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Analysis of the Influence of the Mk Consultant's Role on the Performance of Telecommunication Tower Project Implementation

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Construction Management, Telecommunications Tower, Performance Quality, Time, Cost, Construction Management Consultant, Scope of Work

ABSTRACT
Construction Management is an alternative management technique pattern/system in the construction industry development process that combines the stages of the development process into one unit/integration. the effect of implementing a construction management system in the process tower construction Telecommunications can optimize management and control both in terms of cost, time and quality in achieving the goals/targets that have been determined. This writing analyzes the role and influence of the implementation of the construction management system in the Telecommunication Tower construction process and provides descriptions of the benefits and optimization obtained in its application in terms of cost, quality and time aspects. Project management (planning, organizing, staffing, directing and controlling) has a very large effect on the success of cost performance, quality performance and time performance on the implementation of telecommunications projects with a determination value of 80.3% cost performance affects staffing, directing and planning. Based on the quantitative analysis, the variables that have a major influence on the quality performance used are staffing, directing; and) controlling.

Introduction

The higher the demand for project management skills, because the higher the risk of not achieving project performance targets. Not surprisingly, in large-scale construction projects, including telecommunication towers, which are becoming increasingly popular, especially in big cities, consulting services are generally used (Hansen, 2015). Construction Management (MK). MK Consultant is a company or organization that specializes in professional construction management practices (Willar & Pangemanan, 2018).

Based on the background of the problem, the formulation of the problem from this study is: 1) How does the role of the Mk consultant influence the performance of the telecommunication tower project. 2) What are the factors that influence the role of MK

consultant performance on the success of the Telecommunications Tower project implementation. 3) How is the Strategy to empower the factors that influence the role of MK consultants for the success of the implementation of telecommunication tower projects(Siswanto & Salim, 2019).

The purpose of this study was to analyze the effect of the role of the MK consultant on the implementation of the telecommunication tower project. The aims of this study were as follows: 1) To determine the effect of the role of the MK consultant on the telecommunication tower project. 2) To find out the factors that influence the duties of the Constitutional Court consultant on the success of the Telecommunication Tower project implementation. 3) To examine how the strategy empowers the factors that influence the role of MK consultants for the success of the telecommunication tower project implementation (Ervianto, 2023).

In this study, the following problem limitations will be given: 1) The type of construction project is the Telecommunication Tower project 2) The telecommunication tower project studied is a project that uses MK consultants from 2019 to 2021. 3) This study uses the duration of performance reports time, quality and cost, and communication coordination based on data from 2019 to 2021 first semester.

Research methods

In this study, the method used is descriptive method is a method of examining the status of a group of people, an object, a set of conditions, or a system of thought. The purpose of descriptive analysis is to make a systematic, factual, and accurate description of the facts researched in the field. This analysis is used to process the data obtained in the form of numbers and then describe it based on the distribution of frequencies, average values and standard deviations through statistical calculations (Tanjung, 2017).

Results and Discussions

This study has 5 independent variables that affect the 3 dependent variables. The 5 independent variables include: planning, *organizing*, *Staffing*, *directing*, and *controlling* control while the 3 dependent variables in this study are cost performance, quality performance, and time performance.

The research variables show the recapitulation of scores or respondents' responses related to the statements of the variables planning, *organizing*, *Staffing*, *directing*, *controlling*, cost performance, quality performance, and time performance consisting of several items with a scale of answers (Siswanto & Salim, 2019b).

Table 1. Calculation Results Statistical Description *Planning*/Planning

N	Valid	50
	Missing	0
Mean		17.58
Median		17.00
Mode		16
Std. Deviation		1.630
Variance		2.657

	Skewness	0.396
	Std. Error of Skewness	0.337
	Kurtosis	-1.378
	Std. Error of Kurtosis	0.662
	Range	5
	Minimum	15
	Maximum	20
	Sum	879

Table 2. Calculation Results Statistical Description *of* Organization

N	Valid	50
	Missing	0
Mean		39.52
Median		40.00
Mode		36
Std. Deviation		3.850
Variance		14.826
Skewness		-0.149
Std. Error of Skewness		0.337
Kurtosis		-1.083
Std. Error of Kurtosis		0.662
Range		13
Minimum		32
Maximum		45
Sum		1976

Table 3. Calculation Results Description Statistics *Staffing*/Compilation of Officers

N	Valid	50
	Missing	0
Mean		13.04
Median		12.50
Mode		12
Std. Deviation		1.442
Variance		2.080
Skewness		0.098
Std. Error of Skewness		0.337
Kurtosis		-1.002
Std. Error of Kurtosis		0.662
Range		5
Minimum		10
Maximum		15

	Sum	652

Table 4. Calculation Results Description Statistic Directing

N	Valid	50
	Missing	0
Mean		21.68
Median		21.00
Mode		20
Std. Deviation		2.254
Variance		5.079
Skewness		0.317
Std. Error of Skewness		0.337
Kurtosis		-1.094
Std. Error of Kurtosis		0.662
Range		8
Minimum		17
Maximum		25
Sum		1084

Table 5. Calculation Results Description Statistics Control

N	Valid	50
	Missing	0
Mean		25.76
Median		24.50
Mode		24
Std. Deviation		2.722
Variance		7.411
Skewness		0.396
Std. Error of Skewness		0.337
Kurtosis		-0.838
Std. Error of Kurtosis		0.662
Range		10
Minimum		20
Maximum		30
Sum		1288

Table 6. Calculation Results Description of Cost Performance Statistics

N	Valid	50
	Missing	0
Mean		12.96
Median		12.50

Mode	12
Std. Deviation	1.245
Variance	1.549
Skewness	0.608
Std. Error of Skewness	0.337
Kurtosis	-1.001
Std. Error of Kurtosis	0.662
Range	4
Minimum	11
Maximum	15
Sum	648

Table 7. Calculation Results Description of Quality Performance Statistics

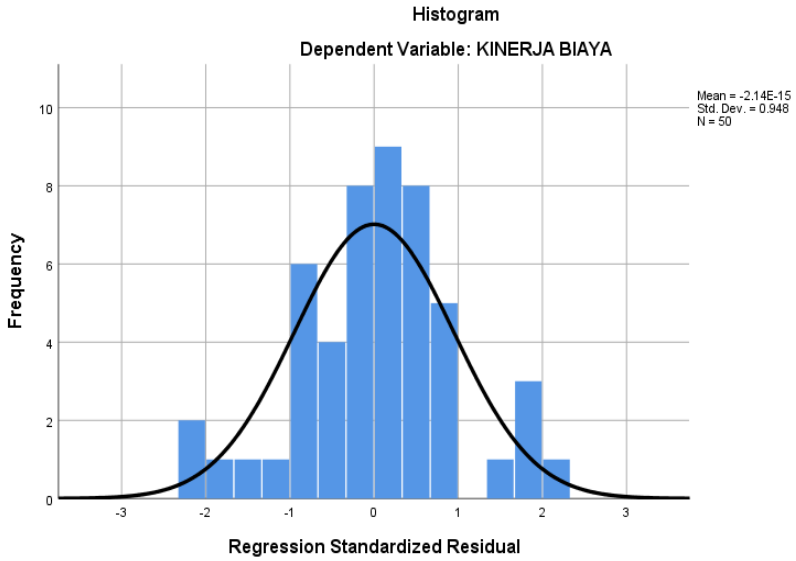
N	Valid	50
	Missing	0
Mean		13.18
Median		13.00
Mode		12
Std. Deviation		1.380
Variance		1.906
Skewness		0.196
Std. Error of Skewness		0.337
Kurtosis		-1.520
Std. Error of Kurtosis		0.662
Range		4
Minimum		11
Maximum		15
Sum		659

Analysis *Kolmogorov Smirnov*(K-S) model I tests the variables X1, X2, X3, X4, X5 to Y1 by first determining the test hypothesis, following the table of K-S test results

One-Sample Kolmogorov-Smirnov Test Model I

		Unstandardized Residual
		50
Normal Parameters[a,b]	Mean	0.0000000
	Std. Deviation	0.55311553

Most Extreme Differences	Absolute	0.116
	Positive	0.116
	Negative	-0.092
Test Statistic		0.116
Asymp. Sig. (2-tailed)		.091[c]



Model III Linearity Test Results

No	Variable	Code	Correlation coefficient	Significance	Information
1	Planning/Planning	X1	0,041	0,779	There is no heteroscedasticity
2	Organizing/Organization	x2	-0,024	0,869	There is no heteroscedasticity
3	Staffing/Organization of Officers	X3	0,079	0,588	There is no heteroscedasticity
4	Directing / Directing	X4	0,032	0,825	There is no heteroscedasticity
5	Controlling / Controlling	X5	0,073	0,613	There is no heteroscedasticity

The form of discussion that will be given to the study The Effect of Construction Management Consultants on the Performance of Telecommunication Project Implementation obtained from the variables planning/planning, organizing/organization, staffing/staffing, directing/directing, directing/directing and controlling/controlling the variable cost performance, performance quality and time performance. An in-depth

explanation is given from the data that has been obtained during the research (Darmali & Waty, 2022).

The results of the first hypothesis research analysis show that Planning/Planning (X1) is proven to have a positive and significant influence on Cost Performance (Y1) with a correlation coefficient of 0.766 and a path coefficient of 0.258 with a significance level of 0.021. This shows that there is a significant positive relationship between planning and cost performance. The results of the second hypothesis show that Organizing (X2) has a positive and significant effect on Cost Performance and is significant on Cost Performance (Y1) with a correlation coefficient is 0.762 and a path coefficient is 0.270 with a significance level of 0.011. This shows that there is a positive relationship significant relationship between organizing/organization with cost performance,

The third hypothesis shows that staffing (X3) has a positive and insignificant effect on cost performance (Y1) with a correlation coefficient of 0.717 and a path coefficient of 0.027 with a significance level of 0.812. This shows that there is a positive relationship between Staffing/Arrangement of Employees with cost performance, The fourth hypothesis of the analysis shows that Directing (X4) has a positive and not significant effect on Cost Performance (Y1) with a correlation coefficient of 0.679 and a path coefficient of 0.068 with a significance level of 0.672. This shows that there is a positive relationship between directing carried out in a construction management consultant to oversee a telecommunication tower project work carried out by a contractor on cost performance (Tuelah et al., 2014).

The fifth hypothesis of the analysis shows that Controlling (X5) has a positive and significant effect on Cost Performance (Y2) with a correlation coefficient of 0.816 and a path coefficient of 0.409 with a significance level of 0.001. This shows that there is a significant positive relationship between Controlling and cost performance (Umum, 2008).

The sixth hypothesis of the analysis that has been discussed in above shows that Planning/Planning (X1) has a positive and insignificant effect on Quality Performance (Y2) with a correlation coefficient value of 0.678 and a path coefficient of 0.077 with a significance level of 0.536. This shows that there is a positive relationship between Planning/Planning and quality performance, meaning that the better the Planning/Planning, the better the quality performance in a telecommunications project implementation (Idawati et al., 2016).

The seventh hypothesis of the analysis shows that Organizing/Organization (X2) has a positive and insignificant influence on Quality Performance (Y2) with a correlation coefficient of 0.646 and a path coefficient of 0.44 with a significance level of 0.707. This shows that there is a significant positive relationship between Organizing / Organization with quality performance (Mochtar, n.d.).

The eighth hypothesis of the analysis shows that staffing (X3) has a significant positive effect on quality performance (Y2) with a correlation coefficient of 0.757 and a path coefficient of 0.314 with a significance level of 0.020. This shows that there is a

significant positive relationship between Staffing/Arrangement of Employees with quality performance.

The ninth hypothesis of the analysis shows that Directing (X4) has a positive and significant influence on Quality Performance (Y2) with a correlation coefficient of 0.708 and a path coefficient of 0.280 with a significance level of 0.020. This shows that there is a significant positive relationship between directing and quality performance.

The tenth hypothesis of the analysis shows that Controlling (X5) has a positive and significant influence on Quality Performance (Y2) with a correlation coefficient of 0.788 and a path coefficient of 0.285 with a significance level of 0.045. This shows that there is a significant positive relationship between Controlling and quality performance.

The eleventh hypothesis from the analysis discussed above shows that planning (X1) has a positive and insignificant effect on time performance (Y3) with a correlation coefficient of 0.651 and a path coefficient of 0.231 with a significance level of 0.139. This shows that there is a positive relationship between planning and time performance.

The twelfth hypothesis shows that Organizing/Organization (X2) has a positive and significant effect on Time Performance and significant on Time Performance (Y3) with a correlation coefficient of 0.681 and a path coefficient of 0.301 with a significance level of 0.043. This shows that there is a significant positive relationship between organizing/organization with time performance (Thomsett, 2009).

The thirteenth hypothesis of the analysis shows that staffing/organization of employees (X3) has an influence significant positive effect on time performance (Y3) with a correlation coefficient of 0.684 and a path coefficient of 0.409 with a significance level of 0.015. This shows that there is a significant positive relationship between Staffing/Arrangement of Employees with the performance of Time,

The fourteenth hypothesis from the analysis discussed above shows that Directing (X4) has a positive and insignificant effect on Time Performance (Y3) with a correlation coefficient of 0.533 and a path coefficient of 0.099 with a significance level of 0.493. This shows that there is a positive relationship between directing carried out in a construction management consultant to supervise a telecommunications tower project work carried out by a contractor on-time performance,

The fifteenth hypothesis from the analysis discussed above shows that Controlling (X5) has a negative and insignificant effect on Time Performance (Y2) with a correlation coefficient of 0.564 and a path coefficient of -0.160 with a significance level of 0.356. This shows that there is a negative relationship between controlling and time performance.

Conclusion

Based on the results of the analysis and discussion of research data on "The Influence of the Role of Construction Management Consultants on the Performance of Telecommunication Project Implementation" several conclusions can be drawn as follows: a. Based on Descriptive Analysis: The variables planning, organizing, staffing, directing, controlling, cost performance, quality performance and time performance have an average value in the range. scale > 4.2 - 5 on the respondent's assessment which means

that the eight variables are in the very good category. Therefore, these eight variables must be given more attention and then implemented in the implementation of telecommunication projects to achieve the goal of better project implementation in the future.

b. Based on Qualitative Analysis: - From the results of the analysis that the coefficient of Determination is 0.803 which can be interpreted that 80.3% that cost performance affects planning/planning, organizing/organization, staffing/staffing, directing/directing, directing/directing and controlling/controlling as a representative variable construction management consultant role. - From the results of the analysis that the coefficient of Determination is 0.740 which can be interpreted that 74.0% that cost performance affects planning/planning, organizing/organization, staffing/staffing, directing/directing, directing/directing and controlling/controlling as a representative variable construction management consultant role. - From the results of the analysis that the coefficient of Determination is 0.598 which can be interpreted that 59.8% that cost performance affects planning/planning, organizing/organization, staffing/staffing, directing/directing, directing/directing and controlling/control as a representative variable construction management consultant role.

2. Project management (planning, organizing, staffing, directing and controlling) has a very big influence on the success of cost performance, quality performance and time performance on the implementation of telecommunications projects. 3. Based on the quantitative analysis, the variables that have a major influence on the cost performance used are (1) planning; (2) organizing/organization; and (3) controlling/controlling. 4. Based on the quantitative analysis, the variables that have a major influence on the quality performance used are (1) staffing; (2) directing/directing; and (3) controlling/controlling. Supported by previous researchers. Now and before Final information shortens and refocuses the discussion at hand. Conclude from the discussion in a solid way. 5. Based on the quantitative analysis, the variables that have a major influence on the performance of the time used are (1) organizing/organization; and (2) staffing/organization of employees.

Based on the analysis and discussion that has been carried out, the suggestions that can be submitted by the authors from the results of this study that will be submitted include: 1. The owner (owner) of the telecommunications project should use the services of a construction management consultant in the implementation of telecommunications projects, so that in the implementation of the telecommunications project, good cost performance is maintained, quality is maintained according to the design drawings and technical documents contained in the contract documents desired by the owner. telecommunications projects, and timeliness in completing telecommunications project work. 2. In the implementation of the telecommunication project, the construction management consultant must carry out 5 (five) project management, namely planning, organizing, staffing, directing and controlling to achieve good cost performance, quality performance and time performance. 3. To achieve successful implementation of telecommunications projects, according to this study, the telecommunications construction management consultants must carry out 5 (five) concurrent project management at the same time, including planning/planning, organizing/organization, staffing/staffing, directing and controlling, in order to achieve telecommunication project implementation performance such as cost performance, quality performance and time performance. 4. With all the limitations, further research is needed on other variables that

affect cost performance, quality performance, and time performance in implementing telecommunications projects.

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