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## **ANALYSIS OF SUCCESS FACTORS: SELF-MANAGEMENT SYSTEM USING THE AHP METHOD AT THE JI'RONA BUILDING PROJECT 'AISYIYAH HOSPITAL BOJONEGORO**

**Earlangga Rohmat Satriawan<sup>1\*</sup>, I Nyoman Dita Pahang Putra<sup>1</sup>, Griselda Junianda Velantika<sup>1</sup>**

<sup>1\*,2,3</sup>) Civil Engineering Department, UPN "Veteran" East Java, Surabaya

Corresponding Author's Email: [erlanggar35@gmail.com](mailto:erlanggar35@gmail.com)

No.HP Corresponding Author : 081330538514

### **ABSTRACT**

Construction projects require an effective and efficient project management system to achieve the expected development goals. One of the developments in project management is the production of a self-managed project management system, which is a management system that the project owner manages by prioritizing the use of their resources. This study aims to determine the priority scale of the factors and criteria for success in self-management in the Ji'rona Building Construction Project of RSAB. The data collection technique used a quantitative descriptive questionnaire survey in this study. The study involved 24 respondents, including project owners, planning teams, implementation teams, supervisory teams/CM, and self-management expert respondents. The data analysis method uses the AHP (Analytical Hierarchy Process) method to make it easier to make decisions based on several alternative self-management success factors. Based on the results of data analysis, the research identified the results of ranking criteria and sub-criteria in the form of a diagram, as well as changes in the hierarchical structure of the research on the success factors of self-management success. The study concluded that the priority factors for the success of self-management in the Ji'rona RSAB Building Construction Project were quality 0.124, communication 0.120, risk management 0.116, stakeholder satisfaction 0.111, cost 0.110, administration 0.108, resources 0.107, time 0.101, and characteristics of the place 0.089.

**Keyword:** *AHP, Analysis of Success Factors, Hospital Building Project, Self-Management*

### **1. INTRODUCTION**

The rapid era of national development now indicates that the construction services industry sector is advancing yearly. According to data from the Central Statistics Agency, in the third quarter of 2023, East Java's construction services business grew by 4.4 percent compared to the second quarter of 2023, which only grew by 3.15 percent [1]. Construction projects require an effective and efficient management system to achieve the expected development goals. Project management is a set of science, expertise, tools, and technical guidelines for project activities and realizing project requirements [2].

The rapid development of technology and times has impacted the development of systems in the construction world [3]. One of the project management developments is to produce a new management system where the owner can directly appoint the project implementation team without an auction or tender process. The management of this project is used as an implementation to maximize the potential of existing human resources in procuring goods and services within the government and non-governmental sectors. This management system is called a self-management system, which is a management system that the project owner himself manages [4].

Project management aims to ensure that the objectives of the construction project are achieved successfully based on the budget and resources that have been determined [5].

Self-management is carried out if existing enthusiasts cannot supply or demand the goods/services needed. The formation of a self-management team is essential before the project is implemented. The self-management team consists of a preparation team, an implementation team, and a supervision team. Referring to the Regulation of the Government of the Republic of Indonesia Procurement Policy Institution Number 3 of 2021 concerning Self-Management Guidelines, the self-management project management system is classified into four types, namely: type I self-management, type II self-management, type III self-management, and type IV self-management [6]. Self-management is one of the project management techniques often applied to a construction project. It prioritizes the existence of one's resources so that they can support the empowerment of existing resources independently. The self-management system does not apply a tender or auction process in procuring needed goods and services. The implementation of the self-management system consists of the Preparation Team, the Implementation Team, and the Supervisory Team [7].

The success factors of self-management based on literacy with consideration of restrictions on the PMBOK Sixth Edition book, are cost, time, quality, characteristics of place, resources, administration, stakeholder satisfaction, risk management, and communication. The project cost of a self-managed system tends to be cheaper than a wholesale system because there are no additional charges, so it is more cost-effective in its implementation [8]. Time is also a criterion considered necessary for a construction project's success. Time centers on whether or not to proceed with the planning and scheduling of a construction project [9]. The optimal quality factor standard is a reference when implementing self-managed construction projects. Quality is the overall characteristic of a good or service that shows the ability to satisfy desired needs [10]. Planning and field surveys can determine a project's site characteristics in advance. The goal is to arrange the layout of the supporting buildings for the main building so that the implementation process runs efficiently. Resources are workers, employees, and managers ready to provide potential or thought to efforts to achieve organizational goals [11]. Administration is a negotiation activity related to implementing policies to achieve a jointly planned goal [12]. Stakeholders satisfaction is an after-purchase consideration, with the chosen alternative at least providing the same results or exceeding the expectations of consumers or owners [13]. Risk management is an effort to minimize all types of risks during a construction project. Risk management is a stage that identifies, measures, and ensures risks and improves strategies to manage existing risks. Risk management is used as a risk control parameter in construction projects. Communication is a form of reciprocity of information, thoughts, and understanding between specific individuals and groups. Communication in project management is essential because it balances the flow of efficient and collaborative work implementation between all stakeholders [14].

Building construction projects are a series of interrelated activities to achieve a specific goal, namely building construction. The building results from a series of planning, implementation, and supervision to achieve the goal of building a building whose height is above the average of the surrounding buildings, that serves as a space for people to engage in social, cultural, religious, and special activities [15]. Construction projects always require resources, namely man, building materials, machinery, money, information, and time [16]. Building construction projects are generally activities in building infrastructure development in the form of buildings. Activities include planning and organizing work to construct, renovate, or develop the physical structure or infrastructure of a building.

Projects that are carried out in a self-managed manner require proper project management, because there are several self-managed projects that fail due to the lack of precision in the implementation of existing project management. Regarding the Ji'rona Building Construction Project of 'Aisyiyah Bojonegoro Hospital, which implements a Type III is self-management, which is planned and overseen by the person in charge of the budget and carried out by the community organization that manages itself.

This study aims to determine the priority scale of the factors and criteria for success in self-management RSAB Building Project.

## 2. RESEARCH METHOD

This study used a quantitative descriptive questionnaire surveys, that involved 24 respondents, including project owners, planning teams, implementation teams, supervisory teams/CM, and self-management expert respondents. The data analysis method uses the AHP (Analytical Hierarchy Process) method.

### 2.1. Research Flow Diagram

The following chart is a flow diagram of the research used:



Sources: Processed by Researcher, 2025

**Fig. 1** Flowchart of Research Process

Figure 1 shows the research flow chart applied by the author. To explain the flowchart above, it is essential to understand the research steps to obtain the desired results. The following are the steps in this research:

1. Initial Observation  
The first stage is observing a research object and collecting basic information before further analysis.
2. Preparation  
The stages of the literature review are available to determine the chosen objectives and methods.

### 3. Execution

The stages of implementing the research are in the form of distributing questionnaires to the selected respondents.

### 4. Data Collection

The stages of collecting all the questionnaire data from the research results.

### 5. Pairwise Comparison Matrix

After all the data is obtained, the value of the multiple comparison matrix of each criterion and sub-criterion is calculated.

### 6. AHP Analysis

AHP analysis applies a problem-solving method to final decision-making, using a structured thinking framework and weighting of existing criteria to obtain appropriate and practical solutions.

### 7. Ratio Test Data Consistency

The data ratio consistency test functions for research data analysis's Consistency (CR). If the CR value is  $< 0.1$ , the data can be considered consistent, but if the CR value is  $> 0.1$ , then the data calculation needs to be reviewed.

### 8. Ranking Of Success Factors

The ranking was carried out to determine each criterion's priority factors and priorities for the success factor of RSAB self-management.

## 2.2. Data Processing Method

The Analytical Hierarchy Process (AHP) is a statistical method for prioritizing and decomposing complex problems into a hierarchical structure. The basic principle of the AHP method is to compile a hierarchical structure, assess criteria with paired comparisons, prioritize, and test the method's consistency with data [17].

Saaty's random index scale is used to compare pairs of criteria. It evaluates the intensity of the importance of criteria, where 1 indicates the same significance, 3 suggests that one criterion is slightly more important than the other, 5 means one criterion is more important than another, 7 indicates one criterion is more important than another, and 9 indicates an absolute criterion is more important than another [18].

Some of the steps in the AHP analysis are as follows:

#### 1. Pairwise comparison matrix input

**Table 1.** Pairwise Comparison Matrix

Index	X1	X2	X3	X4
X1	1	...	...	...
X2	...	1	...	...
X3	...	...	1	...
X4	...	...	...	1
X(n)	...	...	...	...

Sources: Awad & Jung, 2022

Table 1 shows a multiple comparison matrix table of respondents' perceptions of the self-management success factor analysis assessment. On each cell of this matrix, the geometric mean formula applies.

2. Calculate the weight value of criteria/sub-criteria:

At this stage, the geometric mean formula is applied to each cell to calculate the priority weight compared to all the results of the respondent's perception [19].

$$\text{Geometric Mean} = a_{ij} = (Z_1, Z_2, Z_3, \dots, Z_n)^{1/n} \quad (1)$$

(Sources: Capryani, et al., 2016)

3. Calculating matrix normalization based on the criteria

At this stage, each value in the matrix column is divided by the total value of the column to obtain the eigenvector value. If the eigenvalue equals 1, then the calculation is correct.

4. Calculation of  $\lambda$  max values

At this stage, multiplication is carried out on the number of columns of each normalization matrix with the average priority of each row, which is then summed horizontally. Then, the summation results are subdivided by the priority average and added vertically. The result of the sum divided by the number of criteria is obtained from the value  $\lambda$  max.

$$\lambda \max = \frac{(\sum \frac{\text{Normalization matrix result}}{\text{Priority Weight}})}{\sum \text{Criteria}} \quad (2)$$

(Sources: Awad & Jung, 2022)

5. Consistency Index Calculation (CI)

$$CI = \frac{(\lambda \max - n)}{n - 1} \quad (3)$$

(Sources: Awad & Jung, 2022)

**Where:**

CI = Consistency Index

$\lambda$  max = Lambda Max

n = Sigma of Criteria

6. Calculation of Consistency Ratio (CR)

$$CR = \frac{CI}{IR} \quad (4)$$

(Sources: Awad & Jung, 2022)

**Where:**

CR = Consistency Ratio

CI = Consistency Index

IR = Index Ratio

Where is the IR from:

**Table 2.** Index Ratio (IR) Value

Criteria	1	2	3	4	5	6	7	8	9	10
IR	0	0	0.58	0.9	1.12	1.24	1.32	1.41	1.45	1.49

Sources: Saaty, 2008

Table 2 shows the provisions for determining the index ratio (IR) based on the number of criteria. For the number of elements 9, the IR value is 1.45, for the number of elements 4, it is 0.9, and for the number of elements 5, it is 1.12.

#### **Evaluation Criteria:**

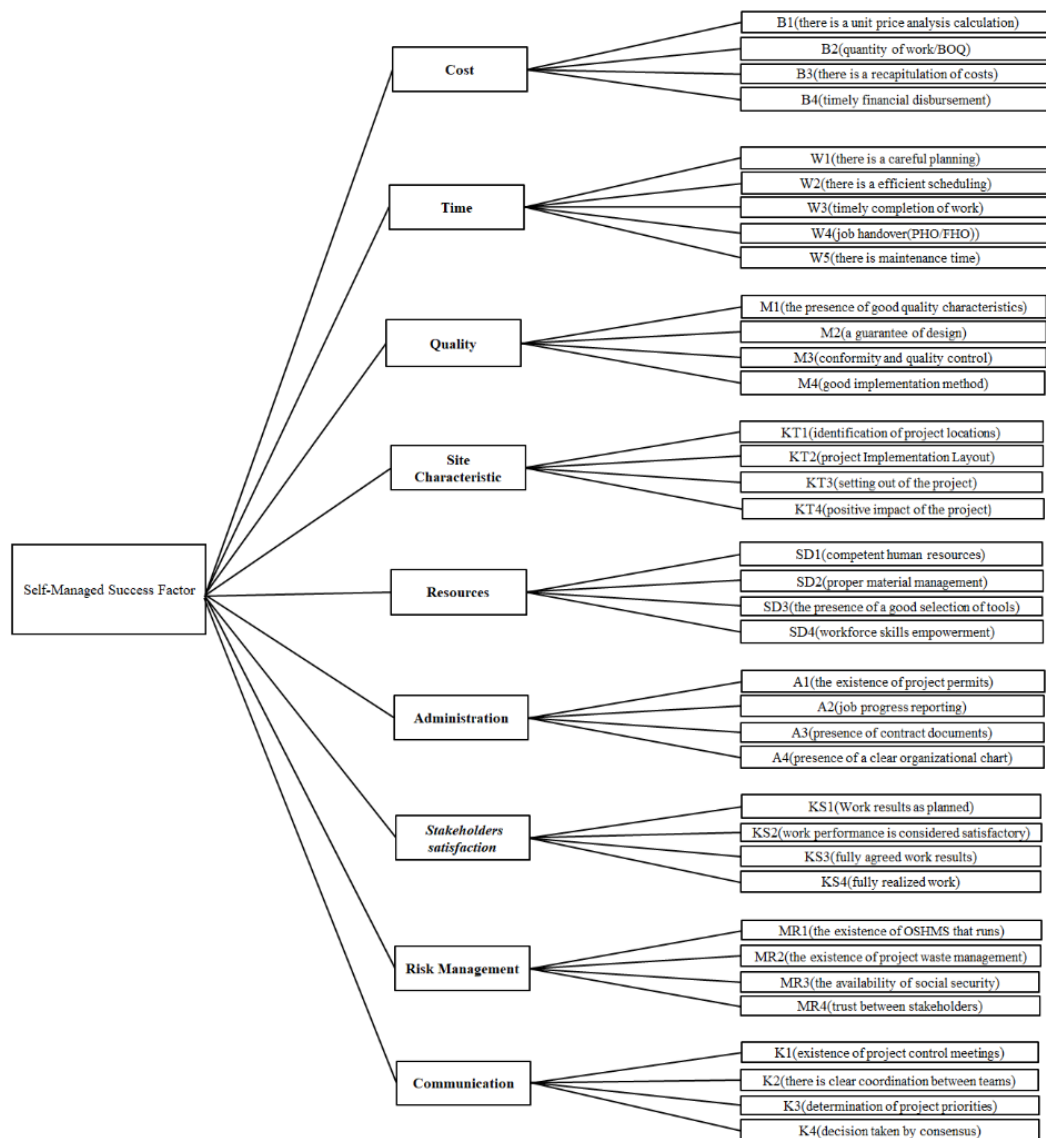
If the  $CR \leq 0.1$ , then the respondents' perception of assessment is considered consistent.

If the  $CR > 0.1$ , then the respondents' perception of assessment is considered inconsistent.

### **3. RESULT AND DISCUSSIONS**

#### **3.1. Initial Hierarchy of Self-Management Success Factors**

At this stage, the preparation of the hierarchy is the first step in identifying all criteria and sub-criteria for the success factors.



Sources: Processed by Researcher, 2025

**Fig. 2** Initial Hierarchy Structure of Success Factor

Figure 2 shows the shows the initial arrangement of the pre-AHP hierarchy of criteria and sub-criteria for the success factors of RSAB self-management.

The initial hierarchy starts from cost, time, quality, site characteristics, resources, administration, stakeholder satisfaction, risk management, and communication.

### 3.2. Weighting Criteria of the Self-Management Success Factor

The following table is the processing table of all the weighting values of the main criteria matrix:

**Table 3.** Weighting of the Matrix by Key Criteria

Weighting of the matrix by key criteria									
Criteria	Cost	Time	Quality	Site Characteristic	Resources	Administration	Stakeholders Satisfaction	Risk Management	Communication
Cost	1.00	1.55	0.78	1.40	0.96	1.00	0.90	0.74	1.07
Time	0.64	1.00	0.94	0.90	1.05	1.28	0.84	0.98	0.85
Quality	1.28	1.06	1.00	1.93	1.12	1.06	0.93	0.89	1.25
Site Characteristic	0.71	1.11	0.52	1.00	1.03	0.88	0.58	0.86	0.90
Resources	1.04	0.96	0.90	0.97	1.00	1.01	1.31	0.80	0.92
Administration	1.00	0.78	0.95	1.14	0.99	1.00	1.19	1.20	0.84
Stakeholders Satisfaction	1.11	1.20	1.07	1.73	0.76	0.84	1.00	0.83	0.96
Risk Management	1.47	1.02	1.12	1.17	1.24	0.84	1.20	1.00	0.73
Communication	0.94	1.18	0.87	1.33	1.08	1.19	1.05	1.38	1.00
<b>Total</b>	<b>9.20</b>	<b>9.85</b>	<b>8.15</b>	<b>11.56</b>	<b>9.23</b>	<b>9.10</b>	<b>8.99</b>	<b>8.68</b>	<b>8.52</b>

Sources: Processed by Researcher, 2025

Table 3 shows the results of the normalization matrix processing based on the main criteria. A geometric mean formula is applied to obtain the average from a set of values in the average value, and the eigenvalue is calculated. The sum of the results of the weighting of the criteria is carried out vertically so that the total is obtained from the weighting of each criterion.

### 3.3. Normalization of the Matrix Based on the Criteria

The table below shows the processing of the normalization matrix based on the main criteria.

**Table 4.** Normalization of the Matrix Based on Key Criteria

Normalization of the matrix based on key criteria										
Criteria	Cost	Time	Quality	Site Characteristic	Resources	Administration	Stakeholders Satisfaction	Risk Management	Communication	Mean
Cost	0.11	0.16	0.10	0.12	0.10	0.11	0.10	0.09	0.13	<b>0.110</b>
Time	0.07	0.10	0.12	0.08	0.11	0.14	0.09	0.11	0.10	<b>0.101</b>
Quality	0.14	0.11	0.12	0.17	0.12	0.12	0.10	0.10	0.15	<b>0.124</b>
Site Characteristic	0.08	0.11	0.06	0.09	0.11	0.10	0.06	0.10	0.11	<b>0.089</b>
Resources	0.11	0.10	0.11	0.08	0.11	0.11	0.15	0.09	0.11	<b>0.107</b>
Administration	0.11	0.08	0.12	0.10	0.11	0.11	0.13	0.14	0.10	<b>0.108</b>
Stakeholders Satisfaction	0.12	0.12	0.13	0.15	0.08	0.09	0.11	0.10	0.11	<b>0.111</b>
Risk Management	0.16	0.10	0.14	0.10	0.13	0.09	0.13	0.12	0.09	<b>0.116</b>
Communication	0.10	0.12	0.11	0.12	0.12	0.13	0.12	0.16	0.12	<b>0.120</b>
<b>Eigen Value</b>										<b>1.00</b>

Sources: Processed by Researcher, 2025

Table 4 shows the results of the normalization matrix processing based on the main criteria. A geometric mean formula is applied to obtain the average from a set of values in the average value, and the eigenvalue is calculated. The eigenvalue must be equal to 1.

### 3.4. Data Consistency Ratio Test

In the test of the consistency ratio of the criteria data to the priority weight, the initial weighting matrix was multiplied by the geometric mean value of the normalization matrix. After that, the sum of each row of the matrix is added, and the order of the matrix (9x1) is obtained.

$$\begin{pmatrix} 1.00 & 1.55 & 0.78 & 1.40 & 0.96 & 1.00 & 0.90 & 0.74 & 1.07 \\ 0.64 & 1.00 & 0.94 & 0.90 & 1.05 & 1.28 & 0.84 & 0.98 & 0.85 \\ 1.28 & 1.06 & 1.00 & 1.93 & 1.12 & 1.06 & 0.93 & 0.89 & 1.25 \\ 0.71 & 1.11 & 0.52 & 1.00 & 1.03 & 0.88 & 0.58 & 0.86 & 0.90 \\ 1.04 & 0.96 & 0.90 & 0.97 & 1.00 & 1.01 & 1.31 & 0.80 & 0.92 \\ 1.00 & 0.78 & 0.95 & 1.14 & 0.99 & 1.00 & 1.19 & 1.20 & 0.84 \\ 1.11 & 1.20 & 1.07 & 1.73 & 0.76 & 0.84 & 1.00 & 0.83 & 0.96 \\ 1.47 & 1.02 & 1.12 & 1.17 & 1.24 & 0.84 & 1.20 & 1.00 & 0.73 \\ 0.94 & 1.18 & 0.87 & 1.33 & 1.08 & 1.19 & 1.05 & 1.38 & 1.00 \end{pmatrix} * \begin{pmatrix} 0.110 \\ 0.101 \\ 0.124 \\ 0.089 \\ 0.107 \\ 0.108 \\ 0.111 \\ 0.116 \\ 0.120 \end{pmatrix} =$$

$$= \begin{pmatrix} 0.110 & 0.157 & 0.096 & 0.125 & 0.103 & 0.109 & 0.100 & 0.086 & 0.128 \\ 0.071 & 0.101 & 0.117 & 0.080 & 0.112 & 0.139 & 0.093 & 0.113 & 0.102 \\ 0.142 & 0.107 & 0.124 & 0.171 & 0.119 & 0.115 & 0.104 & 0.103 & 0.150 \\ 0.079 & 0.112 & 0.064 & 0.089 & 0.110 & 0.095 & 0.065 & 0.099 & 0.108 \\ 0.115 & 0.096 & 0.111 & 0.086 & 0.107 & 0.110 & 0.146 & 0.093 & 0.110 \\ 0.110 & 0.078 & 0.117 & 0.101 & 0.105 & 0.108 & 0.133 & 0.139 & 0.101 \\ 0.123 & 0.121 & 0.133 & 0.154 & 0.082 & 0.091 & 0.111 & 0.096 & 0.114 \\ 0.163 & 0.103 & 0.138 & 0.104 & 0.133 & 0.091 & 0.134 & 0.116 & 0.087 \\ 0.103 & 0.119 & 0.108 & 0.118 & 0.116 & 0.129 & 0.117 & 0.159 & 0.120 \end{pmatrix}$$

$$= \begin{pmatrix} 1.013 \\ 0.928 \\ 1.134 \\ 0.820 \\ 0.974 \\ 0.992 \\ 1.024 \\ 1.068 \\ 1.088 \end{pmatrix} \quad (5)$$

In the following table, the vector consistency check value is calculated by dividing the matrix results by the priority weight of the criteria.

**Table 5.** Calculation of the Consistency Check Value of the Main Criteria Vector

Main criteria	Matrix Result	Prioritizing criteria	Matrix result Prioritizing criteria
Cost	1.013	0.110	9.174
Time	0.928	0.101	9.205
Quality	1.134	0.124	9.173
Site Characteristic	0.820	0.089	9.222
Resources	0.974	0.107	9.134
Administration	0.992	0.108	9.151
Stakeholders	1.024	0.111	9.197
Satisfaction			
Risk	1.068	0.116	9.222
Management	1.088	0.120	9.105
Communication			
	<b>Total</b>		82.583
	<b>λ max</b>		9.176
	<b>CI</b>		0.022
	<b>CR</b>		0.015
	<b>Cek (CR &lt; 0.1)</b>		<b>OK</b>

Sources: Processed by Researcher, 2025



Table 5 shows the results of calculating the check value of the paramount criterion vector consistency. In this step, the CR value must be less than 0.1 to conclude that the respondent's perception of the assessment is consistent.

1.  $\lambda_{max}$  (eigenvalue)

$$\lambda_{max} = \frac{(\sum \frac{Normalization\ matrix\ result}{Priority\ Weight})}{\sum Criteria} \quad (6)$$

$$\lambda_{max} = \frac{82.583}{9}$$

$$\lambda_{max} = 9.176$$

2. CI (Consistency Index)

$$CI = \frac{(\lambda_{max} - n)}{n - 1} \quad (7)$$

$$CI = \frac{(9.176 - 1)}{(9 - 1)}$$

$$CI = 0.022$$

3. CR (Consistency Ratio)

$$CR = \frac{CI}{IR} \quad (8)$$

$$CR = \frac{0.022}{1.45}$$

$$CR = 0.015 < 0.1$$

**Evaluation Criteria:**  $CR = 0.015 < 0.1$  (**Consistent**)

Based on the results of the evaluation of the data consistency check, a CR (Consistency Ratio) value of 0.015 was obtained. When compared to the value of the CR provisions, with a CR of  $< 0.1$ , the processed data is eligible to be declared that the data is consistent. The data was declared consistent indicating that the perception of the respondents' assessment results was also eligible for the AHP data consistency test.

### 3.5. Combined Ranking Result of Self-Managed Success Factors

In the following table, the combined result of the ranking of criteria and sub-criteria for the success factor of self-management of the Ji'rona RSAB Building:

**Table 6.** Recapitulation Results of Ranking Criteria and Sub-Criteria for Success Factors

	Main Criteria	Weight Priority	Rank AHP	Sub-criteria	Weight Priority	Rank AHP
<b>Self-Managed Success Factors</b>	Quality	0.124	1	M4(good implementation method)	0.278	1
				M2(a guarantee of design)	0.241	2
				M3(conformity and quality control)	0.239	3
				M1(the presence of good quality characteristics)	0.234	4
	Communication	0.120	2	K1(existence of project control meetings)	0.255	1
				K3(determination of project priorities)	0.237	2
				K4(decision taken by consensus)	0.234	3
				K2 (there is clear coordination between teams)	0.229	4
	Risk Management	0.116	3	MR1(the existence of OSHMS that runs)	0.291	1
				MR3(the availability of social security)	0.252	2
				MR2(the existence of project waste management)	0.234	3
				MR4(trust between stakeholders)	0.221	4
	Stakeholders Satisfaction	0.111	4	KS1(work results as planned)	0.328	1
				KS4(fully realized work)	0.250	2
				KS3(fully agreed work results)	0.225	3
				KS2(work performance is considered satisfactory)	0.194	4
	Cost	0.110	5	B1(there is a unit price analysis calculation)	0.303	1
				B4(timely financial disbursement)	0.245	2
				B2(quantity of work/BOQ)	0.241	3
				B3(there is a recapitulation of costs)	0.208	4
	Administration	0.108	6	A1(the existence of project permits)	0.344	1
				A4(presence of a clear organizational chart)	0.247	2
				A3(presence of contract documents)	0.201	3
				A2(job progress reporting)	0.201	4
	Resources	0.107	7	SD1(competent human resources)	0.325	1
				SD4(workforce skills empowerment)	0.244	2
				SD2(proper material management)	0.210	3
				SD3(the presence of a good selection of tools)	0.206	4
	Time	0.101	8	W1(there is a careful planning)	0.217	1
				W5(there is maintenance time)	0.215	2
				W3(timely completion of work)	0.200	3
				W4(job hand over (PHO/FHO))	0.190	4
	Site Characteristics	0.089	9	W2(there is efficient scheduling)	0.173	5
				KT4(positive impact of the project)	0.299	1
				KT1(identification of project locations)	0.251	2
				KT2(project Implementation layout)	0.229	3
				KT3(project Implementation layout)	0.210	4

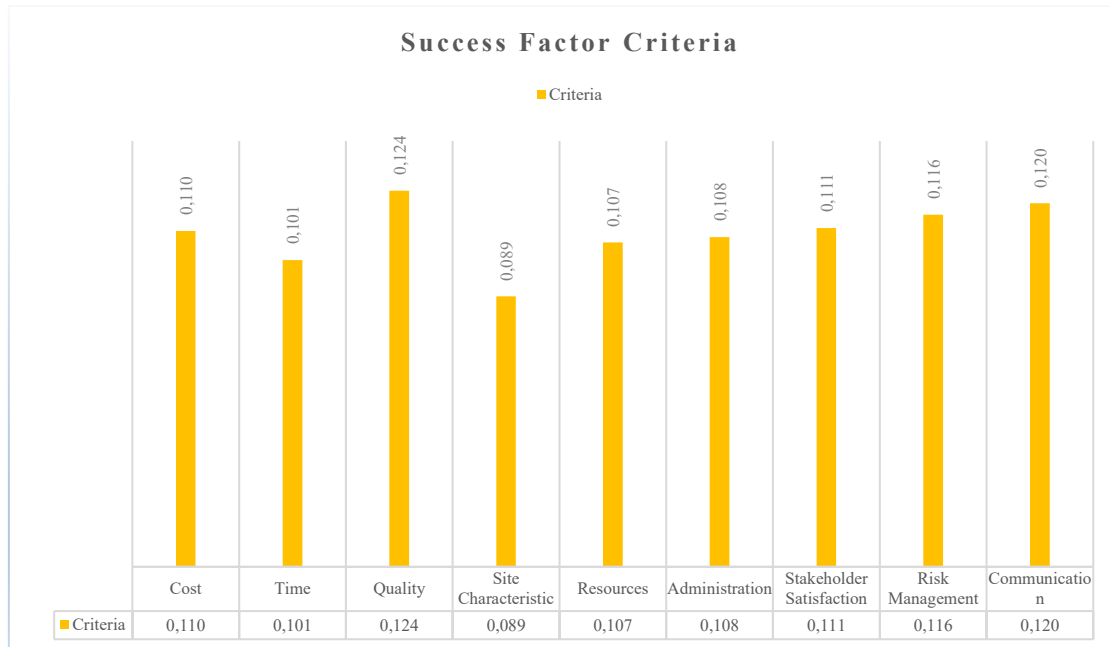
Sources: Processed by Researcher, 2025

Tabel 6 shows the recapitulation of the results of the ranking of priority weights, criteria and sub-criteria for the success of the self-management of the Ji'rona RSAB Building construction project. The results of changes in the ranking order of criteria and sub-criteria of each criterion and sub-criteria of the success factors of self-management in the construction project of the Ji'rona RSAB Building were obtained.

The changes of the ranking results of criteria and sub-criteria will be interpreted in the new post-AHP hierarchical structure.

### 3.6. Ranking Diagram of Success Factor Criteria and Sub-Criteria

The following diagram is the result of ranking the self-management criteria:

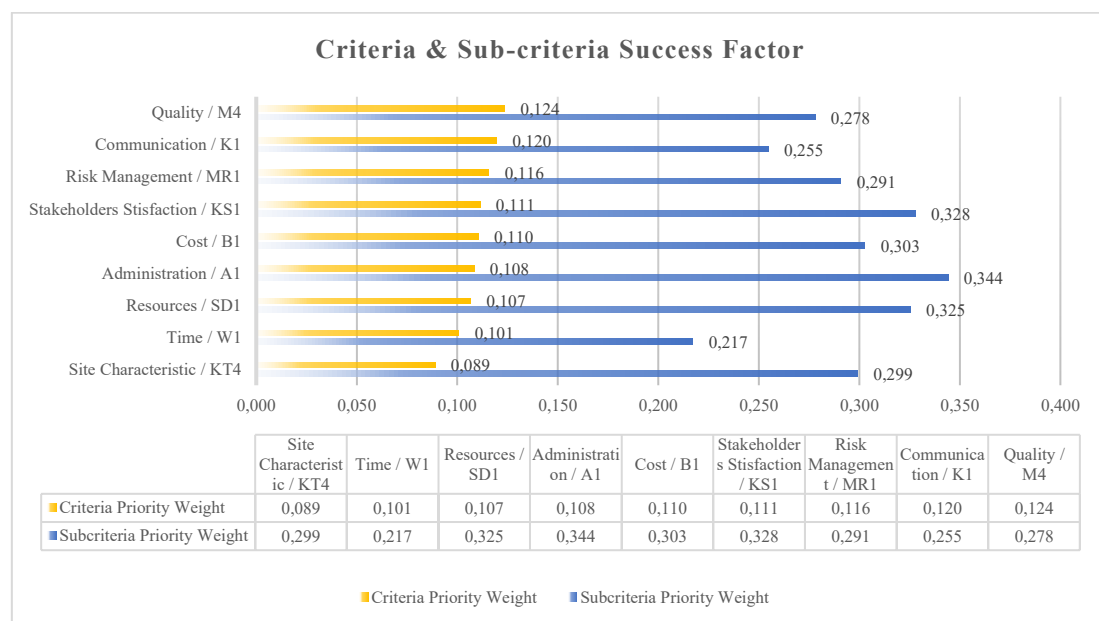


Sources: Processed by Researcher, 2025

**Fig. 3** Ranking of self-management main criteria

Figure 3 shows a diagram ranking the criteria for RSAB self-management success factors. The criteria for the highest order are quality, with a priority value of 0.124, and the criteria for the lowest order are the characteristics of the place, with a priority value of 0.089.

The following diagram is the result of the combined ranking of self-management criteria and sub-criteria in the construction project of the Ji'rona RSAB Building:



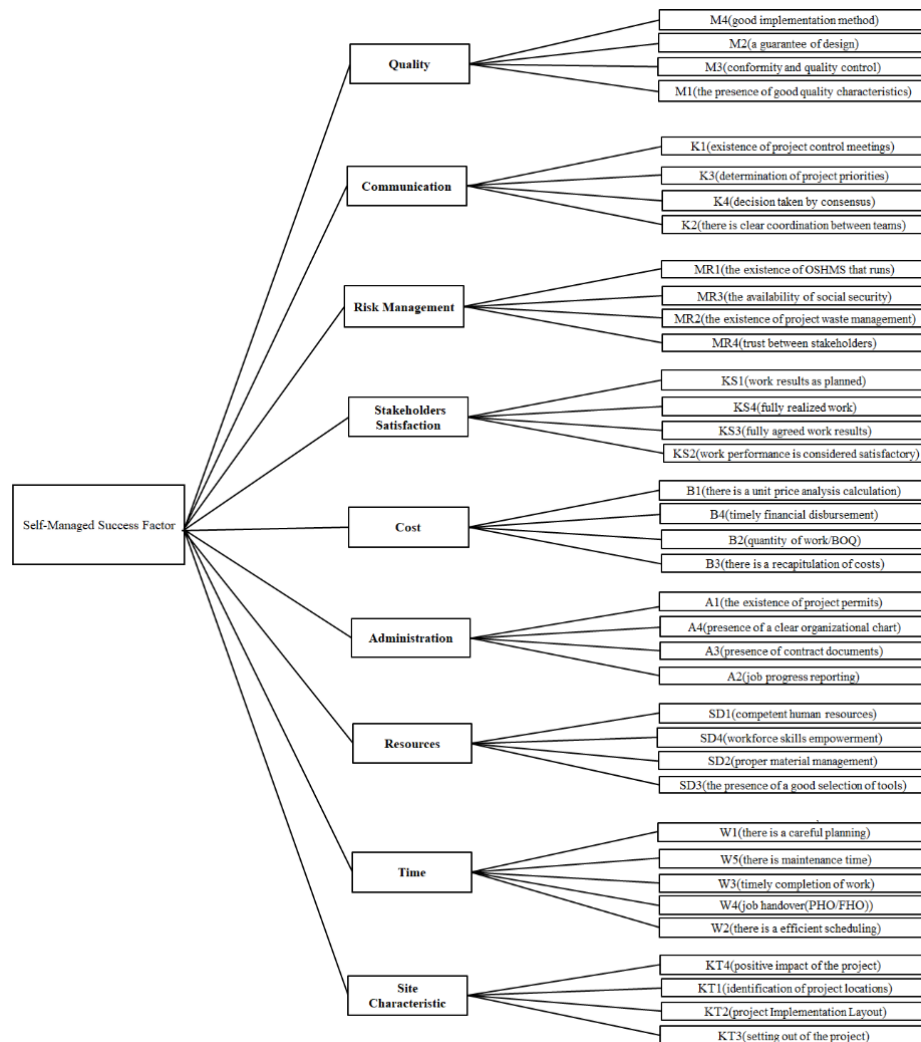
Sources: Processed by Researcher, 2025

**Fig. 4** Combined Ranking of Self-Management Criteria and Sub-Criteria

Figure 4 shows a combined diagram of the ranking results of the criteria and sub-criteria of RSAB self-management success factors. The highest criterion with the RSAB self-management success factors sub-criteria was quality/M4 (good implementation method), with a priority value of 0.124 and 0.278. At the same time, the lowest order was the characteristics of place/KT4 (positive impact of the project on the community), with a priority value of 0.089 and 0.299.

### 3.7. Post-AHP Hierarchy Changes Criteria and Sub-Criteria Success Factors

The Changes in the hierarchy of criteria and sub-criteria of success factors occurred after AHP processing. The following is the post-AHP hierarchy structure in the author's research:



Sources: Processed by Researcher, 2025

**Fig. 5** The Changes in the Post-AHP Hierarchical Structure

Figure 5 shows the change in the post-AHP hierarchy of criteria and sub-criteria for the success factors of RSAB self-management, the change in the hierarchy from the highest to quality, communication, risk management, stakeholder satisfaction, cost, administration, resources, time, and place characteristics. In the sub-criteria, there was also a change in the hierarchy after the AHP analysis.

Quality criteria are prioritized M4 (good implementation methods), communication criteria are prioritized K1 (there are project control meetings), risk management criteria are prioritized MR1 (OSHMS is running), stakeholder satisfaction criteria are prioritized KS1 (work results according to plan), cost criteria are prioritized B1 (there is a unit price analysis calculation), administrative criteria

are prioritized A1 (there is project licensing), resource criteria are prioritized SD1 (competent human resources), the criteria for time to be prioritized W1 (the existence of careful planning), and the criteria for the characteristics of the place where KT4 is prioritized (positive impact of the project on the community).

#### 4. CONCLUSION

Based on the literature and analysis of AHP related to the success factors of the self-management system in the construction project of the Ji'rona RSAB Building, it can be concluded in this study:

The order of priority scale of the self-management success factors in the Ji'rona RSAB Building construction project is seen from the ranking chart of success factor criteria, successively namely quality factor of 0.124 or 12.4%, communication of 0.120 or 12.0%, risk management of 0.116 or 11.6%, stakeholder satisfaction of 0.111 or 11.1%, cost of 0.110 or 11.0%, administration of 0.108 or 10.8%, resource is 0.107 or 10.7%, time is 0.101 or 10.1%, and site characteristics are 0.089 or 8.90%. The order of the priority scale of each self-management success criteria in the Ji'rona RSAB Building construction project is seen from the ranking diagram of the success factor sub-criteria, consecutively, namely from the quality criteria is priority M4 (good implementation method) of 0.278, communication criteria are priority K1 (there is a project control meeting) of 0.255, the risk management criterion is priority MR1 (the existence of OSHMS that is running) of 0.291, the stakeholder satisfaction criteria are priority KS1 (work results according to plan) of 0.328, cost criteria are priority B1 (there is a calculation of unit price analysis) of 0.303, administrative criteria are priority A1 (there is a project permit) of 0.344, resource criteria are priority SD1 (competent human resources) of 0.325, time criteria is priority W1 (there is careful planning) of 0.217, and the criterion of the characteristics of the place is the priority of KT4 (positive impact of the project on the community) of 0.299.

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