

USER SATISFACTION STUDY ON CONTRACTOR PERFORMANCE ON ROAD INFRASTRUCTURE PROJECTS IN MANGGARAI DISTRICT

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Abstract: This study aims to analyze the level of satisfaction of service users with the performance of contractors in road infrastructure projects in Manggarai Regency. Infrastructure plays an important role in improving connectivity and economic growth. The performance of the contractor as a service provider greatly determines the success of the project, especially in terms of work quality, timeliness, cost, work safety, and communication with stakeholders. This study uses a quantitative method with a descriptive approach, where data is collected through a questionnaire survey to service users at the Public Works and Spatial Planning Office of Manggarai Regency. Data analysis was carried out using the Importance Performance Analysis (IPA) and Customer Satisfaction Index (CSI) methods to measure the level of satisfaction of service users with various aspects of contractor performance. The results of this study are expected to provide recommendations for contractors and stakeholders in improving service quality and project management effectiveness. Thus, this research contributes to improving the quality of better and sustainable road infrastructure.

Keywords: *User satisfaction, contractor performance, road infrastructure, IPA and CSI*

INTRODUCTION

Infrastructure in Indonesia has experienced rapid development, especially in the last few decades. However, there are still challenges such as equitable development, financing, and

environmental sustainability that need to be addressed (Rodzi, 2023). Based on this, equitable and quality infrastructure development is the main key to supporting economic growth, improving the welfare of the Indonesian people in the future (Pantow, 2018).

In Manggarai Regency, road infrastructure development is part of the local government's efforts to encourage equitable development. However, in the process of implementing road construction in Manggarai Regency, it has not been evenly distributed and has not been realized properly according to the objectives or physical targets of road construction. This can be seen from the physical condition of the roads that were built, many of which were damaged, such as potholes, gravel, and so on.

Contractor performance plays an important role in the success of infrastructure projects. Aspects such as quality of work, timeliness, safety, cost, and communication with related parties are important indicators in assessing whether the implementation of the project has gone according to expectations. User satisfaction is an important indicator in assessing whether the completed project can meet the expectations and needs of the community. Service users in this case are parties who utilize road infrastructure, be it road users, government, or other parties involved directly or indirectly in the project.

The purpose of this study is to analyze the level of service user satisfaction with contractor performance in road infrastructure projects using a quantitative approach through the Importance Performance Analysis (IPA) and Customer Satisfaction Index (CSI) methods.

METHOD

This research is a quantitative research with a descriptive approach, where in this study the author uses a survey or questionnaire distributed to research subjects as a research method.

After the data is collected, statistical calculations are carried out to obtain conclusions. The data obtained are analyzed to determine the level of satisfaction of users of the Public Works and Spatial Planning Service. This study was analyzed using the Importance Performance Analysis (IPA) and Customer Satisfaction Index (CSI) methods.

Population

The population in this study includes all parties involved in using contractor services on road infrastructure projects within the scope of the Public Works and Spatial Planning Agency.

Sample

In this study, the number of samples taken was 20 with a purposive sampling technique, namely selecting respondents based on certain criteria. In this study, a sample of 20 was taken from the Commitment Making Officer (PPK), the technician team (Public Works and Spatial Planning Agency), as the sample to be studied.

Data Collection Techniques

The data collection techniques used are:

a. Preliminary Questionnaire (Preliminary Survey)

The preliminary questionnaire is a questionnaire intended to be filled out by experts, who are experts to assess the questionnaire, namely two Civil Engineering academics and two experts in the field of roads and bridges. The questions are adjusted based on the references obtained and experts are welcome to choose and add attributes that are considered appropriate to the conditions of the research object. This data will then be used as a reference for compiling the main questionnaire in the main survey.

b. Main Survey

The main questionnaire was compiled based on the selection conducted through the main survey. The questionnaire was formed

with 2 criteria, namely the level of performance and user satisfaction.

Data Collection Instrument

The instrument aims to collect data on the level of user satisfaction with the performance of contractors in road infrastructure projects in Manggarai Regency.

RESULT

Analysis of the average of each criterion in the preliminary questionnaire

Table. 4.1. Assessment of each work item

Number	Information	
1.	Very Relevant	4,00
2.	Relevant	3,00
3.	Quite Relevant	2,00
4.	Totally Irrelevant	1,00

Criteria Reability

Table. 4.1. Reliability Criteria Items

No	Criteria	Relevance Level					Comments
	Realiability	1	2	3	4	5	
1.	The contractor is on time in completing the work						
2.	The quality of the road work results meets the agreed standards						
3.	The contractor is able to complete the work without errors						
4.	The conctractor quickly takes corrective action if a problem occurs						
5.	Project documents are prepared accurately and completely						

6.	The contractor is consistent in fulfilling the agreed agreement						
7.	<i>Other criteria.....</i>						
8.	<i>Other criteria.....</i>						

The results of the average analysis of each item of the Reliability criteria statement are seen in table 4.1.1.

Table. 4.1.1. Results of the average analysis of each item of the Reliability criteria

No. Responden	Criteria <i>Reability</i>					
	Statement Items					
	1	2	3	4	5	6
Respondent 1	5	5	5	5	5	5
Respondent 2	5	5	5	5	5	5
Respondent 3	4	5	4	5	5	5
Respondent 4	4	5	4	4	5	5
Totally	18	20	18	19	20	20
Agreement Amount	5	5	5	5	5	5
Average (Totally/Agreement Amount)	3,6	4	3,6	3,8	4	4

From the average results of each item of the most relevant Reliability Criteria for road work in Manggarai Regency, among others:

1. The quality of the road work results meets the agreed standards
2. Project documents are prepared accurately and completely
3. Contracts are consistent in fulfilling the agreed agreements.

Assurance Criteria

Table 4.2. Assurance Criteria Items

The results of the average analysis of each item of the Assurance

No	Criteria	Relevance Level					Comments
	Assurance	1	2	3	4	5	
1.	Project workers demonstrate competence and professionalism while working						
2.	Safety of safe work safety procedures at the project site						
3.	Information provided by the project party is easy to understand and reliable						
4.	The project party provides assurance of the quality and durability of the work results						
5.	The contractor has relevant certificates and permits ti carry out the project						
6.	The project party is transparent in conveying information related to the project						
7.	<i>Other criteria.....</i>						
8.	<i>Other criteria.....</i>						

criteria statement are seen in table 4.2.1.

No. Responden	Criteria Assurance					
	Statement Items					
	1	2	3	4	5	6
Respondent 1	5	5	5	5	5	5
Respondent 2	5	5	5	5	5	5
Respondent 3	5	3	4	5	5	5
Respondent 4	5	3	2	5	4	4
Totally	20	16	16	20	19	19
Agreement Amount	5	5	5	5	5	5
Average (Totally/Agreement Amount)	4	3,2	3,2	4	3,8	3,8

From the average results of each item of the most relevant Assurance criteria for road work in Manggarai Regency, among others:

1. Project workers demonstrate competence and professionalism when working.
2. The project party provides a guarantee of the quality and durability of the work results.

Tangibles Criteria

Table 4.3. Tangibles Criteria Items

The results of the average analysis of each item of the Tangibles criteria statement are seen in table 4.3.1.

No	Criteria	Relevance Level					Comments
	Tangibles	1	2	3	4	5	
1.	Equipment used is well maintained and safe						
2.	Project work areas are kept clean						
3.	Project workers wear appropriate safety equipment						
4.	Project information boards are available and easy for the public to read						
5.	Project support facilities, such as toilets and rest areas, are available and suitable for use						
6.	Safety signs and directions are installed in the project area						
7.	<i>Other criteria.....</i>						
8.	<i>Other criteria.....</i>						

Table 4.3.1. Results of the average analysis of each criterion item

No. Responden	Criteria Tangibles					
	Statement Items					
	1	2	3	4	5	6
Respondent 1	5	5	5	5	5	5
Respondent 2	5	5	5	5	5	5
Respondent 3	5	4	3	5	4	4
Respondent 4	5	4	4	5	5	4
Totally	20	18	17	20	19	18
Agreement Amount	5	5	5	5	5	5
Average (Totally/Agreement Amount)	4	3,6	3,4	4	3,8	3,6

From the average results of each item of the most relevant Tangibles criteria for road work in Manggarai Regency, among others:

1. The equipment used is well maintained and safe

No	Empathy Criteria	Relevance Level					Comments
	Table 4.4. Empathy Criteria Items	1	2	3	4	5	
1.	Empathy Criteria						
2.	Table 4.4. Empathy Criteria Items						
3.	Empathy Criteria						
4.	Table 4.4. Empathy Criteria Items						
5.	Empathy Criteria						
6.	Table 4.4. Empathy Criteria Items						
7.	Empathy Criteria						
8.	Table 4.4. Empathy Criteria Items						

2. Project information boards are available and easy to read by the public

Empathy Criteria

Table 4.4. Empathy Criteria Items

The results of the average analysis of each item of the Empathy criteria statement are seen in table 4.4.1.

Table. 4.4.1. Results of the average analysis of each item of the criteria

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No. Responden	Criteria Empathy					
	Statement Items					
	1	2	3	4	5	6
Respondent 1	5	5	5	5	5	5
Respondent 2	5	5	5	5	5	5
Respondent 3	4	4	5	4	4	5
Respondent 4	5	5	5	5	5	4
Totally	19	19	20	19	19	19
Agreement Amount	5	5	5	5	5	5
Average (Totally/Agreement Amount)	3,8	3,8	4	3,8	3,8	3,8

From the average results of each item of the Empathy criteria that are most relevant to road work in Manggarai Regency, including:

1. Being friendly and respectful of the surrounding community

Criteria Responsiveness

Table 4.5. Responsiveness Criteria Items

No	Criteria	Relevance Level					Comments
	Responsiveness	1	2	3	4	5	
1.	The project party responds quickly to questions and complaints						
2.	The availability of information related to project developments is delivered regularly						
3.	The project party quickly provides explanations and solutions if problems occur						
4.	Easy access to communication with the project party						
5.	The project party actively informs changes to the work plan						
6.	The project party provides effective communication channels for the community						
7.	<i>Other criteria.....</i>						

8.	Other criteria.....						
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The results of the average analysis of each item of the Responsiveness criteria statement are seen in table 4.5.1.

Table 4.4.1. Results of the average analysis of each criterion item

No. Responden	Criteria Responsiveness					
	Statement Items					
	1	2	3	4	5	6
Respondent 1	5	5	5	5	5	5
Respondent 2	5	5	5	5	5	5
Respondent 3	5	5	4	4	5	5
Respondent 4	4	5	5	5	3	5
Totally	19	20	19	19	18	20
Agreement Amount	5	5	5	5	5	5
Average (Totally / Agreement Amount)	3,8	4	3,8	3,8	3,6	4

From the average results of each Responsiveness item that is most relevant to road work in Manggarai Regency, among others:

1. Availability of information related to project developments is delivered routinely
2. The project party provides effective communication channels for the community.

DISCUSSION

This study shows that the performance of contractors in road infrastructure projects in Manggarai Regency has a direct influence on the level of user satisfaction, the value of which is based on five criteria, namely Reliability, Assurance, Tangibles, Empathy, and Responsiveness. Based on the five criteria, there are several items that are most relevant to user satisfaction, including:

1. Criteria Reliability:
 - 1) The quality of the road work results meets the agreed standards

- 2) Project documents are prepared accurately and completely
- 3) Contracts are consistent in fulfilling the agreed agreements.
2. Criteria Assurance:
 - 1) Project workers demonstrate competence and professionalism when working.
 - 2) The project party provides a guarantee of the quality and durability of the work results.
3. Criteria Tangibles:
 - 1) The equipment used is well maintained and safe
 - 2) Project information boards are available and easy to read by the public
4. Criteria Empathy:
 - 1) Being friendly and respectful of the surrounding community
5. Criteria Responsiveness:
 - 1) Availability of information related to project developments is delivered routinely
 - 2) The project party provides effective communication channels for the community.

This study uses two quantitative methods, namely Importance Performance Analysis (IPA) and Customer Satisfaction Index, to provide a strong and measurable basis for assessing user satisfaction.

CONCLUSION

Based on the results of this study, it can be concluded that the performance of contractors on road infrastructure projects in Manggarai Regency has a major influence on the level of user satisfaction. Through the use of the Importance Performance Analysis (IPA) and Customer Satisfaction Index (CSI) methods, it was found that the five main criteria, namely reliability, assurance, physical evidence, empathy, and responsiveness, each have a role in

shaping user satisfaction with contractor performance. Among these criteria, there are several items that are most relevant, namely aspects such as the quality of road work that meets standards, professionalism of project workers, availability of project information, friendliness to the surrounding community, and effective communication channels are considered the most relevant. This study shows that service users not only expect technical competence from contractors, but also transparency, responsiveness to the community, and empathy. The results of this study are expected to be valuable input for contractors and project owners or service users in implementing better and more community-oriented road infrastructure development in Manggarai Regency in the future.

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