

PROJECT MANAGER COMPETENCY ON PROJECT SUCCESS IN THE CONCEPT OF SCOPING REVIEW: CONSTRUCTION PROJECT PERSPECTIVE OF PT. MMS GRUP

ABSTRACT

Previous literature reviews have explored the relationship between project manager competency and construction project success. The purpose of this scoping review is to map existing studies that assess the influence of project manager competency on construction project success. The main stages of the scoping review are: (1) identifying research questions; (2) identifying relevant studies; (3) selecting studies; (4) charting data, and (5) compiling, summarizing, and reporting results. Over a 10-year time span (2015-2024), the results of the scoping review indicate that most studies acknowledge that project manager competency influences construction project success. However, as has been claimed by Sonelma and Sucita (2022) that the project manager's competence does not affect the success of a construction project.

Keywords:: Project manager competency, Construction project success, Scoping Review

1. INTRODUCTION

A project is an activity carried out with limited resources and time to achieve predetermined goals. The series of activities consists of planning, designing, implementing construction and maintenance (Trisnawati, 2018). In a series of activities, the project should not be free from problems/constraints. Both in terms of cost, quality and time are three problems/constraints that are often encountered in projects and are generally often associated as a measure of project success, namely right cost, right quality and right time (Zulaecha, 2021).

The success of a construction project is the result of the competence of the project manager and the maturity of the project management organization. Likewise, according to PMCDF - Second Edition, the success of a construction project is greatly influenced by the competence of the project manager (Zulaecha, 2021). The success of a project is influenced by how and who manages it. A project manager is someone who is appointed to be responsible for the daily activities of project management for the benefit of the organization (Brahma, et al. 2016).

Sufa (2012) stated that a project manager is a person who is assigned to be responsible for project management activities for the benefit of the project organization. Under full authority, the project manager can be an intermediary between the project organization and the company, as well as coordination and communication between project owners. According to Marpaung (2014), the success of an organization depends on the leadership factor, leaders must play a role that can motivate subordinates and be full of initiative and wisdom in decision making. Riskawati (2021) stated the results of her research that leadership has a significant effect on job satisfaction, based on the results of the study it is known that leadership also has a significant effect on organizational effectiveness.

PT. MMS Group Indonesia. A company that is a multinational company that is developing in the coal mining and trading sector which then expanded into the property sector and sustainable businesses in accordance with the principles of Sustainable Development Goals (SDGs). In facing competition in the Property Industry in particular, the role of a leader is certainly a top priority. One of the factors in achieving project success is influenced by the role of a project manager. To achieve project success, a reliable project manager is needed, who knows the scope of his duties as a project leader and has the required competency requirements. The competence of a project manager can be measured by three aspects, namely knowledge, skills and attitude (Brahma, et al. 2016).

Article 11 of Law of the Republic of Indonesia No. 18 of 1999 explains the responsibility of construction planners, construction implementers and construction supervisors for the results of their work. This responsibility is based on the principles of expertise according to scientific principles, compliance, and intellectual honesty in carrying out their profession while still prioritizing the public interest. MMS Group Indonesia (MMSGI) again wins award TOP CSR Awards with the Excellence or 5 star category. MMSGI also won the title of Top Leader on CSR Commitment 2023 which was given to Adri Martowardojo as the representative of MMSGI. This achievement is better than the previous year in the TOP CSR Awards 2022, at that time MMSGI won 4 stars or the Very Good category. From this predicate, of course, the role of leadership is needed so that a commitment is created to achieve both corporate responsibility and social responsibility outside the company. (mediaindonesia.com)

From this form of responsibility, there needs to be commitment and also competence from project managers so that project success is achieved and does not result in project failure. For example, the case of the construction of the Badung Integrated Licensing Service Agency (BPPT) building did not show any project progress. The project worth billions of rupiah is still far from the target set by the Badung Public Works Agency. The target for completion of the BPPT project fell in mid-December 2014, but until now the target that has only been achieved is 67.04%. The failure to achieve the target was due to the division between workers and work being inefficient. Another case is the delay in the SD 17 Dauh Puri Denpasar project which was 20 percent late. The project that should have been completed according to the contract on November 20, 2014, but only reached 55% of the target of 75%. So the contractor's performance was considered very poor, this reflects how the project manager managed the project (Brahma, et al. 2016)

Project delays will have an impact on cost overruns, so this is where the role of a project manager is needed. As stated above, a project is said to be successful if the cost, time, and quality factors have been achieved. If one of them is not met, then the project is not yet considered successful (Brahma, et al. 2016). According to several previous research results that tested the influence of project manager competence on the success of construction projects conducted by Brahma, et al. (2016), Riskawati, et al. (2021), Prianto, et al. (2012), Imansyah, R Dita (2022), Zulaecha et, al. (2021), concluded that there is a significant influence on project manager competence on project success.

However, this is different from the research results of Sonelma and Sucita (2022), which stated that leadership skills and strategic business management do not influence the success of construction projects. There is a gap in this research so further research needs to be conducted on project manager competency towards project success. This research is expected to be an input to PT MMS Grup Indonesia in managing human resources regarding project manager competency and project success. And from an academic perspective, it is expected that the results of this study can be a reference and contribute to the development of human resource theory insights, especially regarding the relationship between project manager competency and project success.

2. METHODS

This research is a literature research or literature review, namely a research process that involves reviewing and critically evaluating existing literature sources. The main purpose of a literature review is to understand and describe the current state of research in the field related to the topic being studied (Ferdiansyah, 2024). By conducting a literature review, researchers can find current knowledge, identify existing research gaps, and develop a strong theoretical basis for the research to be conducted.

2.1 Identifying research questions

Identifying research questions at the early stage of the research review, because by determining research questions, researchers can design a strategy for conducting a literature search by ensuring substantive areas with research topics. The research question is How is the existing literature on the relevance of project manager competency and project success?

2.2. Identifying relevant studies

The data in this study are secondary data in the form of previous research results related to project manager competency and project success obtained through online searches of national and international scientific journals. The criteria for journals to be reviewed are research journal articles with the subject of companies that examine project manager competency and project success in various countries.

The criteria used in the literature search process are illustrated in Table 1 regarding, the time period used is 15 years, from 2009 to 2024. The 15-year time span is considered sufficient to trace the relevance of competitive advantage research. The type of publication selected is an empirical article that has been published in English. The geographical area is not limited to certain countries. All empirical studies from various countries are included in the criteria as long as they meet the other criteria mentioned previously.

Table 1 Inclusion Criteria

Criteria	Inclusion	
Period	2010-2024	15 years of observation
Language Types	Indonesian and English	Some articles are in English
Publication Type	Journal Articles	Empirical Articles
Geographical Area	All	Findings from all countries

2.3 Study Selection

The results of searching three electronic databases using Google Scholar and Scopus. These articles were then examined to determine their suitability to the research question. The articles were also examined to find possible duplicate articles in different databases. Most of the articles that did not match the research question were because they did not discuss the relationship between project manager competency and project success.

2.4 Mapping Data

In the data charting stage, selected articles are extracted to summarize the most substantial data. The data recorded are data on authors, titles, research years, research locations, designs/methods, and findings.

2.5 Compiling, Summarizing, and Reporting Results

The final stage of the scoping review is compiling, summarizing, and reporting the research results. Compiling produces a table containing the article extractions carried out at the data mapping stage. Summarizing produces a model or main pattern of the main findings, and reporting produces a report format, which in this case is for publication purposes.

Table 2 : The following is a table of the results of collecting articles from 2010-2024:

No	Researcher	Research Title	Variables	Analysis Tools	Research result
1	Sonelma and Sucita (2022)	The Influence of Project Manager Competence Towards the Success of Building Construction Projects Apartment X	Project manager competencies: 1. Technical Project Management (X1), 2. Leadership Skill (X2) and Strategic and 3. Business Management (X3) 4. Project Success (Y)	SPSS, multiple linear regression	Technical Project Management influences the success of construction projects. whereas leadership skills and strategic business management do not influence the success of construction projects
2	Imansyah and Dita (2022)	The Influence of Managerial Competence on Project Performance On Building Construction Projects in Jabodetabek	Competence managerial as (X) Project performance (Y)	SEM-PLS	Competence Managerial has a positive and significant influence on Project Performance
3	Zulaecha et.al. (2021)	Role of Project Manager Towards the Success of Construction Projects	1. Project manager (X) competencies: Knowledge, Performance, and Personal 2. Project Success (Y)	SPSS	performance is a competency variable project manager with the largest Beta value, so this variable can be said to be the one most dominant influence on the success of building construction projects. The order of project manager competency variables that have a dominant influence after the performance variable and followed by knowledge and personal variables.
4	Brahma et al. (2016)	Relationship between Project Manager Competence and Building Construction Project Success	Project competencies : 1. Knowledge (X1), 2. Skill (X2), 3. Attitude (X3) 4. Project success (Y)	SPSS	Stakeholders and Risk Management, Human Resources Management, Leadership and Projects Management, Professionalism and Issues Management, Responsibility, Dream

					and Priority has an influence on project success variables.
5	Riskawati et al. (2021)	The Influence of Project Manager Leadership and Competence on Job Satisfaction and Organizational Effectiveness in Construction Division I PT.	<ol style="list-style-type: none"> 1. Leadership (X1), 2. Competence (X2) 3. Job Satisfaction (Y1) 4. Organizational Effectiveness (Y2) 	SPSS, Path Analysis	Leadership and competence Project managers have a positive and significant influence on organizational effectiveness through job satisfaction in Construction Division I of PT Adhi Karya (Persero) Tbk.
6	Prianto.,et .al (2012)	The Influence of Project Manager Competence on Project Success In Contractor Company In Malang Regency	<ol style="list-style-type: none"> 1. Knowledge (X1), 2. Skill (X2) 3. Work Commitment (X3) 4. Project Success (Y) 	SPSS, Regression	Variables knowledge, skills, work commitment and top management has a significant influence towards project success of 0.831. Partially, the variables of knowledge, expertise, work commitment and top management have a significant influence on project success were 0.286, 0.296, 0.280 and 0.147 respectively.
7	Surya, et.al. (2024)	The Effect Of Project Manager Competence On The Achievement Of Construction Project Performance	<ol style="list-style-type: none"> 1. Knowledge (X1) 2. Skill (X2) 3. Attitude (X3) 4. Project Performance (Y) 	SPSS, Regression	The research results show that knowledge, skills and attitudes have a solid relationship. relationship. On the other hand, management has a high relationship with project performance. achievement in Banda Aceh City. Overall, the project manager competency factor significantly influencing project performance in the city, reaching 94.9%. The most dominant competency project manager is management, indicating that improving management by contractors

					will significantly improve project performance achievement
8	Prihatmoko, (2016)	Relationship Between Teamwork Competencies And the Effectiveness of Project Teams in USD Psychology Students' Group Work	<ol style="list-style-type: none"> 1. Teamwork Competence (X) 2. Project Team Work Effectiveness (Y) 	SPSS	There is a relationship positive and significant between teamwork competencies and project team effectiveness
9	Inoprasetyo, et al. (2021)	Competence, Organizational Commitment, and Motivation Towards Employee Performance Verbasar Perum Peruri Karawang	<ol style="list-style-type: none"> 5. Competence (X1) 6. Organizational Commitment (X2) 7. Motivation (X3) 8. Employee Performance (Y) 	Path Analysis	The results of the study using path analysis stated that the partial influence competence on performance by 26.5%. This shows that competence has positive contribution to performance. The partial effect of organizational commitment on performance is 62.1%. The partial effect of motivation on performance is 4.4%.
10	Rauzana (2022)	The influence of project manager competencies on the success of construction projects: A case of Indonesia.	<ol style="list-style-type: none"> 1. knowledge factor (X1) 2. Project Success (Y) 	SPSS, Regression	Based on the findings, the knowledge factor found to be a dominant factor in the application of project manager competencies in construction projects in Aceh Province. This shows that the knowledge possessed by a project manager is very influential. success of a construction project. The high level of knowledge of a project manager is influenced by the manager's level of education, work experience, understanding and mastery of project needs, and fulfillment fulfillment of the scope of work on the project so that the project runs according to plan

3. RESULTS AND DISCUSSION

Based on a 15-year time span and 10 empirical studies that match the research questions, with (100%) research conducted in Indonesia. This study examines the relevance of project manager competency to the success of construction projects conducted by Sonelma and Sucita (2022), Imansyah and Dita (2022), Zulaecha et.al. (2021), Brahma et.al (2016), Riskawati et.al. (2021), Prianto.,et.al (2012), Surya, et.al. (2024), Prihatmoko, (2016), Inoprasetyo, et al. (2021), Rauzana (2022).

Sonelma and Sucita (2022) conducted research on 30 employees of company Y who had at least two years of work experience and understood project management in the field of building construction services on the X Apartment development project. The aim of this research was focused on the magnitude of the influence of the application of project manager competencies on the success of building construction projects in apartment project X. Research findings show that based on the results of the author's research that the Leadership skill aspect has a low level of relationship and does not significantly influence the success of building construction projects, but this aspect must still be considered because based on the results of multiple linear regression analysis, the Leadership skill competence of project managers increases the success value of building construction projects. From the results of the hypothesis test (t-test) it was concluded that there was no significant influence of the Strategic and Business Management Project Manager competence on the success of construction projects.

Imansyah and Dita (2022) this study used 112 respondents. all respondents are professionals working on building construction projects in Jabodetabek (Jakarta, Bogor, Depok, Tangerang and Bekasi). The approach used in this study is a quantitative approach with an instrument in the form of a questionnaire. The research data obtained from the results of filling out the questionnaire were analyzed using the SEM PLS analysis technique with the help of the SmartPLS program. The results of this study indicate that managerial can affect project performance.

Zulaecha, et.al. (2021) Data collection was carried out by distributing questionnaires to 6 building construction projects being worked on by private companies such as contractors, construction management and owners. Data processing uses statistical analysis methods using SPSS software. The results of the analysis of knowledge, performance and personal variables show that the variable that has the most influence on the success of building construction projects is the performance variable followed by the knowledge variable.

Brahma, et.al. (2016) Respondents in this study were those who were experienced in the field of building construction and acted as project managers. Data processing was carried out in three stages, namely factor analysis to reduce/summarize the many variables into several groups of factors which then became new independent variables, continued to the correlation test stage with the Pearson Correlation method to determine the relationship between independent variables and dependent variables and finally conducting multiple linear regression analysis. The results of the factor analysis show that the variables are formed into eleven groups of factors, the results of the Pearson Correlation test show that only six groups of factors are correlated with project success, including: Communication and Scope Management, Human Resource Management which is part of knowledge; Leadership and Project Management, Professionalism and Issue Management as part of skills; and attitude concerning Responsibility, Dreams and Priorities. The six groups of factors will be independent variables in the multiple linear regression analysis. From the results of the multiple correlation test, the six independent variables together have an influence on project success, as evidenced by the resulting probability value of 0.032.

Riskawati., et. Al (2021) population on This study was 209 employees of the Construction Division at PT Adhi Karya (Persero) Tbk in 2021. The research sample used the Slovin formula, namely 138 respondents using probability sampling technique. The purpose of this study was to examine the influence of leadership and project manager competence on job satisfaction and organizational effectiveness in the Construction Division at PT Adhi Karya (Persero) Tbk. The results of the study statistically prove that leadership and project manager competence have a positive and significant effect on job satisfaction and organizational effectiveness. Leadership and project manager competence through job satisfaction as an intervening variable have a positive and significant effect on organizational effectiveness. Job satisfaction as an intervening variable has a positive and significant effect on organizational effectiveness.

Prianto . et.al (2012) The purpose of this study is to determine how big the role of a simultaneous and partial between knowledge, skills and attitudes of project managers for project success, and to determine the most dominant factors that influence the success of a project. This study uses survey research conducted on company contractors in Malang. The population in this study is contractor management as Project Manager, Supervisor, Leader, Contractor (Director) or authorized by the Company. The test results in this study indicate the variables of knowledge, skills variables, attitudes and behavior / work commitment, top management variables on average have an important influence in determining project success.

Surya, et al. (2024) This study aims to identify the project manager competency factors in construction projects in Banda Aceh City, analyze the relationship between this and project performance achievement, and evaluate its influence on construction project performance achievement in Banda Aceh City. This study was conducted on contractor companies domiciled in the Banda Aceh City area, there were 42 respondents studied. Overall, project manager competency factors significantly affect project performance, achieving 94.9%. Management is the most dominant competency factor influencing the achievement of project performance in Banda Aceh City. Thus, improving the competency of project managers, especially in management, is expected to improve the quality of construction project implementation in the region.

Prihatmoko., Et.al (2016) The subjects of this study were 86 students who took the industrial and organizational psychology course at the undergraduate program in psychology, Sanata Dharma University. The purpose of this study was to determine the relationship between teamwork competence and project team effectiveness involved in student assignment groups at the Faculty of Psychology, Sanata Dharma University. The results of this study stated that There is a positive and significant relationship between teamwork competence and project team effectiveness of students involved in group assignments in the Industrial and Organizational Psychology Class.

Inoprasetyo, et.al. (2021) this research was conducted on 135 employees of the Department Verbasar Perum Peruri. The results of the study using path analysis stated that the partial influence of competence on performance was 26.5%. This shows that competence has a positive contribution to performance. The partial influence of organizational commitment on performance by 62.1%. This shows that organizational commitment has a positive contribution to performance. The partial effect of motivation on performance is 4.4%. This shows that motivation has a positive contribution to performance. Competence, Organizational Commitment and Motivation have an effect on Performance with the test criteria of sig. (0.000) $< \alpha$ (0.05) and f count (16.609) $>$ t table (1.390), then H_0 is rejected. The Total Influence of Competence (X1), Organizational Commitment (X2) and Motivation (X3) has a contribution to

Performance (Y) of 93.0% while the remaining 7% is the contribution of other variables (ϵ) that were not studied

Rauzana (2022) This study aims to determine the project manager competencies that have the most significant influence on the success of construction projects. The data used are questionnaires distributed to 43 respondents working in contractor companies located in Aceh Province, Indonesia. The findings show that the knowledge factor is dominant among all project manager competencies needed to carry out construction projects in Aceh Province. This shows that the knowledge possessed by a project manager significantly affects the successful implementation of these projects.

4. CONCLUSION

The relevance of project manager competency to project success from various research results has undergone many developments. The inconsistency of the research results on project manager competency to project success offers a research gap that connects the two, either mediating or moderating. This scoping review has mapped the existing literature assessing the relevance of project manager competency to project success. The review of the scope of the articles reviewed has several limitations that may be included in the electronic databases of Google Scholar and Scopus.com. In addition to searching using the desired keywords of the researcher. The research question for this study is limited to "What is known from the existing literature about the relevance of project manager competency to project success?" Several criteria in the search for the scope of articles that can be the foundation of research conducted with a span of 15 years are considered to be able to represent the results of research developments on project success, with types of publications in various countries so as to provide broader insights.

This study is limited to examining project manager competency and project success. Further research is expected to be able to add other variables because this study only examines project success influenced by project manager competency, but it does not rule out the possibility of other factors outside this study.

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