are as follows.

1. Gender characteristics

The characteristics of the 42 respondents showed that all respondents were male, namely 42 people (100.00 %). The distribution of respondents based on gender can be seen in Figure 1 below:

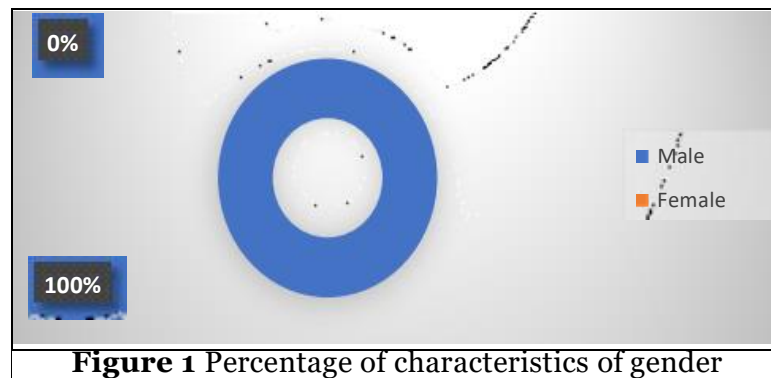


Figure 1 Percentage of characteristics of gender

2. Age characteristics

The characteristics of the 42 respondents show that the majority of respondents aged 31 - 40 years were 24 people (57.14%). Some of the respondents aged 41 - 50 years were 18 people (42.86%). The distribution of respondents based on age can be seen in Figure 2 below:

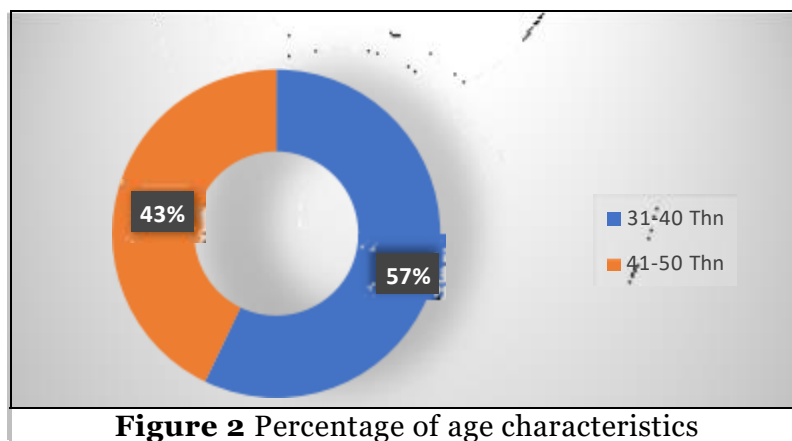


Figure 2 Percentage of age characteristics

3. Final educational characteristics

The characteristics of the 42 respondents showed that all respondents had a bachelor's degree educational background, namely 42 people (100.00%). The distribution of respondents based on their last education can be seen in Figure 3 below:

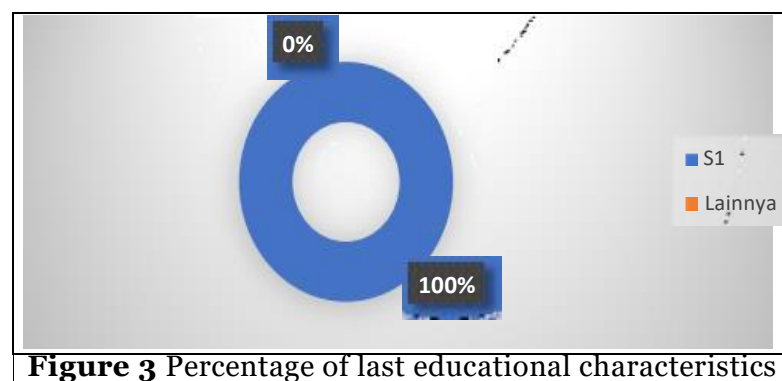


Figure 3 Percentage of last educational characteristics

4. Characteristics of construction experience

The characteristics of the 42 respondents showed that the small number of respondents with 6 - 8 years of experience were two people (4.76%), while the majority of respondents had > 8 years of experience, 40 people (95.23.00%). The distribution of respondents based on experience in the construction sector can be seen in Figure 4 below:

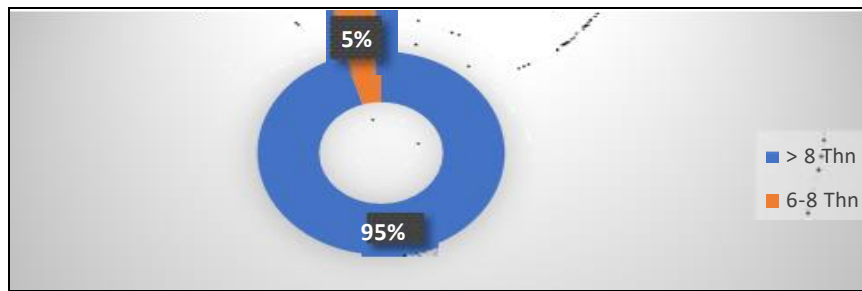


Figure 4 Percentage of characteristics of construction experience

5. Qualification characteristics of the company

K₁ company qualifications were eight people (19.05%). In second place were 14 respondents with K₂ company qualifications (33.33%), followed by eight respondents with K₃ company qualifications (19.05%), followed by four respondents with M₁ company qualifications (9.52%).), then respondents with company qualifications M₂ were five people (11.90%), followed by respondents with company qualifications B₁ as many as two people (4.76%) and in last place were respondents with company qualifications B₂ as many as one person (2.38%). Distribution of respondents based on company qualifications can be seen in Figure 5 below:

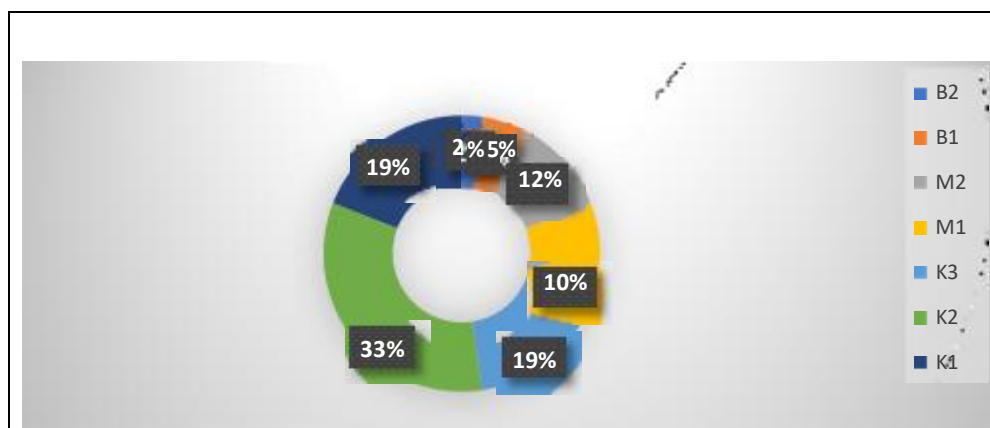


Figure 5 Percentage of characteristics of construction experience

Based on the perspective of project managers from contractor companies, the relationship and influence of project manager competency factors on achieving project performance in Banda Aceh City and the most dominant competency factors that influence project performance achievement in Banda Aceh City are described as follows.

Relationship between project manager competency factors

The relationship between project manager competency factors and project performance achievements in Banda Aceh City has been analyzed through simple correlation (Kamil, Utaya, & Utomo, 2020). This analysis shows that knowledge, skills and attitudes partially have a very high relationship, and management has a high relationship with the achievement of project performance in Banda Aceh City (Eridafithri, 2015). This is in line with research conducted by researchers, which shows that project manager competency factors are related to the success of river construction projects at the Aceh Irrigation Service (Sadiqi, Trigunarsyah, & Coffey, 2017). The project manager's competency factor positively correlates with project performance achievement. This is because competence is a fundamental factor that can integrate cost, quality, and scope to achieve the desired quality of work (Demirkesen & Ozorhon, 2017).

The influence of project manager competency factors

The influence of project manager competency factors on project performance achievement in Banda Aceh City has been analysed through multiple linear regression (Hibrida & Sumual, 2022). Multiple linear regression coefficients on competency factors all positively influence project performance achievement in Banda Aceh City (Sanggoro, Widyaningsih, & Bintoro, 2020). The magnitude of this influence is proportional to the regression coefficient produced by each competency factor. In this case, the increase in achieving the highest project performance is shown by management (X_4), sequentially followed by knowledge (X_1), attitude (X_3) and finally, expertise (X_2).

Interpreting the significance value shows that increasing project manager competency factors will be followed by achieving project performance in Banda Aceh City. The results of the F test show that all competency factors simultaneously influence 94.9% of achieving project performance in Banda Aceh City. Meanwhile, the remaining 5.1 % was influenced by other factors not examined in this research. This aligns with research showing that project manager competence can significantly improve the construction process (Azis & Wahyono, 2016).

The dominant factor in achieving project performance

The manager competency factor that has the most dominant influence on project performance achievement in Banda Aceh City has been analyzed through multiple linear regression (Juned, Sanjaya, & Ikhbar, 2021). This research shows that management has a regression coefficient value of 0.069 and a significance value of $0.017 < 0.05$. Therefore, management is the most dominant project manager competency factor influencing project performance in Banda Aceh City. This is in line with research conducted by researchers, which shows that management factors influence project success. Management is a core skill that a project manager must have a project manager must know how to manage projects effectively with team members involved in project implementation (Hastono, 2023).

CONCLUSION

The research results show that knowledge, skills, and attitudes have a solid relationship. In contrast, management has a high relationship with project performance achievement in Banda Aceh City. Overall, project manager competency factors significantly influence project performance in the city, reaching 94.9 %. The most dominant competency of project managers is management, indicating that improving management by contractors will significantly increase project performance achievements.

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