



Analysis of Factors Influencing Contractor Profit and Loss in Construction Projects: A Case Study of the Boemi Oemmi Luxury Kost Garut Development

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Abstract: Construction projects often face financial challenges that can lead to contractor profits or losses during project implementation. Factors such as labor productivity, material availability, equipment management, financial conditions, and field conditions may significantly affect contractor financial performance. Therefore, identifying these factors is important to improve project management and reduce financial risks. **Objective:** This study aims to analyze the factors influencing contractor profits and losses in the Boemi Oemmi Luxury Kost Garut construction project and to identify the most dominant factors as well as the actions implemented to address these factors. **Method:** This research employed a quantitative descriptive approach. Data were collected through questionnaires distributed to respondents involved in the construction project, including contractors, consultants, and project owners. The sampling technique used was purposive sampling. The collected data were analyzed using descriptive statistical methods, including mean value analysis and the Relative Importance Index, to determine the ranking of factors influencing contractor profits and losses. **Findings:** The results show that labor factors are the most dominant factor influencing contractor profits and losses in the Boemi Oemmi Luxury Kost Garut development project, while equipment factors have the lowest influence. In terms of the implementation of actions to address these factors, material-related issues were found to be the most highly applied factor, whereas weather-related factors were the least applied. **Implications:** The findings of this study provide practical implications for construction project stakeholders by emphasizing the importance of improving workforce productivity, strengthening material procurement planning, and enhancing project management strategies to minimize financial risks and improve contractor profitability. **Originality:** The originality of this study lies in its empirical analysis of contractor profit and loss factors within a specific construction project context using a structured ranking approach through the Relative Importance Index, which provides a systematic evaluation of factors influencing contractor financial performance.

Keywords: Construction Project Management; Contractor Profitability; Project Management Factors; Construction Risk Management; Relative Importance Index.

INTRODUCTION

The construction sector continues to play a strategic role in Indonesia's economic development because it supports infrastructure provision, employment creation, and regional growth. Official data from BPS-Statistics Indonesia show that construction remained the fourth-largest sector in the national economy and contributed 10.43% of

Indonesia's GDP in the fourth quarter of 2024 ([Badan Pusat Statistik, 2025](#)). At the same time, increasing urbanization and population mobility continue to intensify the need for housing and other residential facilities. Recent literature also indicates that Indonesia still faces a substantial housing backlog, showing that the demand for adequate and accessible housing remains high and has not yet been fully met ([Herawati et al., 2022](#)). This condition suggests that the growth of construction activity is closely linked not only to macroeconomic expansion but also to the persistent need for residential development in urban and semi-urban areas.

One practical response to this growing residential demand is the expansion of boarding house (kost) development, particularly in areas with concentrations of students, workers, and mobile urban populations. Recent Indonesian research reports that boarding houses are commonly chosen by students and workers who need temporary accommodation near campuses or workplaces, and that demand for such housing continues to rise in line with mobility and temporary residence needs ([Lenong, 2026](#)). However, although boarding house construction projects offer significant business opportunities, they also expose contractors to various operational and financial risks. In practice, many construction projects experience cost deviations, delays, and inefficiencies caused by weak planning, late material delivery, resource constraints, and unstable project execution conditions. Therefore, understanding the factors that influence contractor profits and losses is essential for improving project performance and minimizing the risk of financial loss in building construction projects.

Previous studies have extensively investigated construction project delay factors, which are considered one of the main causes of poor project performance. Research shows that delays often occur due to poor planning, ineffective scheduling, weak coordination among project stakeholders, and inadequate site supervision ([Kanan, 2020](#); [Tahmasebinia & Song, 2022](#)). Other studies also indicate that operational constraints such as material delivery delays, low labor productivity, insufficient skilled workers, and inefficient equipment utilization significantly contribute to time overruns in construction projects ([Koirala & Shahi, 2024](#); [Nadeem et al., 2023](#); [Susanti et al., 2021](#)). In addition, external conditions such as design changes, weather disturbances, regulatory processes, and environmental constraints may further intensify construction delays across various project sectors ([Kim & Bilbao, 2023](#); [Nguyen et al., 2023](#); [Yaqub et al., 2026](#)). These findings

suggest that construction delays arise from a combination of managerial, technical, and environmental factors.

Another stream of research focuses on critical success factors (CSFs) in construction project management. Studies consistently identify time, cost, quality, and safety as the fundamental indicators of project success, supported by effective communication, competent project teams, and strong stakeholder coordination (Borges et al., 2025; Maghsoodi & Khalilzadeh, 2018; Zahoor & Ali, 2023). Leadership capability, decision-making skills, and management support are also widely recognized as important elements in ensuring effective project implementation and coordination among project participants ((Aneesha & Haridharan, 2017; Gudiene et al., 2013; Herath & Chong, 2021). Furthermore, adequate availability of resources such as financial capital, materials, equipment, and skilled labor has been identified as an essential factor in achieving project success (Aragaw & Cherkos, 2025; Hanafi et al., 2023). These studies emphasize the importance of effective project management practices in improving construction project performance.

In addition to project management factors, several studies examine contractor profitability in construction projects, highlighting the financial and managerial challenges faced by contractors. Research shows that contractor profitability can be significantly affected by payment delays, cost inflation, design errors, and equipment damage, which increase project expenses and reduce profit margins (Oleah et al., 2022). Other studies reveal that financial mismanagement, inaccurate cost estimation, and intense competitive bidding environments can also negatively affect contractor financial performance (Buhamizo et al., 2023; Jung et al., 2018). Moreover, research on construction firms indicates that profitability can be improved through effective risk management, strategic project selection, and stronger collaboration among project stakeholders (Asamoah et al., 2022; Tamer et al., 2012). However, previous studies generally analyze construction delays, success factors, and contractor profitability separately. Only limited research integrates these operational factors within a specific construction project context to explain how they collectively influence contractor profit and loss.

Based on these limitations, this study aims to analyze the factors influencing contractor profits and losses in the Boemi Oemmi Luxury Kost Garut construction project. Specifically, the study seeks to identify and evaluate the influence of labor, material, equipment, financial, and field factors on contractor financial outcomes. Furthermore, the research aims to determine the most dominant factors affecting contractor profitability by

ranking the level of influence of each factor based on respondents' assessments. Through this approach, the study is expected to provide a more contextual understanding of the determinants of contractor profit and loss in building construction projects.

Based on the research problems and objectives, this study argues that contractor profits and losses are influenced by several operational and managerial factors during project implementation. Previous studies indicate that labor productivity, material availability, equipment efficiency, financial stability, and field conditions significantly affect construction project performance. Ineffective management of these factors may lead to delays, cost overruns, and financial losses for contractors. Therefore, this study hypothesizes that labor, material, equipment, financial, and field factors significantly influence contractor profits and losses in the Boemi Oemmi Luxury Kost Garut construction project, with certain factors expected to have a more dominant influence than others.

RESEARCH METHOD

This study focuses on the factors influencing contractor profits and losses in the Boemi Oemmi Luxury Kost Garut construction project. The unit of analysis in this research is the respondents directly involved in the implementation of the project, including personnel from the contractor, consultant, and project owner. These respondents were selected because they possess relevant knowledge and experience regarding project execution, resource management, and operational conditions that may affect contractor profitability.

This research employed a quantitative descriptive design. This design was chosen because the study aims to identify, measure, and describe the level of influence of several factors on contractor profits and losses based on respondents' assessments. A quantitative approach is appropriate for this study because it allows respondents' perceptions to be transformed into numerical data that can be systematically analyzed, compared, and ranked. Through this approach, the study can determine which factors are more dominant in influencing contractor financial outcomes in the project.

The data used in this study were primarily obtained from primary sources, namely respondents who were directly involved in the Boemi Oemmi Luxury Kost Garut construction project. The respondents consisted of representatives of the contractor, consultant, and project owner. In addition, supporting project-related information was used to strengthen the understanding of the research context. The primary data focused on

respondents' perceptions regarding labor, material, equipment, financial, and field factors influencing contractor profits and losses, as well as the implementation of actions taken to address these factors.

Data collection was conducted using a questionnaire survey distributed to selected respondents. The sampling technique used in this study was non-probability sampling, specifically purposive sampling, in which respondents were intentionally selected based on certain criteria and considerations related to their involvement in the project. The questionnaire was designed using a four-point Likert scale. For the analysis of factors influencing contractor profits and losses, the response categories consisted of very influential (4), influential (3), less influential (2), and no effect (1). For the analysis of the implementation of corrective actions, the response categories consisted of highly applied (4), applied (3), less applied (2), and not applied (1). Before the main data collection was carried out, the questionnaire items were tested for validity and reliability to ensure that the instrument was suitable for measuring the intended variables.

The collected data were analyzed using descriptive statistical analysis. First, the questionnaire responses were organized, checked for completeness, and classified according to each research variable. Next, the score of each statement item was calculated to obtain the mean value of each factor using the formula

$$\bar{x} = \frac{\sum x_i}{n},$$

where \bar{x} is the average value, x_i is the score given by respondents, and n is the number of respondents. After that, the Relative Importance Index was calculated using the formula

$$RII = \frac{\bar{x}}{m}$$

where $m = 4$ represents the highest scale value. The mean and RII values were then used to rank the factors from the highest to the lowest score in order to determine the most dominant factors influencing contractor profits and losses, as well as the most strongly implemented corrective actions in the project. The overall stages of the research process are illustrated in Figure 1.

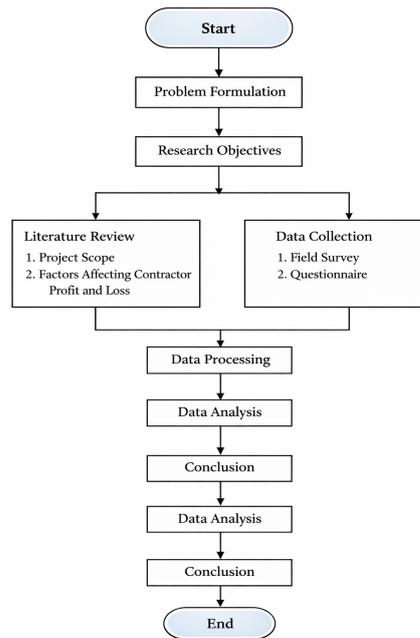


Figure 1. Research flowchart

RESULT

Validity and Reliability Test Results

Before the questionnaire was used to collect data from 30 respondents, its validity and reliability were first tested. Validity testing aims to ensure that each item in the questionnaire accurately measures the intended aspect. Validity is used to assess the appropriateness of each statement in the questionnaire in describing a variable. In this study, validity testing was conducted using SPSS version 2025 software by comparing the corrected item-total correlation (r-count) value with the r-table ($df = n-2$, $\alpha = 5\%$), which resulted in an r-table of 0.361. A questionnaire item is considered valid if the r-count is greater than the r-table; if the r-count is less than the r-table, the item is considered invalid. Instrument reliability testing aims to assess whether the questionnaire prepared as a data collection tool produces consistent results when applied at different times or locations. Reliability testing through internal consistency is conducted by testing the instrument once, then analyzing the results using specific techniques to predict its level of reliability. In this study, reliability testing was conducted using SPSS version 2025 software by comparing the Cronbach's alpha value to the r table. If the Cronbach's alpha value is less than the r table, the instrument is considered unreliable. Conversely, if the Cronbach's alpha value is greater than 0.60, the instrument is considered reliable.

The results of the validity and reliability tests are presented in Tables 1 through 4 below:

Table 1. Results of the Validity and Reliability Test for the Labor

Item	R count	<i>Cronbach's Alpha</i>	R Table	Description
A.1.1	0.625	0.727	0.361	Valid and Reliabel
A.1.2	0.682		0.361	Valid and Reliabel
A.1.3	0.873		0.361	Valid and Reliabel
A.1.4	0.789		0.361	Valid and Reliabel

Table 2. Results of the Validity and Reliability Test of Material Factors

Item	R count	<i>Cronbach's Alpha</i>	R Table	Keterangan
B.1.1	0.769	0.661	0.361	Valid and Reliabel
B.1.2	0.767		0.361	Valid and Reliabel
B.1.3	0.607		0.361	Valid and Reliabel
B.1.4	0.731		0.361	Valid and Reliabel

Table 3. Results of the Validity and Reliability Test of the Equipment Factor

Item	R count	<i>Cronbach's Alpha</i>	R Table	Description
C.1.1	0.687	0.708	0.361	Valid and Reliabel
C.1.2	0.852		0.361	Valid and Reliabel
C.1.3	0.695		0.361	Valid and Reliabel
C.1.4	0.768		0.361	Valid and Reliabel

Table 4. Results of the Validity and Reliability Test of the Implementation Factor

Item	R count	<i>Cronbach's Alpha</i>	R Table	Description
D.1.1	0.836	0.812	0.361	Valid and Reliabel
D.1.2	0.869		0.361	Valid and Reliabel
D.1.3	0.806		0.361	Valid and Reliabel
D.1.4	0.711		0.361	Valid and Reliabel

Table 5. Results of the Validity and Reliability Test of Financial Factors

Item	R count	<i>Cronbach's Alpha</i>	R Table	Description
E.1.1	0.736	0.613	0.361	Valid and Reliabel
E.1.2	0.657		0.361	Valid and Reliabel
E.1.3	0.863		0.361	Valid and Reliabel
E.1.4	0.436		0.361	Valid and Reliabel

Table 6. Results of the Validity and Reliability Test of Field Factors

Item	R count	<i>Cronbach's Alpha</i>	R Table	Description
F.1.1	0.628	0.649	0.361	Valid and Reliabel
F.1.2	0.801		0.361	Valid and Reliabel
F.1.3	0.862		0.361	Valid and Reliabel
F.1.4	0.491		0.361	Valid and Reliabel

General Data

The general data collected by the respondents included: Gender, Age, Last Education, Type of Ownership, Position within the Company, Work Experience, Average Project Duration, and the applicable/eligible questionnaires distributed to the respondents. The following is the complete general data on the respondents:

1. Gender

Based on Respondent Gender, 21 (70%) respondents were male and 9 (30%) respondents were female. Respondent data was grouped by gender.

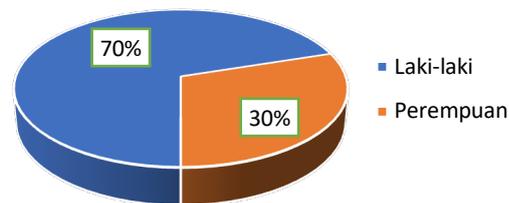


Figure 2. Gender

2. Respondent Age

Based on the research, the respondents' ages were as follows: 0 respondents aged 18-22 years (0%), 18 respondents aged 22-27 years (60%), 7 respondents aged 27-32 years (23%), and 5 respondents aged >32 years (17%).

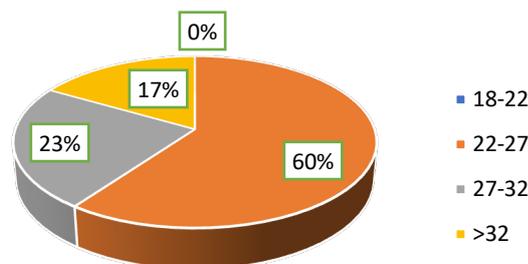


Figure 3. Respondent's Age

3. Respondents' Last Education

Based on the research, the respondents' last education was obtained: 10 respondents had a high school/vocational high school (33%), 0 respondents had a diploma (D3) (0%), 17 respondents had a bachelor's degree (57%), 3 respondents had a master's

degree (10%), 0 respondents had a doctoral degree (0%), and 0 respondents had other degrees (0%).

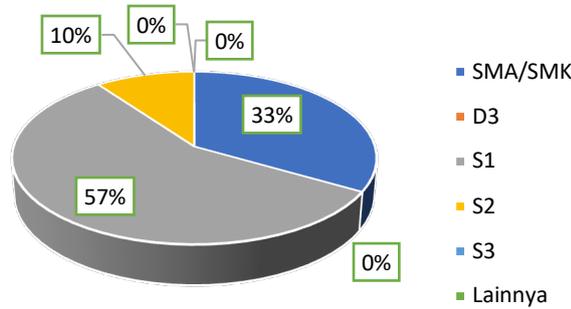


Figure 4. Respondents' Last Education

4. Type of Ownership

Based on the research, the types of ownership of respondents were: 0 respondents were state-owned enterprises (0%), 24 respondents were private companies (80%), 2 respondents were individuals (7%), and 4 other respondents (13%).

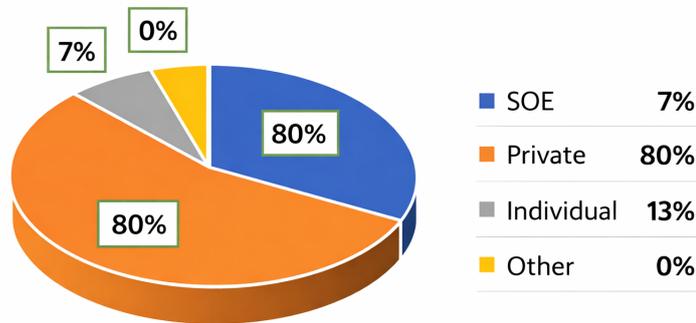


Figure 5. Type of Ownership

5. Respondents' Positions in the Company

Based on the research, respondents' positions in the Boemi Oemmi Luxury Kost Garut Development Project did not all hold the same position. The following are the positions of the 30 respondents working on the project: 2 respondents were Project Managers (6%), 2 respondents were Site Engineers (7%), 0 respondents were Quality Assurance (0%), 1 respondent was Project Estimator (3%), 0 respondents were Safety Supervisors (0%), 2 respondents were Project OHS Experts (7%), and 23 respondents were Others (77%).

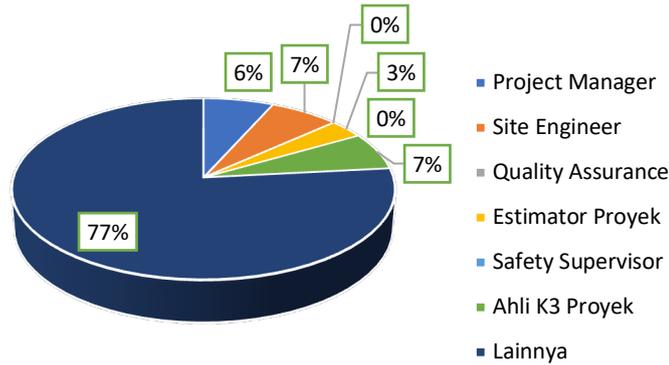


Figure 6. Respondents' Positions in the Company

6. Work Experience

Based on respondents' length of work experience in the Boemi Oemmi Luxury Kost Garut Development Project, 11 respondents had less than 5 years of experience (36%), 14 respondents had 5-10 years of experience (47%), 2 respondents had 10-15 years of experience (7%), and 3 respondents had more than 15 years of experience (10%).

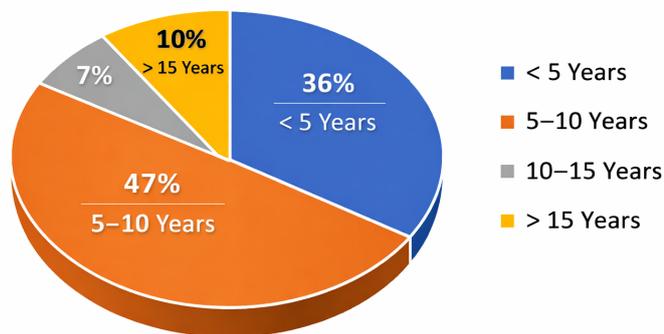


Figure 7. Work Experience

7. Average Project Duration

Based on the average project duration obtained, 12 respondents had project durations of <1 year (40%), 15 respondents had project durations of 1-2 years (50%), 2 respondents had project durations of 2-3 years (7%), and 1 respondent had project durations of >5 years (3%).

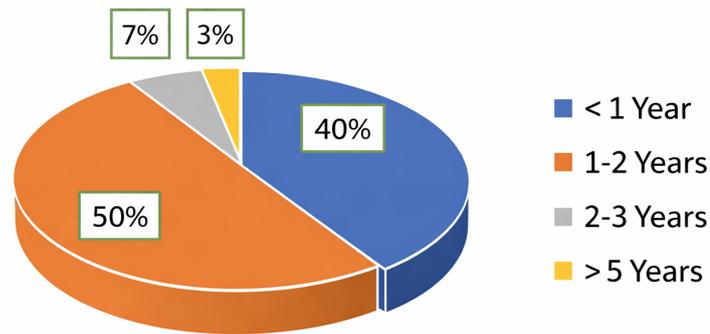


Figure 8. Average Project Duration

Questionnaire Analysis

Based on the questionnaire completed by respondents, data was obtained regarding the factors influencing contractor profits and losses on the Boemi Oemmi Luxury Kost Garut development project. The data was processed using Microsoft Office Excel and yielded the following results:

1. The mean value indicates the average level of each variable. The variable contains factors influencing contractor profits and losses on the Boemi Oemmi Luxury Kost Garut development project.
2. The total score from the variable data processing.
3. The mean value will be used as a reference for determining rankings.
4. The ranking indicates the order of factors influencing contractor profits and losses in the Boemi Oemmi Luxury Kost Garut construction project. In this analysis, the ranking of each factor is determined based on the average (mean) value obtained from the questionnaire data. The mean values were calculated through data processing using Microsoft Office Excel. The results of this questionnaire analysis are further explained in the discussion section.

Questionnaire Results: Factors Influencing Contractor Profits and Losses in the Boemi Oemmi Luxury Kost Garut Development Project

The following presents research data on the factors influencing contractor profits and losses in the Boemi Oemmi Luxury Kost Garut Development Project, with the following details:

1. Very Influential (SB) Score $3.25 < X < 4.00$
2. Influential (B) Score $2.5 < X < 3.25$

3. Less Influential (KB) Score $1.5 < X < 2.5$

4. No Influential (TB) Score $1.00 < X < 1.5$

Table 7. Ranking of factors influencing contractor profits and losses in the Boemi Oemmi Luxury Kost Garut Development Project

NO	QUESTION	MEAN	RANK	EXPLANATION
A Manpower Factors				
1	Availability of sufficient labor throughout the project	3,57	1	Very Influential
2	Workforce skill levels that meet job requirements	3,43	2	Very Influential
3	Poor communication between workers	3,27	4	Very Influential
4	Workforce attendance and discipline	3,33	3	Very Influential
B Material Factors				
1	Timely availability of materials according to the work schedule	3,27	3	Very Influential
2	Material price stability during the construction period	3,10	4	Very Influential
3	Delays in material deliveries to the project	3,50	1	Very Influential
4	Material storage and security systems on site	3,33	2	Very Influential
C Equipment Factor (Equirement)				
1	Availability of adequate equipment for the job	3,33	2	Very Influential
2	Availability of competent equipment operators	2,73	3	Influential
3	Equipment condition (good/bad) during use	3,43	1	Very Influential
4	Inaccurate decisions regarding equipment purchase and rental	2,63	4	Influential
D Implementation Factors				
1	Accuracy of work execution with project implementation	3,4	1	Very Influential
2	Effectiveness of applied work methods	2,77	4	Influential
3	Numerous additional work requested by the owner	3,27	3	Very Influential
4	Number of changes occurring in the field	3,33	2	Very Influential
E Financial Factors				
1	Timeliness of payments from the project owner to the contractor	3,4	1	Very Influential
2	The contractor's ability to manage cash flow during the project	2,77	4	Influential
3	Financial administrative errors (estimates)	3,27	3	Very Influential
4	Delays in disbursement of funds resulting in the contractor incurring debt	3,33	2	Very Influential
F Field Factors				

NO	QUESTION	MEAN	RANK	EXPLANATION
1	Weather conditions that affect the construction process	3,4	1	Very Influential
2	Disturbances or obstacles from the environment around the project	2,7	4	Influential
3	Unsafe project environment	2,8	3	Influential
4	Difficult accessibility of project locations for mobilizing materials/equipment	3,33	2	Influential

Questionnaire Results: Implementation of Measures to Address Factors Affecting Contractor Profits and Losses in the Boemi Oemmi Luxury Kost Garut Development Project

The following presents research data on the implementation of measures to address factors affecting contractor profits and losses in the Boemi Oemmi Luxury Kost Garut Development Project, with the following assessment criteria:

1. Very Implemented (SB) Score $3.25 < X < 4.00$
2. Implemented (B) Score $2.5 < X < 3.25$
3. Less Implemented (KB) Score $1.5 < X < 2.5$
4. No Implemented (TB) Score $1.00 < X < 1.5$

Table 8. Ranking of the implementation of control questionnaire results for factors that influence contractor profits and losses in the construction of Boemi Oemmi Luxury Kost Garut.

NO	QUESTION	MEAN	RANK	EXPLANATION
A Addressing Labor Problems				
1	Providing adequate manpower through planning manpower requirements from the start of the project	3,5	1	Highly Applied
2	Conduct training and certification to improve worker skills.	3,1	4	Applied
3	Improve communication between workers through daily briefings and regular coordination.	3,4	2	Highly Applied
4	Implement an attendance system and monitor employee discipline.	3,33	3	Highly Applied
B Addressing Materials Issues				
1	Prepare a planned material procurement schedule and collaborate with trusted suppliers.	3,5	1	Highly Applied
2	Using materials with quality standards according to contract specifications	3,43	2	Highly Applied
3	Make a fixed price agreement with suppliers to keep prices stable	3,13	4	Applied

NO	QUESTION	MEAN	RANK	EXPLANATION
4	Provide a safe, dry, and well-organized material storage area.	3,33	3	Highly Applied
C Troubleshooting Equipment Problems				
1	Provide adequate equipment according to job requirements and project schedule.	3,4	1	Highly Applied
2	Preparing competent equipment operators through training	2,97	3	Applied
3	Perform routine maintenance (preventive maintenance) before and during the project	3,27	2	Highly Applied
4	Performing equipment rental/purchase cost analysis calculations to make decisions more efficient	2,7	4	Applied
D Overcoming Implementation Problems				
1	Develop a realistic work schedule and conduct regular monitoring (daily/weekly meetings).	3,4	2	Highly Applied
2	Determine efficient work methods according to field conditions.	3,33	3	Highly Applied
3	Improve quality control through QC/QA teams in the field.	3,23	4	Applied
4	Improve coordination between project parties (owner, consultant, and contractor).	3,47	1	Highly Applied
E Overcoming Financial Problems				
1	Ensure timely payments from owners through contract administration control.	3,53	1	Highly Applied
2	Manage cash flow with weekly/monthly financial projections	3,27	4	Highly Applied
3	Reduce administrative errors by using a structured financial documentation system.	3,33	3	Highly Applied
4	Manage project expenditures to comply with the cost budget plan (RAB)	3,47	2	Highly Applied
F Addressing Field Problems				
1	Develop a work schedule that adapts to weather conditions.	3,43	1	Highly Applied
2	Coordinate with the surrounding community and government to minimize environmental disturbances.	2,97	3	Applied
3	Prepare project access routes and manage material/equipment traffic.	3,33	2	Highly Applied
4	Implement project security systems such as fences, CCTV, and supervisory personnel.	2,7	4	Applied

DISCUSSION

The results of this study indicate that several factors significantly influence contractor profits and losses in the Boemi Oemmi Luxury Kost Garut construction project. Based on the ranking analysis using the mean value and Relative Importance Index, the most dominant factors influencing contractor financial outcomes include labor factors, material management, equipment utilization, financial conditions, and field conditions during

project implementation. Among these factors, labor productivity, material availability, and financial management were identified as the most influential aspects affecting project profitability.

The dominance of labor and material factors in influencing contractor profits and losses can be explained by the nature of construction projects, where labor productivity and material costs represent a significant portion of total project expenditures. Inefficient labor performance, lack of skilled workers, or delays in work completion may increase operational costs and extend project duration, thereby reducing contractor profits. Similarly, poor material management, delays in material delivery, or fluctuations in material prices can disrupt project schedules and increase overall project costs. Financial factors, such as delayed payments from project owners and unstable cash flow, also contribute to contractor financial risks during project implementation.

The findings of this study are consistent with previous research that highlights the critical role of management, financial, and operational factors in determining construction project performance. For example, (Tahmasebinia & Song, 2022) identified poor planning, payment delays, and inadequate resource management as key causes of construction project inefficiencies. Similarly, (Susanti et al., 2021) reported that material supply issues and labor productivity significantly affect project completion and contractor financial performance. However, the present study contributes additional insights by examining these factors specifically within the context of the Boemi Oemmi Luxury Kost Garut development project, providing a more localized understanding of contractor profit and loss dynamics.

From a broader perspective, the results of this study indicate that contractor profitability is strongly influenced by the effectiveness of project management practices. Efficient coordination between project stakeholders, including contractors, consultants, and project owners, plays an important role in minimizing risks related to delays, cost overruns, and operational inefficiencies. The findings also emphasize the importance of effective planning, accurate cost estimation, and proper resource allocation to maintain project profitability.

The results also highlight both functional and dysfunctional aspects of project management practices. On the positive side, effective coordination, proper resource allocation, and efficient work methods can improve project performance and increase contractor profits. However, ineffective communication, poor financial management, and

inadequate planning can lead to project delays, cost overruns, and financial losses for contractors. These issues demonstrate the importance of strengthening project management systems to improve construction project performance.

Based on these findings, several practical actions can be recommended to improve contractor profitability in future projects. First, contractors should enhance project planning and scheduling to ensure efficient use of labor and resources. Second, improved material management systems should be implemented to minimize delays and cost fluctuations. Third, stronger financial management practices are necessary to maintain stable cash flow during project implementation. Finally, improved coordination and communication between contractors, consultants, and project owners should be encouraged to ensure smooth project execution and reduce the risk of financial losses.

CONCLUSION

The findings of this study indicate that several factors influence contractor profits and losses in the Boemi Oemmi Luxury Kost Garut construction project. Based on the ranking analysis using the mean value and Relative Importance Index, labor factors were identified as the most dominant factor affecting contractor profitability, while equipment factors showed the lowest influence. In terms of the implementation of actions to address these factors, material-related issues were found to be the most highly applied factor in managing contractor profits and losses, whereas weather-related factors were the least applied. These findings highlight that effective labor management and proper material planning play a crucial role in maintaining contractor financial performance during construction project implementation.

This study contributes to the understanding of contractor profitability in construction projects by identifying and ranking key operational factors that influence profits and losses within a specific project context. The research provides empirical evidence regarding the relative importance of labor, material, equipment, financial, and field factors in construction project management. By applying a quantitative descriptive approach and the Relative Importance Index, this study offers a structured method for evaluating contractor profit and loss factors, which can support decision-making and improve project management practices in similar construction projects.

Despite its contributions, this study has several limitations. The research was conducted on a single construction project, which may limit the generalization of the

findings to other types of construction projects or different geographical contexts. In addition, the study relied primarily on questionnaire-based perceptions from respondents involved in the project. Future research is recommended to expand the scope of analysis by including multiple construction projects, larger respondent samples, and additional analytical methods such as regression or structural equation modeling to obtain a more comprehensive understanding of factors affecting contractor profitability in construction projects.

REFERENCES

- Aneasha, K., & Haridharan, M. K. (2017). Ranking the Project Management Success Factors for Construction Project in South India. IOP Conference Series: Earth and Environmental Science,
- Aragaw, B. T., & Cherkos, F. D. (2025). Integrating Key Elements for Smooth Project Execution: Unveiling the Interplay of Critical Success Factors in High-Rise Construction [Article]. *Journal of Legal Affairs and Dispute Resolution in Engineering and Construction*, 17(2), Article 04525001. <https://doi.org/10.1061/JLADAH.LADR-1152>
- Asamoah, R. O., Baiden, B. K., Nani, G., & Kissi, E. (2022). Identifying intangible resources to enhance profitability strategies of Small-Medium Scale Construction Firms (SMSCFs) in developing countries [Article]. *International Journal of Construction Management*, 22(11), 2207-2214. <https://doi.org/10.1080/15623599.2020.1774835>
- Badan Pusat Statistik, B. (2025). *Indikator Konstruksi, Triwulan IV-2024* [Report](1979-8024). <https://www.bps.go.id/id/publication/2025/03/27/9bae1d4a4dd0b3cd7fb31ffd/indikator-konstruksi--triwulan-iv-2024.html>
- Borges, D. B., Soares, C. A. P., Najjar, M., Costa, B. B. F. D., Tam, V. W. Y., & Haddad, A. N. (2025). Project success and critical success factors of construction projects from the perspective of a multicultural team: a case study in Guyana [Article]. *International Journal of Construction Management*, 25(10), 1115-1129. <https://doi.org/10.1080/15623599.2024.2397626>
- Buhamizo, I., Muhwezi, L., & Sengonzi, R. (2023). A Regression Model to Enhance the Profitability of Local Construction Contractors in Uganda [Article]. *Journal of Construction in Developing Countries*, 28(1), 221-241. <https://doi.org/10.21315/jcdc-08-21-0137>
- Gudiene, N., Banaitis, A., & Banaitiene, N. (2013). Evaluation of critical success factors for construction projects - an empirical study in Lithuania [Review]. *International Journal of Strategic Property Management*, 17(1), 21-31. <https://doi.org/10.3846/1648715X.2013.787128>

- Hanafi, M. H., Abdullah, S., Hasan, R., & Ahmad, H. (2023). The critical success factors for building materials availability at construction sites: A qualitative approach. *AIP Conference Proceedings*,
- Herath, S., & Chong, S. C. (2021). Key components and critical success factors for project management success: A literature review [Review]. *Operations and Supply Chain Management*, 14(4), 431-443. <https://doi.org/10.31387/oscm0470314>
- Herawati, E., Suparjo, & Lestarii, R. (2022). Housing Regulations for Low-Income People in Indonesia. *International Journal of Environmental, Sustainability, and Social Sciences*.
- Jung, M., You, S., Chi, S., Yu, I., & Hwang, B. G. (2018). The relationship between unbilled accounts receivable and financial performance of construction contractors [Article]. *Sustainability (Switzerland)*, 10(8), Article 2679. <https://doi.org/10.3390/su10082679>
- Kanan, M. (2020). Lessons learned from a delayed medical construction project [Article]. *International Journal of Scientific and Technology Research*, 9(4), 2565-2569. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85083427805&partnerID=40&md5=022fdde153a35081bae29bd27481eaa8>
- Kim, J., & Bilbao, P. (2023). Why Are the Frequently Reported Delay Factors in Construction Projects Recurring?: A Qualitative Study [Article]. *International Journal of Sustainable Construction Engineering and Technology*, 14(1), 21-31. <https://doi.org/10.30880/ijscet.2023.14.01.003>
- Koirala, M. P., & Shahi, R. S. (2024). Examining the causes and effects of time overruns in construction projects promoted by rural municipalities in Nepal [Article]. *Evaluation and Program Planning*, 105, Article 102436. <https://doi.org/10.1016/j.evalprogplan.2024.102436>
- Lenong, A. (2026). Understanding the Formation of Boarding House Rent Prices: Researching the Perspectives of Owners and Tenants Around the Campus of Universitas Kristen Indonesia Paulus. *Edunomika*.
- Maghsoodi, A. I., & Khalilzadeh, M. (2018). Identification and Evaluation of Construction Projects' Critical Success Factors Employing Fuzzy-TOPSIS Approach [Article]. *KSCE Journal of Civil Engineering*, 22(5), 1593-1605. <https://doi.org/10.1007/s12205-017-1970-2>
- Nadeem, M., Jiskani, I. M., Urwat, M. S., Uddin, S., Akhtar, K., & Khokhar, N. H. (2023). Analysing delay factors in construction projects using Z-number approach: insights from Pakistan [Article]. *Canadian Journal of Civil Engineering*, 50(12), 966-983. <https://doi.org/10.1139/cjce-2022-0310>
- Nguyen, V. S., Nguyen, H. H., Nguyen, D. A., & Hai, D. T. (2023). Delay factors in the construction of irrigation and hydropower projects in Vietnam [Article]. *Archives of Civil Engineering*, 69(1), 5-20. <https://doi.org/10.24425/ace.2023.144156>
- Oleah, C., Afolabi, A. O., Osoaku, F., & Ochiba, D. (2022). Impediments to Contractors' Profitability in Building Projects. *AIP Conference Proceedings*,

- Susanti, R., Fauziyah, S., & Suwanto, F. (2021). Assessing factors towards construction project delays in Indonesia. IOP Conference Series: Earth and Environmental Science,
- Tahmasebinia, F., & Song, V. (2022). Significant Factors Causing Delay in the Cambodian Construction Industry [Article]. *Sustainability (Switzerland)*, 14(6), Article 3521. <https://doi.org/10.3390/su14063521>
- Tamer, Z., Yoon, Y., & Hastak, M. (2012). Protocol for profitability analysis using internal entities in organizational structure of construction companies [Article]. *Journal of Construction Engineering and Management*, 138(12), 1394-1402. [https://doi.org/10.1061/\(ASCE\)CO.1943-7862.0000563](https://doi.org/10.1061/(ASCE)CO.1943-7862.0000563)
- Yaqub, A., Anam, M., Umar, M., Abdullah, M., & Alam, M. (2026). Analyzing Causes of Delays in Highway Construction Projects: A Case Study of Pakistan [Article]. *Transportation Research Record*, 2680(2), 877-890. <https://doi.org/10.1177/03611981251368319>
- Zahoor, M. H., & Ali, M. (2023). Assessment of Critical Success Factors for Building Projects through the Literature † [Article]. *Engineering Proceedings*, 53(1), Article 45. <https://doi.org/10.3390/IOCBD2023-15988>