

## Analysis of the Level of Satisfaction and Importance of Contractor Performance Factors on Construction Projects

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**ABSTRACT:** In the midst of increasingly tight competition in the construction world, every contractor company is required to be able to demonstrate the quality of its services so that it can excel in the competition. As a company engaged in the service sector, construction companies must have knowledge of quality factors in construction projects, including tangible evidence, reliability, responsiveness, assurance and empathy. If the contractor's performance can meet expectations, stakeholders will be satisfied and vice versa. This study aims to identify contractor performance factors on quality in construction projects. This study uses a quantitative method through the distribution of questionnaires. The respondents used were consultants and owners.

**KEYWORDS:** Quality, Contractor, Construction Projects

### 1. INTRODUCTION

Contractor performance can be said to be a result achieved when working on a task or project. The success of a contractor is seen from performance, which is largely determined by the performance of each individual in the contractor company (Husin & Kristiyanto, n.d.). So the contractor performance factor is also important to know to find out the results that have been achieved (Husin et al., 2024).

The need for performance assessment of construction implementation service companies is needed by various parties to produce quality construction services with good quality (Susetyo et al., 2021).

Construction activity is an activity carried out to realize a physical building or infrastructure with the specified time and resources (Pamungkas & Susetyo, 2024). Directed and precise management is very important for managing projects. Project management pays attention to three project constraints namely quality, cost and time. These three things correlate with each other and appear in the stages of planning activities, organizing, implementing and supervising each step of the work (Amin et al., 2018).

In construction activities, the output to be achieved from project management is the timeliness of work completion and the suitability of costs and quality or quality achieved as required (Ali et al., 2019). The project management process is realized through the process of planning, implementation, inspection, and corrective action. Quality management aims to meet the quality required by the owner both during pre-construction and post-construction without repeating the same stages of work (Erlita et al., 2023).

The quality criteria for each company are not the same, as well as each consumer has different criteria related to quality. In the construction services industry, the components that support the quality of work are the qualifications of contractors who have capital, equipment resources, human resources, and company experience (Husin et al., 2024).

Based on the results of preliminary observations, there is still an impression from the budget user who makes the commitment (project owner) and the planning / supervisory consultant that there are still many weaknesses in the contractor in completing construction projects such as the company leader lacking experience and understanding of construction and has no knowledge of financial matters and company management, does not have much basic capital, the company's experts do not have work skills certification and work expertise certification and are often not at the project site, work equipment is inadequate (Sukardi & Biantoro, 2025). In terms of quality, the implementation time is often late and the work often deviates from the specified technical specifications.

### 2. LITERATURE REVIEW / THEORETICAL BASIS

#### 2.1 Contractor Characteristics

The ability of a company organization in determining its position to achieve success, depending on the management and character of the resources owned by the contractor as a competitive advantage in improving the quality of the company. The characteristics of an organization will have a competitive effect in winning business competition which is the answer in developing a form of business (Aluonzi et al., 2016). According to the Construction Services Development

Institute (LPJK) Number 10 of 2013, explains that the characteristics of contractors related to the qualifications of the form of business entity in re-registering the body carrying out construction services business.

## 2.2 Definition of Quality Management

In manufacturing and other service industries, quality issues are often discussed by producers and consumers (Ebrahimi & Sadeghi, 2013). The level of understanding of quality varies greatly depending on their background and point of view. Manufacturers view quality as customer satisfaction, while for consumers it is a product that can meet their wants and expectations (Eboli & Mazzulla, 2007).

Quality means the suitability / suitability of product use to meet customer needs and satisfaction, where quality is used as a benchmark in the industrial world. Company management that is aware of the quality of providing the best service will continue to look for forms of quality improvement (Firdaus et al., 2022; Madani et al., 2024).

Unlike the construction services industry which has a unique process and is different from the manufacturing industry. The construction services industry prioritizes the skills of human resources while manufacturing processes prioritize tools / machines in achieving the final result. So it is often termed “hand made” because almost 70% still rely on human skills (Pourrostan & Ismail, 2011).

Juran's theory is very relevant to the conditions of project implementation because it emphasizes three elements that are very important and interrelated with each other.

## 2.3 Consultant Performance

Consultant performance is a result of the work achieved by the consultant in carrying out the tasks assigned to him based on skills, experience and sincerity and time. Performance is a condition that must be known and confirmed to certain parties to determine the level of achievement of the results of an agency in relation to the vision carried out by an organization or company and to determine the positive and negative impacts of an operational policy (Rauf et al., 2023; Susetyo et al., 2021).

The scope of duties of the Supervisory Consultant is to provide expertise services to the Owner or Assignor and in this case represented by PPK and assisted by the Development Technical Team, in carrying out the tasks of coordinating and controlling all technical development activities from the design stage to the construction implementation stage and the maintenance period, both concerning management and technological and engineering aspects. Construction Implementation Stage (Shakeri & Khalilzadeh, 2020).

## 2.4 Owner's View

The term perception is often also referred to as views, images, or assumptions, and causes. In perception there is a person's response about one thing or object (Gransberg et al., 2006).

The definition of view is a process of a person managing and interpreting his sensory impressions, in an effort to give a certain meaning to his environment, and a person's view just arises, but is influenced by several things, including: perceiver (individual characteristics), target, and situation (Isradi et al., 2021).

In accordance with the Presidential Regulation of the Republic of Indonesia number 16 of 2018, concerning government goods / services, the project owner in carrying out his function as the recipient of the work results to control, and inspect the work of the contractor. This can be interpreted that the project owner's view is a view based on a project owner's experience gained directly as a result of direct contact with the contractor (Ministry of PUPR, 2012).

## 3. RESEARCH METHODS

This study uses a quantitative approach to analyze data from a questionnaire designed to evaluate the level of customer satisfaction and importance of contractor performance in construction projects. The questionnaire included 16 key criteria that reflect important aspects of project execution, such as schedule management, quality of goods or services, safety, and stakeholder management. Each criterion was assessed based on two main parameters, namely the Mean Importance Score (MIS) which describes the level of importance of the criterion, and the Mean Satisfaction Score (MSS) which indicates the level of customer satisfaction with its implementation (Sianturi & Isradi, 2024).

The data was collected by involving 27 respondents who all came from a contractor background, either as direct performers or as part of project management. These respondents have varied experiences in construction, thus providing diverse perspectives on contractor performance. The questionnaire completion process took place in a controlled environment to ensure data accuracy and consistency (Shadiq & Isradi, 2024).

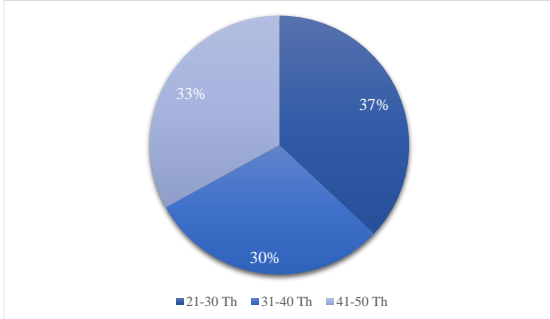
The data obtained was then statistically analyzed to calculate the average MIS and MSS on each criterion. Furthermore, the Customer Satisfaction Index (CSI) was calculated using a proportional approach, by comparing the average MSS against the maximum scale available (Khoirul & Isradi, 2024). This approach allows researchers to identify criteria that have large gaps between importance and satisfaction levels, which are then used as a basis for providing strategic recommendations. The results of MSS and MIS are used to calculate the Customer Satisfaction Index (CSI) with the following rating scale:

- 81%-100%: Very Satisfied
- 66%-80,99%: Satisfied
- 51%-65,99%: Fair
- 35%-50,99%: Less Satisfied
- 0%-34,99%: Not Satisfied

**4. RESULTS AND DISCUSSION**

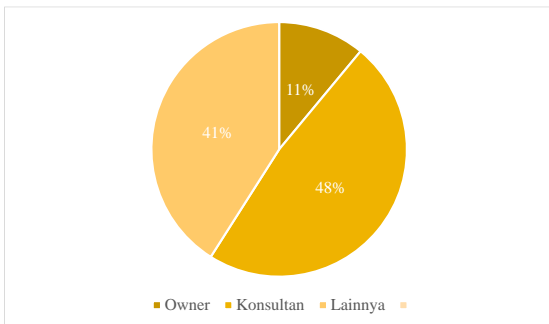
**4.1 Characteristics of Respondents**

Based on the age of the respondents, it can be seen that the average respondent is 21-30 years old as many as 10 people or 37%, then respondents aged 41-50 years as many as 9 people or 33%. For respondents aged 31-40 years, there were 8 people or 30%.



**Figure 1: Frequency of Respondents by Age**

Based on the respondent's job, it can be seen that the average respondent works in a consultant as many as 13 people or 48%, then respondents who work other (engineers, contractors etc.) are 11 people or 41%. Then respondents who are owners are 3 people or 11%.



**Figure 2. Frequency of Respondents Based on Occupation**

**4.2 Level of Importance and Satisfaction**

Based on the results of the analysis conducted, it appears that the aspects most valued by respondents in assessing contractor performance relate to time management, quality, occupational safety, and timeliness of project completion. These aspects have a very high MIS value, indicating that respondents highly prioritize the fulfillment of project schedules, the quality of goods or services in accordance with agreed specifications, and the implementation of a good occupational safety and health system. On the other hand, there are some aspects that are considered less important, such as the contractor's organizational structure, integrated information systems between contractors, subcontractors, and suppliers, and socialization and security of the project environment. The lower MIS scores on these aspects indicate that these factors are not considered top priorities in assessing contractor performance, although they still play a role in the overall smooth running of the project.

Here is an analysis table based on the information you provided:

| Aspect  | MIS Value |
|---|-----------|
| X1: Good schedule management and according to the contract plan                       | 4,78      |
| X2: Quality of goods/services according to specifications and contract agreement      | 4,70      |
| X11: Implementation of Occupational Safety and Health Management System (OHSMS)       | 4,63      |
| X9: Completion of work on time according to the contract                              | 4,59      |
| X13: Contractor organizational structure  | 3,59      |
| X12: Integrated information system between contractors, subcontractors, and suppliers | 3,70      |
| X10: Socialization and security of the project environment                            | 3,93      |

**Description**

- X1 : Aspect with the highest score, indicating the importance of good time management.
- X2 : High score, indicating the importance of quality goods/services in accordance with the contract.
- X11 : Shows that safety is a priority in assessing contractor performance.
- X9 : Indicates the importance of timeliness in the completion of work.
- X13 : Aspect with the lowest score, considered less important than the other aspects.
- X12 : Indicates that integrated information systems are considered less important.
- X10 : Third lowest score, indicating this aspect is considered less relevant than the others.

This table summarizes the most and least important aspects according to respondents, based on the MIS scores given.

The results of the analysis of the respondent's satisfaction level show that in general, respondents rated the project performance in the “Fair” category, with an average Mean Satisfaction Score (MSS) of 3.03. The aspects that received the highest satisfaction were socialization and security of the project environment, implementation of work in accordance with the original plan, and the contractor's organizational structure, although these values were still below the importance score (MSS), indicating a gap between expectations and reality. On the other hand, some aspects that recorded the lowest MSS scores included stakeholder management, quality of goods/services that did not meet specifications, and procurement management of materials and time. These aspects require more attention, especially since the quality of goods/services is considered very important by the respondents, but does not meet their expectations. This finding indicates that there are some critical areas that need to be improved to achieve better satisfaction in the future.

| Aspect | MSS Value | Satisfaction Category |
|--------|-----------|-----------------------|
|--------|-----------|-----------------------|

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|   |      |        |
|---|------|--------|
| <b>Aspect with Highest Satisfaction</b>                     |      |        |
| X10 : Socialization and security of the project environment | 3,44 | Simply |
| X15: Implementation of work according to the initial plan   | 3,41 | Simply |
| X13: Contractor's organizational structure                  | 3,30 | Simply |
| <b>Aspect with Lowest Satisfaction</b>                      |      |        |
| X6: Effective and efficient stakeholder management          | 2,56 | Less   |
| X2: Quality of goods/services according to specifications   | 2,85 | Less   |
| X5: Material and time procurement management                | 2,81 | Less   |

| MIS Value | Notes   |
|-----------|---|
| -         | Still below expectations despite having the highest score.  |
| -         | Performs moderately, but does not fully meet expectations.  |
| -         | Fairly good but there are still gaps with expectations.   |
| -         | Needs deep improvement in stakeholder management.   |
| High      | It is important to improve the quality of goods/services that are more in line with expectations. |
| -         | Performance needs to be improved in materials procurement and time management.                    |

**Notes :**

- **MSS (Mean Satisfaction Score):** The average level of respondent satisfaction with each aspect.
- **MIS (Mean Importance Score):** The average level of importance of each aspect, indicating whether the aspect is important to the respondent.

In this analysis, although some aspects have higher MSS scores, they are still below the MIS score, indicating a gap between expectations and reality. Conversely, aspects with the lowest MSS scores indicate areas that require special attention, particularly in the areas of stakeholder

management, quality of goods/services, and procurement management.

This gap is similar to the findings of a study by Kärnä et al. (2009), which showed that customers are often less satisfied in the final phases of projects due to weak quality control and on-time completion (Kärnä et al., 2009).

**4.3 Customer Satisfaction Indeks (CSI) Method**

The CSI value of 60.07% is in the “Fair” category. This result is consistent with an Indonesian study that recorded a customer satisfaction index of 71.49% for large contractors, with the highest satisfaction factors being communication skills and project change management (Jati et al., 2013)

**Table 1. Customer Satisfaction Index (CSI) Value Criteria**

| CSI Value | CSI Criteria   |
|-----------|----------------|
| 0-25%     | Not Important  |
| 26%-50%   | Fair           |
| 51%-75%   | Important      |
| 76%-100%  | Very Important |

**Strategic Recommendations**

Based on the analysis results and relevant references, several steps can be taken to improve customer satisfaction, including:

1. **Improving the Quality of Communication:** Effective communication is essential for managing customer expectations throughout the project (Kärnä et al., 2009).
2. **Project Quality Control:** Consistent quality implementation will increase customer confidence in the contractor (Huang & Guo, 2010).
3. **Better Stakeholder Management:** Studies show that active involvement of stakeholders in project decisions increases their satisfaction with the final outcome (Januadhianto, 2023).

**Conclusion:**

The aspects of schedule management, quality of goods/services, and work safety are the top priorities of customers, but the level of satisfaction on these aspects is still relatively low. The CSI value of 60.07% indicates significant room for improvement in contractor performance. Based on previous research, improvement measures on communication, quality control, and stakeholder management can be effective strategies to increase customer satisfaction in the future.

**5. CONCLUSIONS**

Respondent Satisfaction Level The Customer Satisfaction Index (CSI) on construction projects was recorded at 60.07%, which falls into the category of “Adequate.” Although the contractor's performance is rated as adequate, this figure shows that there is still significant room for improvement, especially in important aspects of customer concern. This moderate level of satisfaction

emphasizes the need for more targeted improvements on various important aspects of construction projects.

Respondents in construction projects prioritized schedule management, quality of goods/services, and work safety as the main aspects of assessing contractor performance. However, the level of satisfaction with these aspects is still low, indicating a gap between expectations and reality.

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