



# Analysis Of The Role Of Construction Management Consultants In Preventing Delays In Construction Times Of The UPB BWS Kalimantan Iv Office Building Samarinda City

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## Abstract

The construction of building facilities and infrastructure in the province of East Kalimantan which was built in the 2021 fiscal year is expected to produce building infrastructure and facilities that are by what is planned, and all of this is, of course, inseparable from the role and performance of the supervisory consultant who provides expertise services to the owner. . Therefore this research was conducted to find out the supervising consultants on building projects in the province of East Kalimantan and the aim of obtaining the most dominant influencing factors and determining strategies to improve the performance of supervising consultants on building projects. The data analysis methodology used is factor analysis and multiple linear regression analysis of the answers from the questionnaire distributed to 55 respondents from the contractor and owner involved in the road reconstruction project in East Kalimantan province. Based on the results of the study, the performance of supervising consultants significantly in building projects in the province of East Kalimantan is a factor in the ability of management to supervise project implementation with a coefficient of count = 3.380 > table = 1.679. The strategy that must be carried out to improve the performance of the supervising consultant on building projects is that the supervising consultant must attend intensive training (workshop) and hold a meeting at the beginning of the activity regarding evaluation and discussion. to control the stages of work with the construction management system as well as a brief presentation of the methodology and supervision work program regarding quality, volume, and cost control in construction projects in the field.

**Keywords:** Performance, Supervisory Consultant, Building

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## I. Introduction

State Buildings are buildings for official purposes that become/will become State property, such as office buildings, school buildings, hospital buildings, warehouses, and State houses, and are provided with funding sources originating from the State Revenue and Expenditure Budget (APBN) funds. , and/or other legitimate acquisitions (Regulation of the Minister of Public Works No. 45/PRT/M/2007)

A complex building construction project has a fairly long process, and this process often causes problems, especially in planning, control, and supervision. The implementation of a project will not go well if it is not by the rules which results in delays in a project. This will certainly be detrimental to the Government/Owner, the resulting impact will be that the process of administering the State will be hampered related to services to the community and delays in government programs, while for contractors it will result in higher financing due to the automatic addition of time for labor costs, equipment rental, material payments. and others will increase not to mention related to late fees that exceed the implementation time. Therefore, proper project planning, control, and supervision are needed so that project implementation can be carried out correctly, on time on cost, and by the planned technical specifications.

In terms of resource use, planning can be interpreted as guiding for resource implementers to carry out activities and ensure the use of resources effectively and efficiently (Soeharto, 1995).

Project delays can come from service providers or from the use of services as well as other parties and other parties which have an impact on additional time and costs outside of the plan. If the delay comes from the contractor (service provider), then the contractor can be subject to a fine, likewise if the delay comes from the

service user, then the service user will pay the losses borne by the service provider, the amount of which is determined in the contract by applicable laws.

The construction of government office buildings in East Kalimantan Province, Samarinda City also often experiences delays in implementation, generally caused by inaccuracy of resources who are less competent in their fields so that the three government parties, contractors, and consultants have to change the implementation process that has been carried out, as for indications. Problems that often occur are financial constraints, human resources, scheduling methods, implementation methods, design changes, material availability, equipment availability, and poor management in the contractor organization, work plans that are not well structured/integrated, and incomplete drawings and specifications. , and the contractor's failure to carry out the work resulting in delays in implementation.

Projects in the City of Samarinda that are experiencing delays include the Rehabilitation of the UPB BWS Kalimantan IV Office Building in the City of Samarinda 2021. So far it is not known what factors are causing the delay in the government office building construction project in the City of Samarinda, as well as what strategies are appropriate. To overcome delays in the construction of government office buildings in Samarinda City, it is, therefore, necessary to carry out research "Analysis of the Role of Construction Management Consultants in Preventing Delays in Construction Time for UPB BWS Kalimantan IV Office Buildings in Samarinda City", the results of this research are to be used as leadership policy in the development process in the future.

## **II. Method**

This research uses a survey method by gathering opinions, experiences, and attitudes of respondents regarding existing problems, by taking primary data through questionnaires and secondary data from related institutions. Based on the factors that influence the performance of supervisory consultants on building construction projects in East Kalimantan province, the factors are determined which are followed by determining the variables to be used as questions that will be measured in the form of a questionnaire. In this research, samples were taken randomly using proportionate stratified random sampling (Ridwan, 2010). To obtain data through a questionnaire, questions are created that are linked to these variables with their respective indicators. These questions were asked to respondents through a questionnaire. Data obtained from survey results (questionnaires) will later be processed to obtain information in tabular form (Appendix 2). The results of the processed data answer the questions in the problem formulation. Data processing should pay attention to the type of data collected with an orientation toward the goals to be achieved. Accuracy in analytical techniques greatly influences the accuracy of research results. The data analysis techniques used are factor analysis and multiple linear regression analysis. The data from the questionnaire with a range of 1 to 5 from each variable is then re-scored, so that each variable containing several indicators will produce only one score value which is then analyzed using factor analysis and multiple linear regression analysis. Data processing was carried out with the help of the Statistical Package and Service Solution (SPSS) 15 For Windows program.

## **III. Results and Discussion**

### **a. Instrument Test**

#### **1) Validity and Reliability**

The validity test can be explained that for fourteen variables with a significance level ( $\alpha$ ) = 0.05, the table critical value is 0.266. Because all items have coefficient values above 0.266, all questions can be included in further analysis. Meanwhile, reliability with Cronbach's Alpha coefficient for all variables is greater than 0.600. So it can be concluded that the indicators used to measure these variables are reliable and reliable.

### **b. Data Analysis and Discussion**

#### **1) Factor Analysis**

##### **a) Latent Variable Management Ability to Supervise Project Implementation (X1)**

The cumulative contribution level shows that the influence of the performance of supervisory consultants on building projects can be explained by 62.538% by indicators of the latent variable Construction K3 Control (X1), while the remaining 37.462% is an error or formed by other indicators that have not been detected in the research This.

##### **b) Latent Variable Quality Control of Work in Terms of Quality and Quantity (X2)**

The cumulative contribution level shows that the influence of the performance of supervisory consultants on building construction projects can be explained by 64.777% by indicators of the latent variable quality control of work in terms of quality and quantity (X2), while the remaining 35.223% is an error or formed by other indicators that have not been detected in this study.

##### **c) Volume and Cost Control Understanding Variables (X3)**

The cumulative contribution level shows that the influence of the performance of supervisory consultants on building projects can be explained by 48.049% by the latent variable indicators volume and cost control (X3),

while the remaining 51.951% is an error or formed by other indicators that have not been detected in this research.

d) Time Control Latent Variable (X4)

The cumulative contribution level shows that the influence of the performance of supervisory consultants on building projects can be explained by 58.139% by indicators of the time control latent variable (X4), while the remaining 41.861% is an error or formed by other indicators that have not been detected in this research.

e) Latent Variable Coordination of Preparation of Implementation Meeting Materials (X5)

The cumulative contribution level shows that the influence of the supervisory consultant's performance on building projects can be explained by 65.180% by indicators of latent variable preparation of implementation meeting materials (X5), while the remaining 34.820% is influenced by other variables outside the research.

f) Latent Variable Mastery/Understanding of the Duties and Obligations Listed in the TOR (X6)

The cumulative contribution level shows that the influence of the performance of supervisory consultants on building construction projects can be explained by 70.487% of the latent variable indicators of mastery/understanding of the tasks and obligations listed in the TOR (X6), while the remaining 29.513% is an error or was formed by other indicators that have not been detected in this study.

g) Latent variables of accuracy, speed, and completeness in submitting reports (X7)

The cumulative contribution level shows that the influence of the performance of supervisory consultants on building construction projects can be explained by 63.618% by the latent variable indicators of accuracy, speed, and completeness in submitting reports (X7), while the remaining 36.382% is an error or formed by other indicators. which had not been detected in this study.

h) Latent Variable Capability of Project Implementation Supervision Management (X8)

The cumulative contribution level shows that the influence of the performance of supervisory consultants on building construction projects can be explained by 71.753% by the latent variable indicators Management Capability for project implementation supervision (X8), while the remaining 28.247% is an error or formed by other indicators that have not been detected in this research.

2) Multiple Linear Regression Analysis

a) Normality Assumption Testing

Based on the Kolmogorov-Smirnov Z test, a value of 0.854 was obtained, where this value is greater than  $\alpha = 0.05$ . From these tests, it is shown that the error or residual has a normal distribution. So it can be concluded that the error assumption has been met.

b) Testing the Homoscedasticity Assumption

Testing this assumption obtained a Spearman rank correlation coefficient of 0.000 with a p-value of 1.000, where this value is greater than  $\alpha = 0.05$ . From this test, it can be concluded that the homoscedasticity assumption has been fulfilled.

c) Testing the Non-Autocorrelation Assumption

The Watson Durbin (dW) statistical value of 1.678 is between  $dU=1.861$  and  $4-dU=2.139$  so it can be concluded that there is no autocorrelation, meaning that the non-autocorrelation assumption in the regression has been fulfilled.

d) Multiple Linear Regression Analysis

Table 1. Results of Multiple Linear Regression Analysis

Variabel	Koefisien $\beta$	t <sub>hitung</sub>	p-value	Keterangan
Konstanta	0,386	0,467	0,643	
X1	0,107	0,797	0,429	Tidak Signifikan
X2	-0,190	-0,867	0,390	Tidak Signifikan
X3	0,038	0,151	0,881	Tidak Signifikan
X4	0,059	0,351	0,727	Tidak Signifikan
X5	-0,009	-0,087	0,931	Tidak Signifikan
X6	0,104	0,508	0,614	Tidak Signifikan
X7	0,023	0,179	0,859	Tidak Signifikan
X8	0,744	3,380	0,001	Signifikan
$\alpha$	= 0,050			
R <sup>2</sup>	= 0,392			
R	= 0,626			
F-Hitung	= 3,174			
F-Tabel (0,05,8,46)	= 2,150			
p-value	= 0,002			
t-tabel ( 0,05, 46 )	= 1,679			

Based on the results of the regression analysis, it was found that the variable of project implementation supervisory management ability (X8) is a variable that has a significant effect according to (Table 4.20). Furthermore, the variables that significantly influence the performance of the building project supervisor consultant. This can be explained as follows: The project implementation supervisory management capability variable (X8), was formed with manifest variables consisting of The supervising consultant did not check the contract documents (X8.1), The supervising consultant did not check the technical specifications and fieldwork methods (X8.2). Next, we will discuss the strategy used for the variables that significantly affect the performance of the building project supervisor consultant.

#### **IV. Conclusion**

The results of the F test showed that factors X1, X2, X3, X4, X5, and X6, However, from the results of the partial t-test, the factors that significantly influence the performance of supervisory consultants on building construction projects in East Kalimantan province are: The management capability factor for supervising project implementation with a coefficient value of  $t_{count} = 3.380 > t_{table} = 1.679$ .

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