

Development of a Construction Service Provider Performance Assessment System as an Instrument for Preventing Project Failure in the Badung Regency Government

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The failure of government construction projects characterized by work delays, the imposition of fines, and even contract termination remains a challenge in the implementation of government procurement of goods/services. This study aims to analyze the influence of construction service provider performance on the risk of project failure in Badung Regency and identify the most dominant performance dimensions in shaping service provider performance. The study used a quantitative approach with an explanatory research design. Data were obtained from 140 respondents consisting of Commitment Making Officers (PPK), technical officials, and construction service providers involved in Badung Regency government projects. Data analysis was conducted using Structural Equation Modeling–Partial Least Squares (SEM-PLS). The results showed that all service provider performance dimensions, namely technical performance, time performance, financial performance, managerial performance, and contractual compliance, had a positive and significant effect on service provider performance. The managerial performance dimension was the most dominant factor with an influence coefficient of 0.365, followed by contractual compliance at 0.241. Service provider performance was proven to have a significant effect on the risk of project failure ($b = 0.246$; $p = 0.024$), although its contribution is relatively limited with an R^2 value of 0.060. This finding indicates that improving service provider performance can be an important instrument in mitigating project risks, but preventing project failure also requires strengthening aspects of planning, governance, supervision, and risk management in an integrated manner. This study recommends the development of a service provider performance assessment system based on historical data as a basis for more accountable procurement decisions that are oriented towards project success.

Keywords: Service Provider Performance, Project Failure Risk, Construction, Government, SEM-PLS, Risk Management.

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1. Introduction

Infrastructure development is a strategic tool for local governments to drive economic growth, improve the quality of public services, and ensure equitable distribution of public welfare. In the context of a region with high economic activity like Badung Regency, infrastructure development serves not only as a means of providing basic services but also as a key support for the tourism, trade, and service sectors that form the backbone of the regional economy. Therefore, the successful implementation of government construction projects is a crucial prerequisite for achieving sustainable regional development goals.

However, the implementation of government construction projects in various regions in Indonesia, including Badung Regency, still faces fundamental problems such as delays in completion, the imposition of fines, and even the termination of contracts between local governments and construction service providers. This phenomenon occurs even though the procurement process has been carried out in accordance with statutory provisions and the work contracts have been legally signed by all parties. This situation indicates

a gap between the provider selection process and the provider's actual performance in project implementation.

Empirical data from the Badung Regency Government shows that in recent years, a number of construction projects in the Highways, Human Settlements, and Education sectors have experienced significant delays, even resulting in contract termination. These projects include the construction and improvement of roads, bridges, drainage systems, educational facilities, and other public infrastructure, with significant contract values. The fact that these delays and project failures occurred with providers who had been declared to have met the administrative, technical, and business qualification requirements indicates that meeting formal requirements does not necessarily reflect the provider's actual performance capabilities.

The problem of project delays and failures is not merely a technical issue of construction implementation, but also a performance management and risk management issue in government procurement of goods and services. Project delays directly impact development benefits for the community, increase indirect costs, disrupt regional budget planning, and potentially erode public trust in local government performance. In the long term, project failure can also create legal and administrative risks for commitment-making officials (PPK) and related regional officials.

2. Methods

This research uses a quantitative approach with an explanatory research design (*explanatory research*). The quantitative approach was chosen because the research objective was to empirically and measurably test the relationship and influence between variables, specifically the influence of construction service provider performance on the risk of project failure in the Badung Regency government. Explanatory research was used to explain the causal relationship between the independent variable (construction service provider performance) and the dependent variable (project failure risk), through testing the hypotheses formulated in Chapter II. With this approach, the research is expected to produce objective, retestable findings (*replicable*), and has limited generalizability in the context of local government.

The object of the research is the performance of construction service providers who have and are currently implementing Badung Regency government construction projects and the risk of project failure that occurs during contract implementation. The population in this study is all construction service providers who:

1. Have or are currently carrying out construction projects for the Badung Regency government, and
2. Involved in construction work contracts during the research period.

In addition, to obtain an objective performance assessment, the respondent population also included Commitment Making Officers (PPK) and/or technical officials directly involved in contract management. This study used the technique *purposive sampling*, with the following respondent criteria:

1. PPK or technical officials who have handled Badung Regency government construction projects;
2. Construction service providers who have experience in at least one local government project;
3. Respondents understand the process of implementing and controlling construction projects.

The sample size was determined by considering the needs of multivariate statistical analysis. The minimum sample size was set at 5–10 times the number of research indicators (Hair., et.al., 2023), resulting in a sample size of 140 respondents to meet the eligibility requirements for multiple regression analysis or SEM-PLS.

3. Results and Discussion

Structural Model Evaluation (*Inner Model*)

Table 1. Path Coefficient Construct

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Contractual Compliance -> Service Provider Performance	0.241	0.240	0.014	16.859	0.000
Financial Performance -> Service Provider Performance	0.156	0.156	0.019	8.110	0.000
Managerial Performance -> Service Provider Performance	0.365	0.364	0.020	18.470	0.000
Service Provider Performance -> Project Failure Risk	0.246	0.261	0.109	2.260	0.024
Technical Performance -> Service Provider Performance	0.210	0.211	0.017	12.408	0.000
Time Performance -> Service Provider Performance	0.219	0.218	0.012	17.635	0.000

Source: Data Processing Results

Table 1 shows five exogenous variables of level one: technical performance (X1), time performance (X2), financial performance (X3), managerial performance (X4), contractual compliance (X5), one exogenous variable of level two: service provider performance (X), and one endogenous variable: project failure risk (Y). Based on the analysis results, all variables of service provider performance dimensions, namely contractual compliance, financial performance, managerial performance, technical performance, and time performance, have a positive and significant effect on the Service Provider Performance construct, because they have a positive coefficient value and a p-value <0.05. This indicates that an increase in each of these dimensions will improve the overall performance of the service provider. Among these variables, managerial performance has the strongest influence on service provider performance (b= 0.365), followed by contractual compliance (b= 0.241), time performance (b= 0.219), technical performance (b= 0.210), and financial performance (b= 0.156). According to Hair et al. (2021), the greater the path coefficient, the stronger the influence of the exogenous variable on the endogenous variable.

Furthermore, the performance of service providers is proven to have a positive and significant influence on the risk of project failure (b= 0.246; p = 0.024). Although significant, the magnitude of the effect is relatively small, indicating that the risk of project failure is not only influenced by service provider performance, but also by other factors outside the research model. This is in line with Chin's (1998) view that the path coefficient describes the strength of the structural relationship as well as the model's predictive ability. Next, testing is carried out (1) *R-Square (R²)*, (2) *Q-Square Predictive Relevance (Q²)*, and (3) *Goodness of Fit (GoF)*.

Structural Model Evaluation through *R-Square (R²)*

Table 2. Distribution of R Values²

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Service Provider Performance	1.000	1.000	0.000	26125.658	0.000
Project Failure Risk	0.060	0.080	0.047	1.275	0.202

Source: Data Processing Results

Table 2 shows that the values *R-square* if the service provider performance is 1, then the model is included in the strong model criteria, meaning that the constituent variables are able to explain all the variance of the construct perfectly. This value is included in the very strong category based on Chin's criteria (Lathan and Ghozali, 2012:85). Meanwhile, the Project Failure Risk construct has an R^2 value of 0.060, which indicates that only 6% of the variance in project failure risk can be explained by the Service Provider Performance variable in the model, while the remaining 94% is influenced by other factors outside the research model. According to Chin (Lathan and Ghozali, 2012:85), an R^2 value below 0.19 is categorized as weak, so the model's predictive ability towards project failure risk is low.

Based on the evaluation of the feasibility of the model with the role of each dependent latent variable with the factors that influence it, there is a characteristic pattern that is very reasonable and in line with the available statistical theory, that at the level of influence with more constructs, the value obtained is greater. *R-square* the bigger one (Hair *et al.*, 2010).

Structural Model Evaluation through *Q-Square Predictive Relevance (Q²)*

Q-Square Predictive Relevance (Q²) is a measure of how well the observations made provide results for the research model. The value *Q-Square Predictive Relevance (Q²)* ranges from 0 (zero) to 1 (one). The closer to 0 the value, the *Q-Square Predictive Relevance (Q²)*, provides an indication that the research model is getting worse, whereas conversely, the further away from 0 (zero) and the closer to the value 1 (one), the better the research model is. The criteria for the strength and weakness of the model are measured based on *Q-Square Predictive Relevance (Q²)*. According to Lathan and Ghozali (2012:85) are as follows: 0.35 (strong model), 0.15 (moderate model), and 0.02 (weak model). The *Q-Square* formula is: $Q^2 = 1 - (1 - R^2_1)(1 - R^2_2)$. The magnitude of the value *Q-Square* is $= 1 - (1 - 0.06)(1 - 1) = 1 - 0 = 1$, based on these results, the estimated model is included in the strong criteria, meaning that 100% of the endogenous construct variation can be predicted by the exogenous construct variation.

Effect size (*f²*)

Table 3. Mark *f²* (*f-Square*)

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Contractual Compliance -> Service Provider Performance	631.919	933.279	4596.408	0.137	0.891
Financial Performance -> Service Provider Performance	431.214	634.509	3012.817	0.143	0.886
Managerial Performance -> Service Provider Performance	1548.624	2256.291	11493.191	0.135	0.893
Service Provider Performance -> Project Failure Risk	0.064	0.090	0.060	1.075	0.282
Technical Performance -> Service Provider Performance	550.661	822.722	4308.801	0.128	0.898

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Time Performance -> Service Provider Performance	716.248	1006.628	4333.515	0.165	0.869

Source: Data Processing Results

Based on the analysis results, the variables of contractual compliance, financial performance, managerial performance, technical performance, and time performance show a very large f^2 value for the Service Provider Performance construct. This indicates that these five dimensions are the dominant factors that shape the overall performance of service providers. Among these variables, managerial performance has the largest contribution to service provider performance. Conversely, the effect of Service Provider Performance on Project Failure Risk has an f^2 value of 0.064, smaller than 0.15, which is classified as a weak effect according to Cohen's criteria. This indicates that although service provider performance influences the risk of project failure, its contribution is relatively limited and there may be other factors outside the model that more dominantly influence the risk of project failure.

Structural Model Evaluation through *Goodness of Fit (GoF)*

Table 4. Evaluation Goodness of Fit (GoF)

	R Square	Average Variance Extracted (AVE)
Contractual Compliance		0.861
Financial performance		0.663
Managerial Performance		0.850
Time Performance		0.861
Technical Performance		0.792
Service Provider Performance	1	0.568
Project Failure Risk	0.06	0.755
Average	0,53	0,764

Source: Data Processing Results

Calculation with *GoF* shows the average value *R-square* is 0.53 while the average *AVE* is 0.764, then the *GoF* value is $\sqrt{A.R^2 * A.AVE} = \sqrt{0.53 * 0.764} = \sqrt{0.405} = 0.636$, meaning the global model is highly predictive *large*. The model used in the estimation shows a good model (*fit model*).

Research Hypothesis Testing

Table 5. Statistical Results of the Direct Influence of Research Variables

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Information
Contractual Compliance -> Service Provider Performance	0.241	0.240	0.014	16.859	0.000	<i>significant</i>
Financial Performance -> Service Provider Performance	0.156	0.156	0.019	8.110	0.000	<i>significant</i>
Managerial Performance ->	0.365	0.364	0.020	18.470	0.000	<i>significant</i>

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Information
Service Provider Performance						
Service Provider Performance -> Project Failure Risk	0.246	0.261	0.109	2.260	0.024	<i>significant</i>
Technical Performance -> Service Provider Performance	0.210	0.211	0.017	12.408	0.000	<i>significant</i>
Time Performance -> Service Provider Performance	0.219	0.218	0.012	17.635	0.000	<i>significant</i>

It turns out that from the six research hypothesis tests for direct influence (*direct effects*) between the research variables (Table 5.11) the results showed that there was a positive and significant influence on the relationship between the variables. This is indicated by the T-value. *Statistic* > 1.96 and *value p-value* < 0.05. A complete description of the relationship between constructs with estimates *path* of the related constructs are presented in Figure 1.

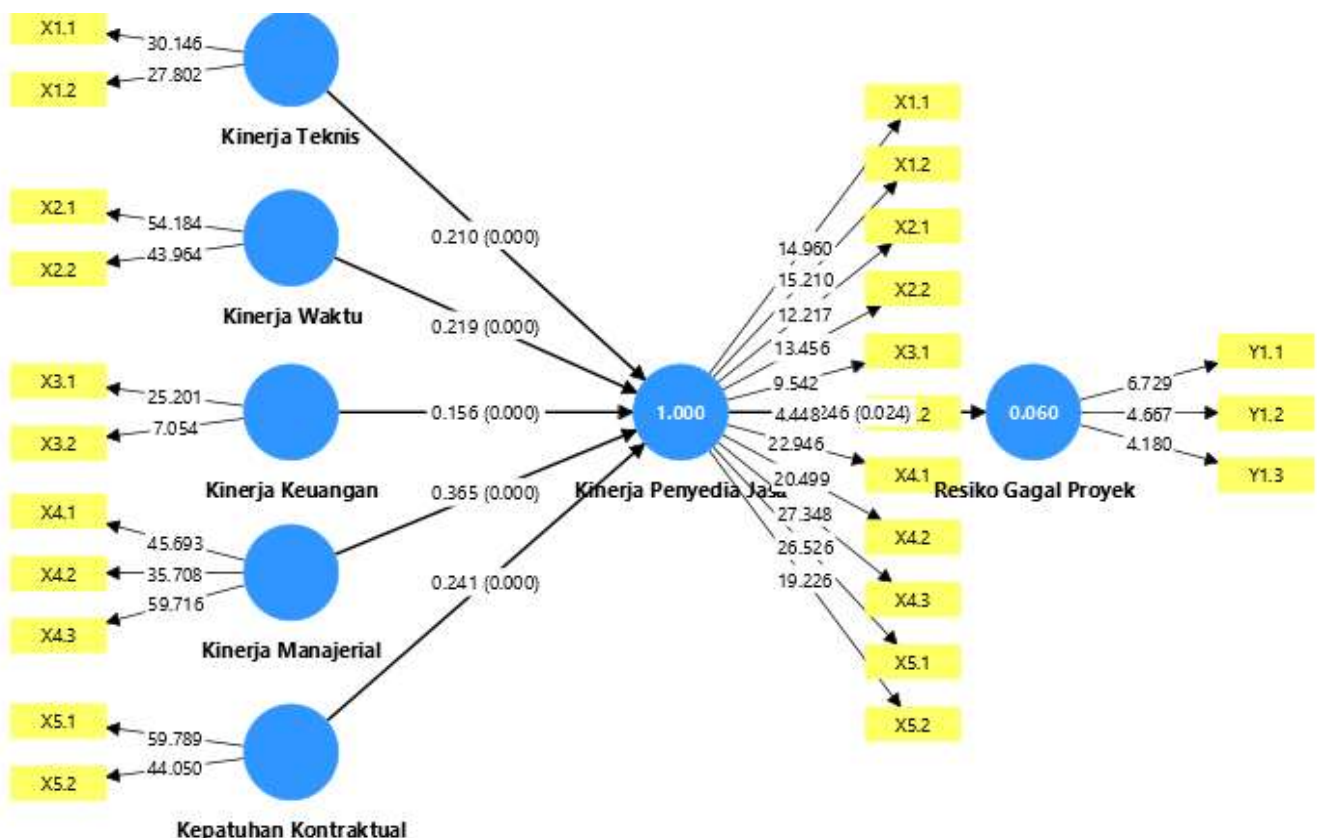


Figure 1. Analysis Results *Bootstrapping* Research Model

Based on Table 5 and Figure 1 it can be explained that:

- The technical performance of the service provider (X1) has a positive effect of 0.210 on the risk of project failure (Y) and this relationship is significant at the 0.05 level because the T-value *Statistic* greater than 1.96, which is 12.408. Based on this description, hypothesis 1 in the study, namely that Development of a Construction Service Provider Performance Assessment System as an Instrument for Preventing Project Failure in the Badung Regency Government. I Wayan Gede Putrawan et.al

the technical performance of service providers has a positive and significant effect on the risk of failure of Badung Regency government projects, is accepted.

- b. Service provider time performance (X2) has a positive effect of 0.219 on the risk of project failure (Y) and this relationship is significant at the 0.05 level because the T-value *Statistic* greater than 1.96, which is 17.635. Based on this description, hypothesis 2 in the study, namely that the service provider's time performance has a positive and significant effect on the risk of failure of the Badung Regency government project, is accepted.
- c. Financial performance of service providers (X3) has a positive effect of 0.156 on the project failure risk (Y) and this relationship is significant at the 0.05 level because the T-value *Statistic* greater than 1.96, which is 8.110. Based on this description, hypothesis 3 in the study, namely that the financial performance of service providers has a positive and significant effect on the risk of failure of Badung Regency government projects, is accepted.
- d. Managerial performance of service providers (X4) has a positive effect of 0.365 on the risk of project failure (Y) and this relationship is significant at the 0.05 level because the T-value *Statistic* greater than 1.96, which is 18,470. Based on this description, hypothesis 4 in the study, namely that the managerial performance of service providers has a positive and significant effect on the risk of failure of Badung Regency government projects, is accepted.
- e. Service provider contractual compliance (X5) has a positive effect of 0.241 on the risk of project failure (Y) and this relationship is significant at the 0.05 level because the T-value *Statistic* greater than 1.96, which is 16.859. Based on this description, hypothesis 5 in the study, namely that service provider contractual compliance has a positive and significant effect on the risk of failure of the Badung Regency government project, is accepted.
- f. Service provider performance (X) simultaneously has a positive effect of 0.246 on the project failure risk (Y) and this relationship is significant at the 0.05 level because the T-value *Statistic* greater than 1.96, which is 2,260. Based on this description, hypothesis 6 in the study, namely that the performance of service providers simultaneously has a positive and significant effect on the risk of failure of the Badung Regency government project, is accepted.

Discussion

This study places the five dimensions of service provider performance, namely technical performance, time performance, financial performance, managerial performance, and contractual compliance as constructs that are thought to play a fairly strategic role theoretically, describing the performance of service providers that has an important influence in reducing the risk of government project failure. The better the service provider's performance, the lower the possibility of the project experiencing delays, fines, or contract termination.

This study investigates the sustainability of the development of service provider performance dimensions in building work productivity, as reflected in service provider performance. The relationships between constructs, as designed based on the theoretical references presented above, constitute a research model framework that is expected to contribute to the development of research on other dimensions of service provider performance. in the future and the development of other factors to reduce the risk of government project failure due to delays, fines, or contract termination.

The Influence of Technical Performance of Service Providers Against the Risk of Failure of Badung Regency Government Projects

The research results found that there was a positive and significant influence of the service provider's technical performance variable dimension on the risk of failure of the Badung Regency government project.

This implies that the relationship between the service provider's technical performance and the risk of project failure is of a positive nature negative, meaning the better the provider's ability to meet technical specifications and work quality, the lower the possibility of the project experiencing delays, fines or contract termination.

Theoretically, this result is very much in line with the concept *project management success criteria* from Toor and Ogunlana (2010) which confirms that the success of a construction project is greatly influenced by the fulfillment of *quality/performance specifications*, in addition to time and cost. Conformity of technical quality to contract specifications is a core indicator of project success and reduces the risk of failure. In addition, research Alzahrani and Emsley (2013) found that the contractor's attributes on the aspect *management and technical capability*, particularly the quality of work, the adequacy of technical resources, and technical experience, significantly influence the probability of success of a construction project. The stronger the contractor's technical capabilities, the lower the potential for the project to experience quality deviations, rework, further delays, and even output failure. From the description above, it can be stated that the findings of this study align with and strengthen the findings of Mahamid (2024); Gokuz & Akiner (2025) which found a positive and significant influence between the technical performance of service providers and the risk of project failure.

The Impact of Service Provider Time Performance Against the Risk of Failure of Badung Regency Government Projects

The research results found that there was a positive and significant influence of the service provider's time performance variable dimension on the risk of failure of the Badung Regency government project. This implies that the relationship between service provider time performance and the risk of project failure is of a positive nature negative. The better the provider's ability to complete work on time, the lower the risk of project failure. Conversely, the worse the provider's ability to complete work on time, the higher the risk of project failure.

Theoretically, this result is very much in line with the concept *Iron Triangle* from Toor dan Ogunlana (2010) which places *time/schedule performance* as one of the core KPIs for public sector projects, alongside cost and quality. They emphasized that timeliness remains a central indicator of project success, although large public projects must also consider stakeholder satisfaction and resource efficiency. Furthermore, Lim & Mohamed (1999) explain in perspective *micro success*, the success of the project is largely determined by timely completion. Thus, schedule failure is the most obvious form of project failure risk from the contractor's and owner's perspective.

Empirically, research Alzahrani and Emsley (2013) found that contractor attributes such as *management capability, adequacy of labour, resource sufficiency, dan past performance* has a significant impact on the probability of project success. One of the main implications is the contractor's ability to maintain the project schedule through control of labor, tools, and *sequencing/job demand*. The findings in this study are in line with and strengthen the findings Suyansen et al. (2017); Jones (2021), who found that there is a relationship between the time performance dimension of the service provider and the risk of project failure or *success of a project*.

The Influence of Service Provider Financial Performance on the Risk of Project Failure in the Badung Regency Government

Data processing revealed that the service provider's financial performance variable dimension had a positive and significant effect on the risk of failure of Badung Regency government projects. This is indicated by $T\text{-statistic} = 8,110$ ($t\text{-statistic} > 1.96$), so the hypothesis that the financial performance of service providers

has a positive effect on the risk of failure of Badung Regency government projects is empirically proven. This result can be interpreted as meaning that the stronger the financial performance of service providers, the smaller the risk of project failure. Conversely, the weaker the financing and cash flow capabilities, the greater the risk of project failure.

As previously explained, the investigation into the dimensions of the service provider's financial performance construct (X3) with the risk of project failure (Y) is reflected by two indicators, where the indicator with the higher value is The provider has sufficient financial capacity to finance the project, with a value of 4.29 (Table 5). Having very good results in describing the performance of service providers means that the provider has sufficient working capital, access to financing, or liquidity capacity to fund initial project needs, material purchases, labor payments, and field operations. In government projects, this indicator is very important because physical implementation often begins before receiving full payment. When working capital is weak, projects are prone to stalling from the start. The results of statistical tests prove that all service provider financial performance indicators with values *loading factor* above 0.70, thus providing validity based on statistical theory to be continued in the research process and estimation results.

Theoretically, these results are very much in line with the concept of the framework. Baccharini (1999) what differentiates *project management success* and *product success*. From the side *project management success*, a project is assessed based on its success in meeting implementation targets. If project financing is weak and cash flow is disrupted, then time, cost, and implementation control will be disrupted, thereby increasing the risk of project failure. Furthermore, the study Alzahrani & Emsley (2013) explicitly include *finance* as one of nine clusters of contractor attributes that influence the success of construction projects. They also found that factors such as *turn over history* and other contractor attributes are significantly associated with project success. This supports that the financial aspects of the provider are not additional elements, but rather part of the critical project success factors.

The results of this study are in line with research Mahamid (2024) found that *cash flow problems* (cash flow and capital problems) in contractors is one of the the main causes of failure of contracting companies in the construction industry. Likewise, the research results Nisar & Asif (2023) shows that public infrastructure projects are experiencing *cost overrun* (cost increases exceeding the budget) have a higher tendency to experience *default* or failed to resolve. This indicates that there is a positive and significant influence between the financial performance of service providers and the risk of failure of Badung Regency government projects.

The Influence of Service Provider Managerial Performance on the Risk of Project Failure in the Badung Regency Government

The results of this study found a positive and significant influence of the service provider's managerial performance variable dimension on the risk of failure of the Badung Regency government project. This implies that the higher the project risk level, the greater the demands on the service provider's managerial capabilities to coordinate, control, and manage the project *problem solving*. Substantively findings positive and significant This implies that in the Badung district government projects that increasingly complex, high value, cross-OPD, and high risk, the need for the managerial capabilities of service providers are also increasing.

Theoretically, this result is very much in line with the concept that states that Factors related to the project manager, team members, and the project environment are the main determinants of project success or failure. Belassi, W., and Tukel, O. I. (1996). *A new framework for determining critical success/failure factors in projects*. So are Sanvido et al. (1992) explains that the success of a construction project is determined by communication, coordination, monitoring, and commitment of the project organization. The better these

managerial factors are, the less likely the project is to experience deviations in time, cost, or quality, or even contract termination. This supports the fact that the managerial aspects of service providers are not additional elements, but rather integral to the success of Badung Regency government projects.

From the description above, it can be stated that the findings of this study are in line with and strengthen the findings of Aga et al. (2016); Mir & Pinnington (2014) who found a positive and significant relationship between service provider managerial performance and the risk of failure of Badung Regency government projects, indicating that the higher the complexity and risk of government projects, the greater the demands on service providers' managerial capabilities in carrying out coordination, control, communication, and corrective actions. Thus, managerial performance can be interpreted as the provider's adaptive capacity in responding to increasing project risks.

The Influence of Service Provider Contractual Compliance on the Risk of Project Failure in the Badung Regency Government

The research results found a positive and significant influence of the service provider's contractual compliance variable dimension on the risk of project failure in the Badung Regency government. This implies that substantively, the relationship between service provider contractual compliance and project failure risk is negative, where the higher the level of service provider compliance with contract clauses and procurement regulations, the lower the potential for significant delays, fines, or project contract termination.

Theoretically, these results are very much in line with the theory *Agency* Jensen and Meckling (1976) that a contract is an instrument to ensure that the agent (provider) carries out his obligations in accordance with the interests of the principal (government). Likewise, Williamson, O. E. (1985) also explains that a contract that is complied with is the main control tool to prevent *escalation of risk* going to *project failure*. This supports the fact that contractual compliance is a key control tool in preventing moral hazard, implementation deviations, and escalating risks leading to delays, fines, and even termination of contracts for Badung Regency government projects.

The findings in this study are in line with and strengthen the findings of Casady, C. B., Petersen, O. H., and Brogaard, L. (2023); OECD. (2021); Gisagara District Rwanda Study (2025); Castro, M. F., Guccio, C., & Rizzo, I. (2023) who found that The indicators of compliance with all provisions of the employment contract in this study strengthen the evidence that *contract compliance* is the main foundation for mitigating the risk of failure of Badung Regency government projects.

The Influence of Simultaneous Service Provider Performance on the Risk of Failure of Badung Regency Government Projects

The results of statistical tests prove that most of the service provider performance indicators have a value *loading factor* above 0.70 except on the p indicator. The provider has adequate financial capacity to finance the project (X3.1) of 0.666 and the provider's cash flow does not hinder project implementation (X3.2) of 0.495. Where *loading factor* > than 0.7 with a value interval of ≥ 0.70 is good, ≥ 0.40 is still acceptable in exploratory research, < 0.40 should be removed with a value of *p value* < 0.05, as well as the value *Average Variance Extracted (AVE)* must be > 0.5 (Hulland, J., 1999). Thus providing validity based on statistical theory to be continued in the research process and estimation of results.

The results of other statistical tests found the magnitude $R^2 = 0.060$ on the service provider performance variable can be interpreted as meaning that only 6% of the variation in project failure risk can be explained by service provider performance. According to Hair et al. (2021), R^2 value is smaller than 0.25 is considered weak. Its strategic significance can be explained even though the service provider is technically, time-wise,

financially, managerially and contractually very good, The root of the risk of project failure still comes more from factors other than the performance of the service provider.

Theoretically, these results are very much in line with the theory. *Agency Theory* Jensen and Meckling (1976) who stated the relationship significant shows that agent quality remains an important factor in government project risk. Belassi and Tukel (1996) *Critical Success Factors* that the more complete the provider's success factors, the stronger its influence on the project's risk conditions. According to Toor dan Ogunlana (2010), The success or failure of public projects is no longer adequately explained by classical approaches alone. *iron triangle* which focuses on cost, time, and quality. In the context of public sector projects, project outcomes are also greatly influenced by project governance quality/*project governance*, effectiveness of stakeholder involvement, leadership capacity, orderly contract administration, aspects of project outcome sustainability, and responsiveness of government institutions in decision-making during implementation work. Thus, the risk of project failure is a multidimensional phenomenon influenced by the simultaneous interaction of technical, managerial, and institutional factors.

The results of this study are consistent with Alzahrani and Emsley (2013) which confirms that contractor attributes have a significant influence on project success, and is in line with Doloi et al. (2010) And Wang and Huang (2006) which places technical, managerial, financial, and schedule control capabilities as the primary determinants of project performance. Thus, the simultaneous influence of service provider performance on project failure risk in this study has a strong empirical basis.

4. Conclusion

Based on the research results, it can be concluded that service provider performance is in the very high category, while the risk of project failure is in the medium category. The test results indicate that service provider performance significantly influences the risk of project failure, so improving performance quality can help reduce the risk of project failure, although it cannot completely eliminate it. The managerial performance dimension is the most dominant factor in shaping service provider performance. The ability to plan, coordinate, control resources, and supervise project implementation are key aspects that determine the success of service providers in implementing government projects.

Furthermore, contractual compliance has been shown to be a crucial factor in improving service provider performance. The higher the level of compliance with contract provisions, technical specifications, implementation schedules, and applicable regulations, the better the service provider's project performance. This study also shows that service provider performance significantly influences the risk of project failure, but its contribution is relatively limited. This indicates that project risk is influenced not only by service provider performance, but also by other factors such as planning quality, design changes, oversight capacity, environmental conditions, and other external factors. Furthermore, the national regulatory framework provides an adequate foundation for service provider performance assessment as a project risk mitigation tool. Therefore, the Badung Regency Government needs to streng then the implementation of the provider performance assessment system, improve the quality of historical provider data, and optimize the use of procurement databases as a basis for more effective, accountable, and evidence-based decision-making.

5. Reference

Aga, D. A., Noorderhaven, N., & Vallejo, B. (2016). Transformational leadership and project success: The mediating role of team-building. *International Journal of Project Management*, 34(5), 806–818.

- Al-Hashimi, A., & Masuri, M. G. (2022). The impact of risk management and project management skills on the performance of construction projects in the United Arab Emirates.
- Alzahrani, J. I., & Emsley, M. W. (2013). The impact of contractors' attributes on construction project success: A post-construction evaluation. *International Journal of Project Management*, 31(2), 313–322.
- Andreyanov, P., Decarolis, F., Pacini, R., & Spagnolo, G. (2024). *Past performance and procurement outcomes* (Working Paper).
- Atkinson, R. (1999). Project management: Cost, time and quality, two best guesses and a phenomenon, its time to accept other success criteria. *International Journal of Project Management*, 17(6), 337–342.
- Baccarini, D. (1999). The logical framework method for defining project success. *Project Management Journal*, 30(4), 25–32.
- Belassi, W., & Tukel, O. I. (1996). A new framework for determining critical success/failure factors in projects. *International Journal of Project Management*, 14(3), 141–151.
- Casady, C. B., Petersen, O. H., & Brogaard, L. (2023). Public procurement failure: The role of transaction costs and government capacity in procurement cancellations. *[Journal Name]*.
- Castro, M. F., Guccio, C., & Rizzo, I. (2023). How one-size-fits-all public works contracts do it better?
- Chrisp, T., & Margraves, A. (2024). The risks of non-compliance for general contractors.
- Flyvbjerg, B., Hon, C. K., & Fok, W. H. (2017). Reference class forecasting for Hong Kong's major roadworks projects.
- Göküz, A., & Akiner, İ. (2025). Investigating key factors influencing the success of construction projects.
- Gomarn, P., & Pongpeng, J. (2018). Project failure indicators: Perceptions of Thai and Malaysian engineers.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Kerzner, H. (2019). *Innovation project management: Methods, case studies, and tools for managing innovation projects*. John Wiley & Sons.
- Lim, C. S., & Mohamed, M. Z. (1999). Criteria of project success: An exploratory re-examination. *International Journal of Project Management*, 17(4), 243–248.
- Lubis, A. S. (2014). Principles of procurement of goods/services: Should they be followed? Malang Financial Training Center.
- Mahamid, I. (2024). Effect of conflicts on the contracting business failure in the construction industry.
- Mir, F. A., & Pinnington, A. H. (2014). Exploring the value of project management: Linking project management performance and project success. *International Journal of Project Management*, 32(2), 202–217.
- Nisar, M., & Asif, M. (2023). Factors leading to failures of infrastructure development projects in Pakistan: A systematic literature review. *[Journal Name]*.
- OECD. (2021). *Procurement strategy in major infrastructure projects*. Organisation for Economic Co-operation and Development.
- Okifitriana, M., & Latief, Y. (2021). Development of quality management system for construction services procurement to improve the quality of contractor performance in Universitas Indonesia.
- Regulation of the Minister of Public Works and Public Housing of the Republic of Indonesia Number 14 of 2020 concerning Standards and Guidelines for Procurement of Construction Services through Providers.
- Presidential Regulation of the Republic of Indonesia Number 16 of 2018 concerning Government Procurement of Goods/Services.
- Presidential Regulation of the Republic of Indonesia Number 12 of 2021 concerning Amendments to Presidential Regulation Number 16 of 2018 concerning Government Procurement of Goods/Services.

- Presidential Regulation of the Republic of Indonesia Number 46 of 2025 concerning Amendments to Presidential Regulation Number 16 of 2018 concerning Government Procurement of Goods/Services.
- Prakoso, A. E. J., & Setyaningati, C. N. (2018). Law protection for procurement officers: Legal protection against the procurement instrument of goods and services. *[Journal Name]*.
- Rockart, J. F. (1979). Chief executives define their own data needs. *Harvard Business Review*, 57(2), 81–93.
- Sandi, P. V., Rohman, M. A., & Utomo, C. (2020). A concept to evaluate procurement principles implementation of public construction projects in Surabaya. *IOP Conference Series: Materials Science and Engineering*.
- Sanvido, V., Grobler, F., Parfitt, K., Guvenis, M., & Coyle, M. (1992). Critical success factors for construction projects. *Journal of Construction Engineering and Management*, 118(1), 94–111.
- Toor, S. U. R., & Ogunlana, S. O. (2010). Beyond the iron triangle: Stakeholder perception of key performance indicators (KPIs) for large-scale public sector development projects. *International Journal of Project Management*, 28(3), 228–236.
- Williamson, O. E. (1985). *The economic institutions of capitalism*. Free Press.