

The Influence of Project Planning, Field Supervision, and Contractor Capability on the Performance of Fish Market Development Projects

(Case Study on the Fish Market Development Project in Sape District, Bima Regency, West Nusa Tenggara)

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Abstract

The performance of construction projects in regional areas continues to face various challenges, particularly due to the lack of integration between project planning, site supervision, and contractor capability. The Fish Market Development Project in Sape Subdistrict, Bima Regency, serves as a concrete example where administrative obstacles, extreme weather, and technical issues have affected the quality, timeliness, and cost of the project. This study aims to examine the conditions of project planning, field supervision, contractor capability, and project performance, as well as to analyse the influence of these three variables on project performance both simultaneously and partially. The research employs a quantitative approach using descriptive and verification methods. A total of 30 respondents were selected using a saturated sampling technique. Data were collected through a Likert-scale questionnaire and analysed using multiple linear regression. The results show that project planning, site supervision, contractor capability, and project performance are all in the “moderate” category. Simultaneously, the three variables have a significant influence on project performance, with a coefficient of determination (R^2) of 86.4%. Partially, site supervision has the most dominant influence on project performance, followed by contractor capability and project planning. These findings highlight the importance of synergy between thorough planning, effective supervision, and adequate contractor capability in improving construction project performance, particularly in coastal regions with complex geographical and social challenges.

Keywords: Project Planning, Site Supervision, Contractor Capability, Project Performance, Sape Fish Market

PENDAHULUAN

The construction industry plays a strategic role in supporting national development, particularly in the provision of quality, efficient, and timely infrastructure. One of the main indicators of success in construction project implementation is project performance, which generally includes the achievement of quality, time, and cost in accordance with the initial planning (Soeharto, 1995). In practice, project performance success is not only influenced by technical aspects but also strongly determined by managerial aspects, particularly project planning, field supervision, and the capability of the contractors involved.

Project planning is a crucial initial stage in the project management cycle as it serves as the basis for scheduling, budgeting, and controlling project activities. According to Bambang Spriadi (2017), good planning must be able to anticipate the future, considering various possibilities and resources to be utilized. In the context of regional development, planning becomes an integrated part of the national development planning system in accordance with Law Number 25 of 2004, aiming to optimize the use of regional potential and minimize development inequality between regions (Sjafrizal, 2016; Bastian, 2009).

However, even though planning is detailed, in practice projects often face deviations due to various obstacles in the field, such as delays in material supply, shortage of labor, and other technical issues. Therefore, field supervision becomes an inseparable part of managerial functions to ensure that project implementation remains aligned with the planned framework. According to Sondang P. Siagian in Satriadi (2016), supervision aims to ensure that organizational activities are carried out in accordance with established plans and policies while taking corrective actions when deviations occur.

In addition to planning and supervision, contractor capability also plays a vital role in determining project performance success. Contractor capability includes experience, technical skills, financial management, business legality, and workforce competency. According to Rahardjo (2015), project performance is strongly influenced by the managerial and technical capacity of the executor, including contractors who are responsible for resource procurement, time management, and quality control. In construction projects, contractors with relevant work experience, expert support, and adequate equipment can improve project efficiency and minimize the risk of failure (Natalicio Pinto, 2022; Parami Dewi et al., 2022).

The importance of synergy between comprehensive planning, effective supervision, and adequate contractor capability becomes a central concern in the implementation of the Fish Market Development Project in Sape District, Bima Regency, West Nusa Tenggara Province. This project is part of the local government's efforts to improve market infrastructure as a center for coastal community economic activities.

Based on field observations of the Fish Market Development Project in Sape District, several issues were identified, showing that the integration of project planning, field supervision, and contractor capability has not yet been optimal. One

major issue was the project site, which experienced land ownership claims from local residents, leading to administrative and social obstacles in the initial implementation stage.

Additionally, the project experienced a two-month delay due to extreme weather factors. According to the Meteorology, Climatology, and Geophysics Agency (BMKG, 2025), during February to March 2025, Sape District experienced heavy rainfall with strong winds and high waves due to sea surface temperature anomalies in the southern waters of West Nusa Tenggara. This condition disrupted material transportation, temporarily damaged initial structures, and hampered labor distribution to the project site (BMKG, 2025; BPBD Bima Regency, 2025). This shows that environmental risk aspects were not fully accounted for in the planning stage.

Based on a preliminary survey of 10 respondents from the Fish Market Development Project in Sape, it was found that project planning is still in the "fair" category with an average score of 3.02, with evaluation and monitoring (2.7) being the weakest aspect, indicating suboptimal planning. For field supervision, the average score was 3.08, also in the "fair" category, but with weaknesses in comparison (2.8) and corrective actions (2.8), suggesting a need for improvements in evaluating implementation standards. Furthermore, contractor capability scored an average of 3.07, with technical ability (2.9) being the main challenge, although social (3.2) and conceptual (3.1) abilities were relatively better. Overall project performance was in the "fair" category with an average score of 3.13, with time performance (2.8) as the weakest aspect, while cost performance (3.7) was the strongest.

Several previous studies, such as those conducted by Trijeti (2000), Hafid Mulyawan (2001), and Erry Humayun (1998), focused more on individual variables, such as planning or supervision, in relation to project performance, without integrating the three into a comprehensive

analysis model. Meanwhile, studies by Diah Parami Dewi et al. (2022) and Natalicio Pinto (2022) emphasized the influence of human resource quality on performance but did not directly consider the relationship between contractor capability and other managerial elements such as planning and field supervision simultaneously.

Therefore, there is still a research gap, namely the need to examine integratively how project planning, field supervision, and contractor capability influence construction project performance simultaneously within a comprehensive research framework. This is especially important in the context of development projects in regions with specific geographical and social characteristics such as Sape District.

These problems illustrate that the lack of integration between planning, supervision, and contractor capability significantly affects project performance in terms of quality, time, and cost. Therefore, this study is relevant to examine the extent to which project planning, field supervision, and contractor capability influence construction project performance.

Based on the above description, the researcher is interested in conducting further research entitled: **“The Influence of Project Planning, Field Supervision, and Contractor Capability on the Performance of Fish Market Development Projects in Sape District, Bima Regency, West Nusa Tenggara.”** This study aims to determine how comprehensive project planning, effective field supervision, and adequate contractor qualifications contribute to improving project performance, particularly in terms of time, quality, and cost in market construction projects.

Research Problem Formulation

1. What are the descriptions of project planning, field supervision, contractor capability, and project performance in the Fish Market Development Project in Sape District, Bima Regency, West Nusa Tenggara?

2. How do project planning, field supervision, and contractor capability, both partially and simultaneously, influence the project performance of the Fish Market Development Project in Sape District, Bima Regency, West Nusa Tenggara?

LITERATURE REVIEW

Project Planning

According to Bambang Spriadi (2017:3), the definition of planning is as follows: "Planning is a management function consisting of four main functions: planning management (planning function), organizing (organizing function), directing (directing), and controlling (controlling). Therefore, planning is an absolute requirement for implementing good management."

According to Kusno (2021:34), the planning indicators are as follows:

- 1) The desired goals.
- 2) A specific timeframe for achieving the goals.
- 3) Continuously linking various problems with available resources.
- 4) The best policies for realizing the goals.
- 5) Planning contains concrete programs, activities, and efforts.

According to Rusdiana and Nasihudin (2021:56-57), the planning indicators are as follows:

1) Assessing that planning is used as a vehicle for monitoring and thorough preparation in managing resources and improving agency performance.

2) Providing recommendations for improvement. Based on planning.

From these two indicators, the author draws the following conclusions: The desired goal, a specific timeframe for achieving the goal, a constant connection between various problems and available resources, the best policy variables for realizing the goal, and the planning containing concrete programs, activities, and efforts.

Field Supervision

According to Moekizat in Satriadi (2015, p. 289), supervision is the process of monitoring work results, evaluating them, and, if necessary, taking corrective action to ensure that the results are in line with the plan.

The following is a summary of Robbins and Coulter's opinion in Satriadi (2016, p. 290) regarding four control indicators:

1) Setting standards: Determining targets or desired results as benchmarks for organizational performance.

2) Measuring: Continuously measuring the quality and quantity of results, whether daily, weekly, or monthly.

3) Comparing: Assessing whether the achieved results meet, exceed, or exceed established standards.

4) Taking action: Taking corrective action if there are deviations between results and standards.

Contractor Capability

Contractor capability is the overall ability of the contractor, both individually and as an organization, to carry out construction work effectively, efficiently, professionally, and in accordance with established quality standards.

According to Hersey and Blanchard (2008), capability refers to several indicators, including:

a. Technical Competence

1) Mastery of work equipment

2) Mastery of work methods/procedures

3) Understanding of work rules

b. Social Competence

1) Ability to collaborate

2) Ability to empathize

3) Ability to work in a team

c. Conceptual Competence

1) Understanding of organizational policies

2) Understanding of agency goals and targets

Project Performance

Project performance is assessed using three main indicators: quality, time, and cost performance. Each has specific indicators, as follows:

a. Quality performance indicators, according to Syah (2004), include: (1) compliance with technical specifications in the contract documents, (2) approval and acceptance of the project by the owner without conditions or comments, (3) absence of penalties, complaints, or claims related to quality, (4) proper implementation of Occupational Safety and Health (K3), (5) satisfaction of all parties involved in the project implementation, (6) obtaining a certificate of completion, (7) creating a positive company image, and (8) invitations or appointments for new projects.

b. Project time success indicators include: (1) completion of work according to the schedule in the contract documents, (2) acceptance of the project by the owner, either in part or in full, (3) absence of

complaints or claims from the employer or third parties, (4) satisfaction of all related parties, (5) maintaining the company's image, and (6) invitations or appointments for new projects from external parties (Syah, 2004).

c. Cost performance indicators include: (1) conformity of project implementation with contract documents,

(2) approval and full payment by the project owner, (3) no unpaid work, (4) satisfaction of all parties involved, (5) maintaining a good company image, (6) obtaining invitations or appointments for new projects, and (7) achieving profits for the company. The complete relationship between the research variables can be seen in the following figure.:

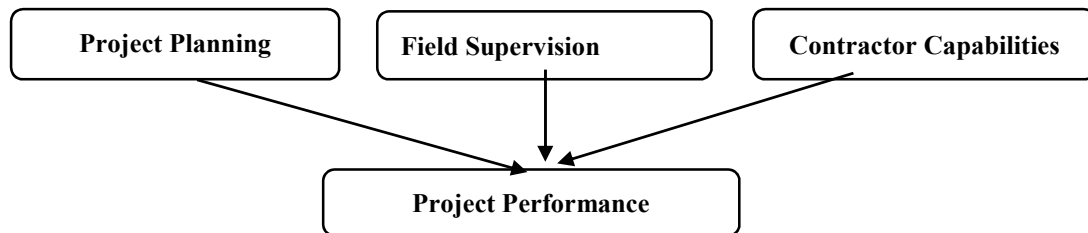


Figure 1 Research Paradigm

RESEARCH METHODS

This study employed a quantitative approach with descriptive and verification methods. The aim was to analyze the influence of project planning, field supervision, and human resource quality on construction project performance. The research object focused on the Sape District Fish Market Development Project in Bima Regency, West Nusa Tenggara Province. The unit of analysis was the construction project itself, and the units of observation were the individuals directly involved, such as the project manager, supervisors, field implementers, and technical personnel.

The study population consisted of 30 workers involved in the project. Due to the relatively small number, a saturated sampling technique was used, allowing the entire population to be sampled. Primary data were collected through a questionnaire with a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), structured based on the variable indicators of project planning, field supervision, human resource quality, and project performance. Prior to use, the instrument was tested for validity using Pearson Product Moment correlation and reliability using Cronbach's Alpha to ensure its validity and consistency.

Data analysis was conducted through descriptive statistics to provide an overview of the conditions of project planning, field supervision, human resource quality, and project performance. Furthermore, classical assumption tests were conducted, including

normality, multicollinearity, and heteroscedasticity tests, to ensure the feasibility of the regression model. Multiple linear regression analysis was used to measure the influence of the three independent variables on project performance. Hypothesis testing was conducted using a t-test to determine the influence of each independent variable partially, and an F-test to see the influence of all three simultaneously on project performance. In addition, the coefficient of determination (R^2) was calculated to determine the contribution of the independent variables in explaining variations in project performance. Thus, this research method is expected to provide empirical evidence regarding the factors that most influence the success of the Sape District Fish Market development project.

RESEARCH RESULTS

Respondent Characteristics

This study was conducted by distributing questionnaires to 30 respondents, consisting of workers, technicians, foremen, and field supervisors directly involved in project implementation. Saturated sampling was used as the sampling method, as the relatively small population allowed all individuals to be included in this study. Data regarding the characteristics of the respondents are presented as follows:

Table 1 Respondent Characteristics

Respondent Profile	Criteria	Frequency	Presentase
Gender	Male	27	90%
	Female	3	10%
Highest Education	Elementary School/Equivalent	12	16%
	Junior High School/Equivalent	29	38%
	High School/Equivalent	33	43%
	High School/Vocational High School	9	30%
Respondent Profile	D1/D3	0	0%
	S1/D4	21	70%
Gender	Postgraduate Degree	0	0%
	Doctorate Degree	0	0%
	<1 year	9	30%
	1-3 years	15	50%
	4-6 years	0	0%
	Over 6 years	6	20%

Source: Researcher Data Processing, 2025

In Table 1, the characteristics of respondents show that the majority were male (90%), were in the productive age group of 25–34 years (40%), and had a bachelor's degree (70%). In terms of work experience, most respondents had worked for 1–3 years (50%), while only a small proportion had more than 6

years of experience (20%). These findings indicate that the project workforce is still dominated by men with higher education backgrounds and relatively moderate work experience, which serves as the basis for analyzing the relationship between research variables and project performance.

Validity and Reliability Test

Table 2 Validity and Reliability Test

Variables	Statement	r Count	r Table	informati on
Project Planning (X1)	P1	0,735	0,361	Valid
	P2	0,452	0,361	Valid
	P3	0,662	0,361	Valid
	P4	0,438	0,361	Valid
	P5	0,511	0,361	Valid
	P6	0,457	0,361	Valid
	P7	0,597	0,361	Valid
	P8	0,711	0,361	Valid
	P9	0,699	0,361	Valid
	P10	0,517	0,361	Valid
	P11	0,691	0,361	Valid
	P12	0,613	0,361	Valid
Field Supervision (X2)	P1	0,520	0,361	Valid
	P2	0,687	0,361	Valid
	P3	0,629	0,361	Valid
	P4	0,536	0,361	Valid
	P5	0,392	0,361	Valid
	P6	0,687	0,361	Valid
	P7	0,426	0,361	Valid
	P8	0,684	0,361	Valid
Contractor Capability (X3)	P1	0,707	0,361	Valid
	P2	0,872	0,361	Valid
	P3	0,474	0,361	Valid
	P4	0,516	0,361	Valid
	P5	0,552	0,361	Valid
	P6	0,470	0,361	Valid
	P7	0,615	0,361	Valid
	P8	0,493	0,361	Valid
	P9	0,599	0,361	Valid
Project Performance (Y)	P1	0,622	0,361	Valid
	P2	0,605	0,361	Valid
	P3	0,453	0,361	Valid

P4	0,619	0,361	Valid
P5	0,551	0,361	Valid
P6	0,590	0,361	Valid
P7	0,718	0,361	Valid
P8	0,525	0,361	Valid
P9	0,548	0,361	Valid
P10	0,578	0,361	Valid
P11	0,412	0,361	Valid
P12	0,494	0,361	Valid
P13	0,594	0,361	Valid
P14	0,613	0,361	Valid
P15	0,685	0,361	Valid
P16	0,570	0,361	Valid
P17	0,654	0,361	Valid
P18	0,619	0,361	Valid
P19	0,645	0,361	Valid
P20	0,425	0,361	Valid

Source: Data Processing with SPSS 23, 2025

In Table 2, the validity index value for each item of the project planning variable question, field supervision, contractor capability and project performance is measured

through the product moment correlation value which has a value above the valid coefficient value, namely 0.361, so each question is declared valid.

Table 3 Reliability Test Results

No	Variables	<i>Alpha Cronbach</i>	<i>Alpha</i>	Description
1	Project Planning (X1)	0,882	12	Reliable
2	Field Supervision (X2)	0,711	8	Reliable
3	Contractor Capabilities (X3)	0,770	9	Reliable
4	Project Performance (Y).	0,894	20	Reliable

Source: Data Processing with SPSS 23, 2025

Meanwhile, the reliability values for the questionnaire items for the four variables above showed a Cronbach's alpha value greater than 0.70. These results indicate that the questionnaire items for the variables Human Resource Competence, Work Environment, and Work Productivity can measure their respective variables and are considered highly accurate for use as research variables.

Descriptive Analysis

Overview of the Sape District Fish Market Development Project Planning

Respondents' responses to the overall Project Planning aspect were in the "Good" category, with an average total score of 3.53. Of the 12 statements submitted, most aspects received the "Good" category, such as the appropriateness of the number of workers and materials to project requirements (average 3.90), clarity of activity outputs (3.77), and the use of policy documents as coordination guidelines (3.43–3.77). This indicates that most respondents assessed the project planning as being sufficiently structured

and realistic. However, several aspects remained in the "Sufficient" category, such as clarity of project objectives in documents (3.30), periodic evaluation (3.30), and use of monitoring results to revise strategies (3.23). This indicates that although the planning aspect has been implemented well, improvements are still needed in terms of more detailed documentation, utilization of monitoring results, and strengthening of the periodic evaluation mechanism to further optimize the quality of project planning.

Overview of Field Supervision of the Sape District Fish Market Construction

Respondents' responses to the Field Supervision aspect were overall in the "Sufficient" category, with an average total score of 3.33. Of the eight questions asked, two

Overview of Contractor Capabilities for the Sape District Fish Market Development Project Respondents' responses to Contractor Capability were generally categorized as "Good," with an average total score of 3.51. Of the nine statements provided, six fell into the "Good" category, such as the ability to work within a project team (average score of 4.17), understanding of regulations and technical standards (3.67), and understanding of project targets (3.60). The remaining three fell into the "Fair" category, such as the ability to use work tools (3.30), the application of work methods (3.27), and the ability to build cooperation (3.37). This indicates that the contractor generally possesses good capabilities in carrying out construction work, particularly in terms of team collaboration, regulatory understanding, and orientation toward project targets. However, there is still room for improvement, particularly in terms of operational technical skills and the implementation of field work procedures, to optimize project implementation.

Overview of the Performance of the Sape District Fish Market Development Project Respondents' responses to the overall Project Performance were categorized as "Good," with an average total score of 3.41. This assessment covered three main aspects: quality, time, and cost. In terms of quality, several indicators were categorized as good, such as work meeting

aspects received the "Good" category: supervision activities that included comparing work results with working drawings and implementation time (average 3.63), and inspection of the work of inexperienced local craftsmen (average 3.40). Meanwhile, six other statements are still in the "Sufficient" category, such as the consistent presence of supervisors in the field (3.23), the use of standards as a reference in evaluations (3.17), and the recording of corrective actions in official reports (3.33). This indicates that although there are several aspects of supervision that have been running well, in general the implementation of field supervision still requires improvement, particularly in terms of reporting consistency, daily monitoring, and supervisors' responses to technical deviations in the field.

technical specifications (3.47) and the absence of financially problematic work (3.67). However, several quality aspects were still considered adequate, such as the implementation of Occupational Health and Safety (K3) (3.23) and acceptance of work without revisions (3.30), indicating a need for improvement in quality control and documentation. Regarding time, most respondents rated the project's time performance as good, including on-schedule completion (3.67) and the project's time benefits to the company's reputation (3.60). However, some respondents still found statements categorized as adequate, such as the impact of extreme weather (3.37) and claims of delays (3.17). Regarding the cost aspect, responses were also categorized as good, with indicators such as timely payment from the project owner (3.67), expenditure efficiency (3.53), and profit on target (3.50).

Verification Analysis

Classical Assumption Test Normality Test

Normality testing can be performed using a statistical test, namely the Kolmogorov-Smirnov test. If the p-value is > 0.05 , the data is normally distributed. The results of the Kolmogorov-Smirnov test are as follows.

Table 4 Normality Test Results
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		30
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	4.08070786
Most Extreme Differences	Absolute	.109
	Positive	.068
	Negative	-.109
Test Statistic		.109
Asymp. Sig. (2-tailed)		.200 ^{c,d}

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

Sumber: Olah Data dengan SPSS 23, 2025

Based on Table 3, the Kolmogorov-Smirnov test shows that the significance value of 0.2 is greater than 0.05, indicating that the data obtained are normally distributed, thus meeting one of the assumptions for hypothesis testing.

Multicollinearity Test

Multicollinearity issues can be detected by examining the VIF value. If the VIF value is less than 10, the model can be concluded to be free of multicollinearity. The VIF values in this study are as follows:

Table 5 Multicollinearity Test Results
Coefficients^a

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
X1	.349	2.865
X2	.322	3.103
X3	.360	2.776

a. Dependent Variable: Y

Source: Data Processing with SPSS 23, 2025

Based on Table 4, all VIF values are <10 and the tolerance value is >0.1. It can be concluded that there is no multicollinearity among the independent variables in the regression model. Therefore, the multiple regression model used between Project Planning, Field Supervision, and Contractor Capability on Project Performance meets the classical assumptions of

multicollinearity and is suitable for further analysis.

Heteroscedasticity Test

One way to detect heteroscedasticity is to examine the scatterplot graph between the predicted values of the dependent variable, ZPRED, and its residual values (SRESID). The following figure is used to detect the presence or absence of heteroscedasticity:

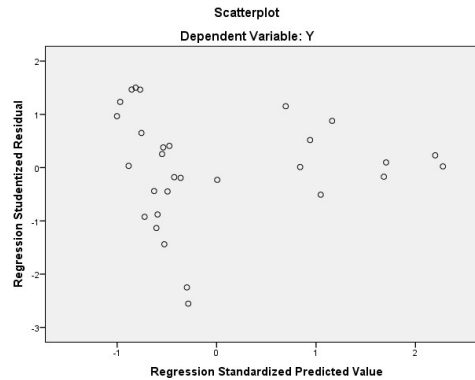


Figure 2. Heteroscedasticity Test with Scatterplot

Source: Data Processing with SPSS, 2025

Figure 1 shows that the model does not exhibit heteroscedasticity. There is no clear pattern in the figure, and the points are spread above and below 0 on the Y-axis. This indicates that the variance of the residuals from one observation to the next is the same or constant in the model.

A multiple linear regression statistical test was used to analyze the influence of variables—project planning, field supervision, and contractor capability—on the performance of the Sape District Fish Market construction project. This test aims to determine the extent of influence of each independent variable on the dependent variable, both simultaneously and partially. The results of the multiple linear regression are presented as follows::

Multiple Linear Regression Model

Table 6 Regression Coefficient Results
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	-3.001	4.321		-.695	.494
X1	.549	.200	.337	2.749	.011
X2	.907	.329	.351	2.755	.011
X3	.722	.267	.326	2.705	.012

a. Dependent Variable: Y

Source: Data Processing with SPSS, 2025

The resulting multiple linear regression equation is: $Y = -3.001 + 0.549X1 + 0.907X2 + 0.722X3 + e$, where Y is project performance, X1 is project planning, X2 is field supervision, and X3 is contractor capability. The constant value of -3.001 indicates that without the influence of project planning, field supervision, or contractor capability, project performance is estimated to be negative, at -3.001.

The project planning regression coefficient of 0.549 is positive, meaning that better project planning will increase project performance by

0.549 units. Furthermore, the field supervision regression coefficient of 0.907 is also positive, meaning that more optimal field supervision will increase project performance by 0.907 units. Similarly, the contractor capability regression coefficient of 0.722 shows a positive influence, which means that the higher the contractor's capability in implementing the project, the project performance will also increase by 0.722 units.

Hypothesis

A partial significance test of the regression coefficients was used to determine the effect of each independent variable—project planning, field supervision, and contractor capability—on project performance. Each independent variable was tested individually while holding the other variables constant. The statistical hypothesis formulation tested partially is as follows:

Statistical Hypothesis:

1) $H_0 : b_1 = 0$ There is no effect of Project Planning (X1) on Project Performance (Y)

$H_1 : b_1 \neq 0$ There is an effect of Project Planning (X1) on Project Performance (Y)

2) $H_0 : b_2 = 0$ There is no effect of Field Supervision (X2) on Project Performance (Y)

$H_1 : b_2 \neq 0$ There is an effect of Field Supervision (X2) on Project Performance (Y)

3) $H_0 : b_3 = 0$ There is no effect of Contractor Capability (X3) on Project Performance (Y)

$H_1 : b_3 \neq 0$ There is an effect of Contractor Capability (X3) on Project Performance (Y).

Table 7 Partial Test Results

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	-3.001	4.321		-.695	.494
X1	.549	.200	.337	2.749	.011
X2	.907	.329	.351	2.755	.011
X3	.722	.267	.326	2.705	.012

a. Dependent Variable: Y

For the first hypothesis, namely the influence of Project Planning (X1) on Project Performance (Y), the calculated t-value was 2.749, which is greater than the t-table value of 2.056. Furthermore, the significance value (Sig.) of 0.011 is lower than the significance level of $\alpha = 0.05$. Based on these results, H_0 is rejected, indicating a significant influence between project planning and project performance. The positive regression coefficient (0.549) indicates that better project planning will improve project performance.

For the second hypothesis, regarding the influence of Field Supervision (X2) on Project Performance (Y), the calculated t-value was 2.755, which is also greater than the t-table value of 2.056, with a significance value of $0.011 < 0.05$. Therefore, H_0 is rejected, indicating that field supervision has a significant influence on project performance. The regression coefficient value of 0.907 indicates a positive effect, meaning that the better the field supervision implementation, the higher the project performance.

Meanwhile, for the third hypothesis, namely the effect of Contractor Capability (X3) on Project Performance (Y), the calculated t-value was 2.705, which is also greater than the t-table (2.056), and the significance value was 0.012, which is less than 0.05. Therefore, H_0 is

rejected, and it can be concluded that contractor capability significantly influences project performance. The positive regression coefficient value of 0.722 indicates that the higher the contractor's capability, the better the resulting project performance.

Table 8 Simultaneous Hypothesis Test (F Test)
ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3061.517	3	1020.506	54.944	.000 ^b
	Residual	482.913	26	18.574		
	Total	3544.430	29			

a. Dependent Variable: Y

b. Predictors: (Constant), X3, X1, X2

Source: Data processing using SPSS 23, 2025

Based on Table 8, the calculated F value is 54.944 with a significance value (Sig.) of 0.000. With a significance level of $\alpha = 0.05$, 3 independent variables (Project Planning, Field Supervision, and Contractor Capability), and 30 respondents, the degrees of freedom for the numerator (df1) are 3 and the denominator (df2) are 26. Referring to the F distribution table, the obtained F table value is 2.98. Because the calculated F (54.944) is greater than the F table (2.98), and the significance value of 0.000 is less than 0.05, it can be concluded that H_0 is rejected. This means that the multiple linear regression model used in this study is

simultaneously significant. In other words, the variables Project Planning (X1), Field Supervision (X2), and Contractor Capability (X3) jointly have a significant effect on the Project Performance variable (Y).

Coefficient of Determination

To determine the extent of influence of the variables Project Planning (X1), Field Supervision (X2), and Contractor Capability (X3) on Project Performance (Y), the coefficient of determination is calculated using the formula: $KD = r^2 \times 100\%$, where r is the correlation value. The following is obtained:

Table 9 Simultaneous Determination Coefficient Analysis
Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.929 ^a	.864	.848	4.30971

a. Predictors: (Constant), X3, X1, X2

b. Dependent Variable: Y

Source: Data Processing with SPSS 23, 2025

Based on the results shown in Table 9, it is known that the R Square value is 0.864, this shows that Project Planning, Field Supervision, and Contractor Capability

simultaneously influence Project Performance by 86.4%, while the remaining 13.6% is influenced by other variables not observed in this study.

Table 10 Partial Determination Coefficient Analysis

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-3.001	4.321		-.695	.494
X1	.549	.200	.337	2.749	.011
X2	.907	.329	.351	2.755	.011
X3	.722	.267	.326	2.705	.012

a. Dependent Variable: Y

Based on the analysis, the contribution of each independent variable to project performance can be explained as follows. The Project Planning variable (X1) has a correlation value (r) of 0.850 and a

regression coefficient (β) of 0.337. Based on the partial coefficient of determination calculation, the contribution of Project Planning to Project Performance is 28.65%.

Furthermore, the Field Supervision variable (X2) has a correlation value of 0.860 and a regression coefficient of 0.351. The calculation results indicate a contribution of 30.19%, meaning that field supervision has the largest influence of the three variables on project performance.

The Contractor Capability variable (X3), with a correlation value of 0.844 and a regression coefficient of 0.326, contributes 27.50% to project performance. This indicates that the contractor's work experience, technical skills, and managerial capacity also have a significant influence on project success.

CONCLUSION

Based on the research results and discussion regarding the influence of project planning, field supervision, and contractor capability on the performance of the Sape District Fish Market construction project, Bima Regency, West Nusa Tenggara, two main conclusions can be drawn:

1. The overview of project planning, field supervision, contractor capability, and project performance indicates that project planning has been implemented quite well, with work guidelines, field-based policies, and periodic evaluations in place. Field supervision was deemed adequate, but still requires improvement in the consistency of supervisor attendance and recording of supervision results. Contractor capability was considered good, particularly in terms of teamwork, understanding of project policies, and technical mastery. Overall project performance was perceived as good by respondents, characterized by the achievement of work quality, timely implementation, and relatively efficient cost management.

2. Project planning, field supervision, and contractor capability influenced project performance, both partially and simultaneously. Each variable had a significant influence on improving project quality, timeliness, and cost. Together, these three variables made a significant

contribution to achieving project performance. This confirms that the success of a construction project is largely determined by the synergy between thorough planning, effective supervision, and competent and professional contractors.

RECOMMENDATIONS

Based on the conclusions outlined, the author proposes the following recommendations:

1. For Regional Governments or Project Implementing Agencies: It is recommended that the results of this study serve as a reference in formulating construction project management policies, particularly those located in coastal or underdeveloped areas. Project planning should be conducted comprehensively and based on field needs, while field supervision must be implemented consistently and well-documented. Contractor selection should also consider technical and managerial capabilities, as well as teamwork skills.

2. For Project Implementers: The importance of synergy between planning, supervision, and contractor capabilities in project implementation should be emphasized. All three are interconnected and contribute to project success, particularly in achieving appropriate work quality, timely implementation, and cost efficiency. Regular evaluation and internal capacity building of the implementation team will significantly assist in maintaining project performance.

3. For Academics and Researchers: It is hoped that the results of this study can serve as a reference in the development of academic studies in the field of construction management. Future researchers could expand the scope of variables or use different methodological approaches to generate more comprehensive insights. Furthermore, geographic contexts such as coastal areas or underdeveloped regions could be the focus of research to make a tangible contribution to regional development.

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