20. Turnitin-Analysis of Satisfaction of BBPJN XI Banjarmasin on Supervisory Consultant Performance in Project Work Construction Bridge in South Kalimantan

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Research Paper   Open Access

Analysis of Satisfaction of BBPJN XI Banjarmasin on Supervisory Consultant Performance in Project Work Construction Bridge in South Kalimantan

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Abstract

Bridges are basic infrastructure needed by humans to be able to move from one location to another in order to meet needs. The success of bridge construction projects carried out by the government is largely determined by the role of the construction actors involved, one of which is a consultancy service provider (Consultant) and the success of a consultancy service company is measured by the performance of the company.

So far there has been no mechanism in conducting an assessment (assessment) of the performance of supervisory consultants on the bridge construction project work in South Kalimantan in a systematic manner. For this reason, it is necessary to further study the performance of supervisory consultants on bridge construction project work in South Kalimantan, to measure the performance of supervisory consultants and to understand what approaches can be taken in an effort to continuously improve performance.

From the results of the analysis that has been done, it can be concluded that indicators of communication and coordination capabilities in the construction project implementation activities are in the top priority category needing attention because it shows the lowest quadrant. So the main strategy that needs to be done is a very selective selection in the position of Chief Inspector.

Keywords: Supervisory Consultant Performance, Bridge Construction Project, Performance Improvement Strategy

I. PRELIMINARY

Bridges are basic infrastructure needed by humans to be able to move from one location to another in order to meet needs. In terms of quality or regulatory steps required are usually referred to as quality management or quality management. The quality management of a project includes the activities required to optimize the quality policy and project processes, because of the important role of the supervisory consultant in controlling the quality of bridge work in South Kalimantan, it is necessary to conduct research as a study on "Analysis of Satisfaction of BBPJN XI Banjarmasin on the Performance of Supervision Consultants on Bridge Construction Projects in South Kalimantan".

Suyatno (2010) aims to find out   causative factors delays in the completion of projects in the Municipality of Surakarta and in order to find out the rank (ranking) according to service providers' perceptions of the factors that cause delays in project completion.

Tomigolung (2013), examined the performance of supervisory consultants on road and bridge projects in North Sulawesi. The analytical method used is multiple regression analysis, the number of samples there are 33 consultants supervising road and bridge projects in North Sulawesi Province.

Wijaya (2016), examined the performance of a supervising consultant with the concept of earned value in the construction project of the Banyan - Padang city bridge.

Sutriyono (2017), examines the performance of supervisory consultants on road implementation in Jawa timur. This research uses a survey method, type quantitative research while analyzing data using descriptive statistics.

According to Tjiptono (2011) this technique was first put forward by Martilla and James in 1977 in their article "Importance Performance Analysis" published in the Journal of Marketing.

Supervisory Consultant is a company that acts to plan the design, direction, and recommendations in determining the direction and policies of project implementation. Siagian (1994) provides an understanding of development as "A business or series of efforts for growth and change that are planned and carried out consciously by a nation, state and government, towards modernity in the context of fostering the nation (nation building)".

According to the Minister of Public Works Regulation No. 04 / PRT / M / 2009 concerning the Quality Management System (QMS) of the Department of Public Works:

1. Establish the skills needed for personnel that carry out work.
2. Support that every personnel related to the quality of activities can apply and maintain the QMS properly in accordance with the conditions set requirements.
3. Conduct a needs analysis, plan and provide training or other actions for personnel who need, in order to guarantee the application of the QMS within the Department of Public Works.
4. Evaluate the effectiveness of planned training or actions and implemented
5. Ensure that personnel are aware of their duties and responsibilities it is important to support the achievement of the Quality Goals.
6. Maintain Records / Proof of Work related to competence human resources, such as educational history, training and related skills.
7. Evaluate the performance of personnel involved in the related process with the quality of activities.

II. RESEARCH METHODS

DATA RESEARCH

This research is directed at the factors that have an effect on increasing or decreasing the Supervisory Consultant's performance on bridge project work in South Kalimantan. The approach taken is to first determine and measure the intended performance factors.

The result of this activity was the discovery of suspected factors that influenced the supervisory consultant's performance. Preliminary studies are carried out by taking sources from journals, books, texts, regulations that apply and by considering all aspects related to achieving goals and so that the work can run as it should, then future work results can be in accordance with the requirements determined in the Terms of Reference.

Factors that influence the performance of supervisory consultants are obtained from literature sources, namely from research in civil engineering journals, Volume 3, Number 1, 2014. From the reference source, a summary of the factors that are appropriate for assessing the performance of the supervisory consultant on the bridge construction project workers in South Kalimantan, namely Documents, Supervision and Capability which will be used as a Questionnaire in the study. The questionnaire was processed, distributed and processed data by validation and rebability testing using the Spearman rank method and Cronbach alpha using SPSS software.

DATA ANALYSIS

For data analysis to determine the level of performance using CSI, to determine the factors that influence the IPA.

Satisfaction Level Analysis

According to Dickson (2004) there are four steps in CSI calculations, namely:

1. Determination of Mean Importance Score (MSS)
2. Determine Weight Factor (WF)
3. Perform a Weighting Score (WS)
4. Determine the value of the Customer Satisfaction Index (CSI)

The CSI value in this study is divided into categories as shown in Table III.1

No	CSI Value	SatisfactionLevel
1	81%-100%	VerySatisfied
2	66%-80.99%	Satisfied
3	51%-65.9%	Fairly Satisfied
4	35%-50.99%	Not Satisfied
5	0%-34.99%	Very Dissatisfied

Priority Factor Analysis

According to Tjiptono (2011) On engineering Importance Performance Analysis,

respondents were asked to rate the level of importance and performance of the company, then the average value of the level of importance and performance is analyzed on the Importance Performance Matrix, where the x-axis represents perception while the y-axis represents expectations.

The priority factor is the indicator / research variable which is included in quadrant A (Top Priority). The application of the Natural Sciences method will use a 5-level scale, as shown in Table III.2

Table III.2 Scale Value Respondent Answer Weight

The performance	Hope	Answer Weight
Very Satisfied	Very Important	$4,21 - 5,00$
Satisfied	Important	$3,41 - 4,20$
Quite Satisfied	Quite Important	$2,61 - 3,40$
Not Satisfied	Not Important	$1,81 - 2,60$
VeryDissatisfied	Very Not Important	$1,00 - 1,80$

III. RESULTS ANDDISCUSSION

VALIDITY
From the results of the validity test of 34 respondents, that the Spearman rank correlation coefficient (R) is greater than the critical value (R0.05 = 0.33) so that it can be concluded that all items are valid.

RELIABILITY
From the test results it can be seen that all α obtained is greater than the minimum value of reliability, so that thus all items of the research question are stated to be reliable.

DATA RECAPITULATION OF QUESTIONARY RESULTS
Questionnaire on Supervisory Consultant Performance

Table III.3 Data from the Supervisory Consultant's Performance Questionnaire

No	Performance Aspect	Variable	Respondent's Answers					Total
			STP	KP	CP	P	SP	
1.	Documents	$D_{.1}$	-	-	11	20	3	34
		$D_{.2}$	-	3	6	22	3	34
		$D_{.3}$	-	-	15	16	3	34
		$D_{.4}$	-	-	15	15	4	34
2.	Supervisor	$P_{.1}$	-	-	6	19	9	34
		$P_{.2}$	-	1	12	16	5	34
		$P_{.3}$	-	-	16	13	5	34
		$P_{.4}$	-	-	13	16	5	34
		$P_{.5}$	-	-	18	13	3	34
3.	Ability	$K_{.1}$	-	-	15	13	6	34
		$K_{.2}$	-	-	9	22	3	34
		$K_{.3}$	-	1	6	23	4	34
		$K_{.4}$	-	1	10	19	4	34
		$K_{.5}$	-	1	12	15	6	34

Questionnaire for the expectations of the Supervising Consultant

Table III.4 Data from the Consultant Consultant's Hope Questionnaire

No	Performance Aspect	Variable	Respondent's Answers					Total
			STP	KP	CP	P	SP	
1.	Documents	$D_{.1}$	-	-	11	20	3	34
		$D_{.2}$	-	2	6	23	3	34
		$D_{.3}$	-	-	14	17	3	34
		$D_{.4}$	-	-	14	15	5	34
2.	Supervisor	$P_{.1}$	-	1	12	16	5	34
		$P_{.2}$	-	-	16	13	5	34
		$P_{.3}$	-	1	10	19	4	34
		$P_{.4}$	-	-	13	15	6	34
		3.	-	-	15	13	6	34
3.	Ability	$K_{.1}$	-	-	6	20	8	34
		$K_{.2}$	-	1	6	23	4	34
		$K_{.3}$	-	-	9	22	3	34
		$K_{.4}$	-	-	18	12	4	34
		$K_{.5}$	-	1	12	15	6	34

ANALYSIS OF SATISFACTION LEVELS
The performance measurement consultancy for bridge project supervisors in South Kalimantan in this study uses the CSI (Customer Satisfaction Index) method, explained in Table III.5

Table III.5 CSI Method Calculation Results

No	Performance Aspect	Variable	Expectation MIS	Performance MSS	WF (%)	WSi
1.	Documents	$D_{.1}$	3.76	3.76	7.13	26.85
		$D_{.2}$	3.79	3.74	7.19	26.84
		$D_{.3}$	3.68	3.65	6.96	25.40
		$D_{.4}$	3.74	3.68	7.08	26.01
2.	Supervisor	$P_{.1}$	3.74	4.09	7.08	28.93
		$P_{.2}$	3.68	3.74	6.96	26.01
		$P_{.3}$	3.76	3.68	7.13	26.22
		$P_{.4}$	3.79	3.76	7.19	27.06
			3.74	3.56	7.08	25.18
3.	Ability	$K_{.1}$	4.06	3.74	7.69	28.72
		$K_{.2}$	3.88	3.82	7.35	28.12
		$K_{.3}$	3.82	3.88	7.24	28.12
		$K_{.4}$	3.59	3.76	6.80	25.59
		$K_{.5}$	3.76	3.76	7.13	26.85
	Total		52.79	52.62	100	375.87

$$\text{CSI} = \frac{\sum_{i=1}^{n} WSi}{5} \; x \; 100\% \rightarrow \frac{375.87}{5} \; x \; 100\% \rightarrow 75.17\%$$

ANALYSIS OF PRIORITY FACTORS

The measurement of the priority level of the performance of the bridge project supervisory consultant in South Kalimantan in this study uses the IPA (Importance Performance Analysis) method, described in Table III.6, and Table III.7 and Figure III.1

Table III.6 IPA Analysis

No.	Question	Score Performance	Performance	Score Expectation	Expectation	Suitability Level (%)
1	D.1	128	3.76	128	3.76	100%
2	D.2	127	3.74	129	3.79	98%
3	D.3	124	3.65	125	3.68	99%
4	D.4	125	3.68	127	3.74	98%
5	P.1	139	4.09	127	3.74	109%
6	P.2	127	3.74	125	3.68	102%
7	P.3	125	3.68	128	3.76	98%
8	P.4	128	3.76	129	3.79	99%
9	P.5	121	3.56	127	3.74	95%
10	K.1	127	3.74	138	4.06	92%
11	K.2	130	3.82	132	3.88	98%
12	K.3	132	3.88	130	3.82	102%
13	K.4	128	3.76	122	3.59	105%
14	K.5	128	3.76	128	3.76	100%
	Total	1789	52.62	1795	52.79	99.73%

$$X = \frac{\sum XI}{K} = \frac{52.6177}{14} = 3.76 \qquad Y = \frac{\sum YI}{K} = \frac{52.7941}{14} = 3.77$$

Table III.7 Quadrant Results

Performance Aspect	No	Variable	Koordinat (x, y)	Quadrant
Documents	1	$D_{.1}$	3.76, 3.76	D
	2	$D_{.2}$	3.74, 3.79	A
	3	$D_{.3}$	3.65, 3.68	C
	4	$D_{.4}$	3.68, 3.74	C
Supervisor	5	$P_{.1}$	4.09, 3.74	D
	6	$P_{.2}$	3.74, 3.68	C
	7	$P_{.3}$	3.68, 3.76	C
	8	$P_{.4}$	3.76, 3.79	B
	9		3.56, 3.74	C
Ability	10	$K_{.1}$	3.74, 4.06	A
	11	$K_{.2}$	3.82, 3.88	B
	12	$K_{.3}$	3.88, 3.82	B
	13	$K_{.4}$	3.76, 3.59	D
	14	$K_{.5}$	3.76, 3.76	D
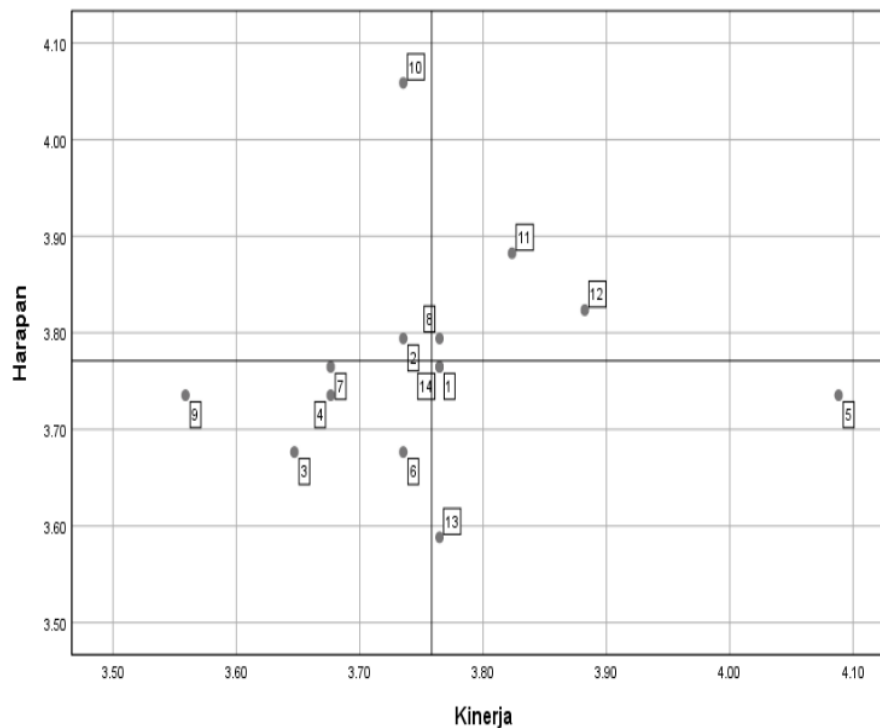
Gambar III.1 Diagram Importance Performance Analysis

PERFORMANCE IMPROVEMENT STRATEGY

A very selective selection of Chief Inspector positions based on the KAK (Terms of Reference) at the time of the selection of personnel submission, a letter of offer for each company submits a job discribtion for the position of Chief Inspector in one job activity.

In addition, to get a competent and professional Chief Inspector during the auction above, it is necessary to look at the work history (Curriculum Vitae) and certificate of expertise (SKA) according to the field of work and classification (Young, Associate or Main Certificate) required by the project owner (Owner). Then it needs to be ensured that the Chief Inspector in charge is the same person during the auction process.

In the case of replacement of the Chief Inspector or other consultant personnel, it can happen with the approval of the PPK and Kasatker with a minimum replacement requirement, has a work history with the same score, then checks the SKA and compares the SKA owned by the worker with the one replaced, if possible, more than what is replaced in order to maintain it well the course of the project and avoiding construction failure.

IV. CLOSING

From the results of the analysis and discussion that have been carried out, there are a number of important things that can be drawn as a conclusion to the performance of the supervisory consultant on the construction project work bridge in South Borneo. Some of the important points are:

1. Based on the analysis conducted with the Customer Satisfaction Index (CSI) Method and the Importance Performance Analysis (IPA) Method it is known that the level of satisfaction with the supervisory consultant is quite satisfied with a value of 75.17% for CSI,

2. For IPA the main factors that need to be prioritized (Quadrant A) are the preparation of bridge work meeting materials (D.2) and the ability of communication and coordination in the construction project implementation activities (K.1).

3. The main strategy that needs to be carried out for the quadrant according to researchers is to choose a Chief Inspector who is experienced and checks SKA owned by workers, so that they can properly guard the project and avoid construction failure.

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FINAL GRADE

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GENERAL COMMENTS

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