

Implementation of Hybrid Entropy and MABAC Methods in a Decision Support System for Selecting The Best Anime Series

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ABSTRACT

Anime is a form of animation originating from Japan that has become an integral part of the lifestyle of teenagers in various countries, including Indonesia. With the large number of anime titles released annually, viewers often struggle to select series that align with their preferences. This study aims to integrate the Entropy and MABAC methods into a Decision Support System (DSS) to assist users in identifying the best anime based on relevant criteria, such as user ratings, popularity, community membership, episode count, and duration. The Entropy method is used to determine criterion weights, while the MABAC method provides a more accurate evaluation during the selection process. Through this approach, it is expected that users will receive more precise and objective anime recommendations and find it easier to navigate the available options. Among the 35 anime titles analyzed, the results indicate that the best anime series is the 16th title (A16), with an S-score of 0.17699. Following testing via comparison with the TOPSIS method, A16 remained the best alternative; this demonstrates that the Entropy-MABAC method is consistent in determining the best anime.



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I. INTRODUCTION

Anime, a form of animation originating from Japan, has a wide fan base in various countries, including Indonesia. For many teenagers, anime has become an essential part of their lifestyle and daily entertainment[1]. Besides entertainment, anime is also often enjoyed in the form of manga (comics) and animated series broadcast on television and digital platforms. Anime is very popular among Indonesians, especially among teenagers, and this is proof that anime's influence cannot be underestimated [2]. One genre that is very popular among fans is action anime, known for its suspenseful stories, exciting fight scenes, and thrilling plots. Anime has become a very popular form of entertainment worldwide, including in Indonesia. With the rapid growth of the anime industry, the number of anime titles released each year continues to increase. By 2025, it is estimated that hundreds of new titles will be launched, creating a challenge for viewers in choosing the best anime series based on their preferences. "Best anime" is not interpreted as the absolute best anime or simply the one with the highest user rating. Operationally, "best anime" is defined as the anime achieving the highest preference score

based on a multi-criteria evaluation of user ratings, popularity, number of community members, episode count, and duration. User ratings, community member counts, and popularity indicators are considered aspects that contribute positively to preference, whereas episode count and duration are treated as aspects where lower values are more favorable, in accordance with the preferences established in the model. Consequently, the anime ranked first is the one demonstrating the most optimal overall performance based on the combination of criteria and weights used in the study, rather than simply the anime with the highest rating.

According to data from MyAnimeList, a leading platform for anime ratings and reviews, viewers often find it difficult to make choices among the many available alternatives. This highlights the need for systems that can help users make better decisions. This situation is exacerbated by the fact that many users lack the time or resources to research each title in depth. Decision-making methods can help determine the best choice in entertainment contexts, such as anime[3]. However, many previous studies have used simplistic methods and failed to consider multiple criteria simultaneously.

In the context of entertainment, particularly in selecting anime, several important aspects to consider include user ratings (scores), popularity, genre, number of community members, number of episodes, and anime duration. These factors are often the main reference for viewers in deciding which anime to watch. To overcome this complexity, a system is needed that can analyze data in a structured manner so that decisions are taken more accurately and objectively. Decision Support Systems (DSS) are an effective solution that can simplify this selection process. By using DSS, the selection of the best anime can be made based on various relevant factors, thus providing users with recommendations that suit their preferences. This study aims to implement DSS to help filter and determine anime that has quality that meets the established criteria, making it easier for users to find the most suitable anime.

The entropy method is used because it is effective in decision support systems for assessing and determining criteria weights based on available information [4]–[6]. By using this method, decision-making can be carried out more systematically and data-driven, resulting in better decisions. The MABAC method is used because it can provide more accurate results in selecting the best option based on the evaluation of relevant criteria through a systematic approach [7]–[9]. This study will integrate the entropy method with the MABAC method to optimize the assessment in a decision support system for the best anime series, with the hope of providing more accurate and relevant results.

II. METHODE

A. Basic Research Framework

The research flow for this study can be seen in Figure 1. The research process begins with problem identification to determine the issues to be resolved, then continues with data collection for analysis. The next stage is determining the criteria and alternatives to be assessed in the decision-making process. Next, the criteria are weighted using the Entropy method to objectively determine the level of importance of each criterion. To determine the alternative score, the MABAC method is used to obtain the value and ranking of each alternative. The final stage is analysis of the results and testing to ensure the resulting decisions are valid and accountable



Figures. 1. Research Flow

B. Decision Support System

A Decision Support System (DSS) is a tool that helps in decision-making by offering data analysis, information, and a range of options [10], [11]. DSS plays an important role in helping decision-makers choose the best solution in complex situations with various criteria [12]–[14]. In this study, DSS is used to determine the ranking of the best anime in 2025 based on existing statistical data, by applying accurate and structured analysis methods.

C. Entropy

Entropy measures the degree of uncertainty or disorder in a system. Entropy is used in decision-making, particularly in selecting alternatives, to evaluate the information contained in existing criteria. The entropy value is correlated with the variation of the data, meaning the criteria have more information to consider when making a decision [15], [16]. The entropy method is used in decision support systems (DSS) to [17], [18]:

1) *Measuring Criteria Weights*: We can determine which criteria are more informative. To do this, we need to calculate the entropy value for each criterion. Criteria with higher entropy values are considered to have more influence on decision-making.

2) *Assessing Alternatives*: After determining the criteria weights, the value of each alternative can be normalized and multiplied by the criteria weight to produce a value that corresponds to the preference.

The stages in calculating entropy include [19]–[21]:

1. Create a decision matrix to show how each option is evaluated according to each criterion that has been established using equation (1).

$$X = \begin{bmatrix} x_{11} & x_{1n} \\ x_{m1} & x_{mn} \end{bmatrix} \quad (1)$$

Where :

m = number of alternatives

n = number of criteria

X_{ij} = assessment of alternative A_i on criteria C_j

2. Normalization of the decision matrix

Normalization for Benefit Criteria:

$$R_{ij} = \frac{x_{ij}}{\max(x_{kj})} \quad (2)$$

Normalization for Cost Criteria:

$$R_{ij} = \frac{\min(x_{kj})}{x_{ij}} \quad (3)$$

Where:

R_{ij} = normalized value for alternative i on criterion j

X_{ij} = original value for alternative i on criterion j

k = number of alternatives

3. Determining the proportion value

The way to calculate the proportion value is by dividing the value of the element by the total value of the elements in the same column using equation (4).

$$p_{ij} = \frac{r_{ij}}{\sum_{i=1}^m r_{ij}} \quad (4)$$

- Calculate the entropy value that will be used to measure uncertainty in the data distribution of a criterion using equation (5)

$$E_j = \left[\frac{-1}{\ln m} \right] \sum_{i=1}^n [p_{ij} * \ln(p_{ij})] \quad (5)$$

- Calculate the dispersion value using equation (6) to measure how far the criteria contribute to decision making by considering the entropy value.

$$d_j = 1 - E_j \quad (6)$$

Where :

d_j is the dispersion value for criterion j

E_j is the entropy value for criterion j

- Calculating the criteria weight. This weight is calculated by normalizing the dispersion value that has been obtained using equation (7).

$$w_j = \frac{d_j}{\sum_{j=1}^n d_j} \quad (7)$$

Where :

w_j = weight for criterion j

d_j = dispersion value for criterion j

n = number of criteria

D. MABAC

MABAC (Multi-Attributive Border Approximation Area Comparison) is used to evaluate and compare alternatives based on a number of predetermined criteria. The MABAC multi-criteria decision-making method is intended to provide more flexible and accurate solutions in situations where alternatives must be assessed according to several interrelated criteria.

The following is the formula or equation used in the steps of the MABAC method[22]–[25]:

- Decision Matrix Normalization

For normalization, the following formula is used:

Normalization for Benefit Criteria:

$$R_{ij} = \frac{x_{ij}}{\max(x_{kj})} \quad (2)$$

Normalization for Cost Criteria:

$$R_{ij} = \frac{\min(x_{kj})}{x_{ij}} \quad (3)$$

Where:

R_{ij} = normalized value for alternative i on criterion j

x_{ij} = original value for alternative i on criterion j

k = number of alternatives

- Normalization Weighting

After normalization, the next step is to multiply the normalized values by the criteria weights:

$$V_{ij} = W_j \cdot R_{ij} \quad (4)$$

Where:

V_{ij} = weighted value for alternative i on criterion j

W_j = weight for criterion j

- Boundary Area Calculation

MABAC calculates the boundary area for each alternative using the formula:

$$A_i = \sum_{j=1}^n V_{ij} \quad (5)$$

Where:

A_i = total value for alternative i

n = number of criteria

- Alternative Evaluation

Alternatives are evaluated by comparing the total value of A_i . The best option is the one with the highest value of A_i

- Decision Criteria

To determine the best alternative, the following criteria can be used:

$$\text{Alternatif terbaik} = \operatorname{argmax}(A_i) \quad (6)$$

Where:

$\operatorname{argmax}(A_i)$ = alternative i that has the highest A_i value.

III. RESULTS AND DISCUSSION

Data collection was conducted online through MyAnimeList, a leading platform for anime ratings and reviews. The research data used were collected in November 2025. The selection of criteria for this study is based on the premise that evaluating anime requires considering several factors: perceived quality, popularity, community engagement, content quantity, and the time commitment required for viewing. User Rating was chosen as it reflects user perception of anime quality, while Popularity serves to indicate the level of acceptance and appeal an anime holds within the community. Community Members serves as an indicator of engagement and the size of the user base that has added the anime to their lists. Episode Count was considered to represent the quantity of content offered, whereas Duration reflects the time required for users to watch each episode. Thus, these five criteria were selected because they provide complementary perspectives for evaluating anime alternatives and are relevant to the decision-making objectives of this study. Table 1 displays the data used in this research. Before the dataset was used, alternatives with incomplete values for their respective criteria were removed. The final dataset used consisted of 35 alternatives.

TABLE I
ANIME SERIES DATA

	C1	C2	C3	C4	C5
A1	8.190	947	281,377	25	23
A2	8.000	2,798	73,172	12	23
A3	7.620	1,989	123,464	20	23
A4	8.650	357	660,866	13	23
A5	7.590	1,689	148,085	12	23
A6	8.240	1,071	250,418	12	24
A7	8.910	663	391,450	24	24
A8	7.630	3,996	38,144	1	100
A9	8.440	577	437,208	16	28
A10	7.430	3,944	39,066	102	24
A11	8.830	3,116	60,101	1	144
A12	7.650	1,387	191,337	12	23
A13	7.700	1,016	264,842	12	24
A14	8.180	3,081	61,373	13	23
A15	7.190	1,216	220,785	13	23
A16	7.280	11,873	2,247	1	80
A17	7.350	1,591	165,029	25	24
A18	7.610	1,785	141,189	13	23

A19	7.030	3,276	54,556	12	24
A20	6.650	3,952	38,850	18	25
A21	7.930	6,358	12,471	1	96
A22	6.470	3,668	44,868	12	23
A23	8.550	710	367,958	12	24
A24	8.350	790	337,355	12	23
A25	6.140	2,817	72,137	12	24
A26	8.150	1,371	193,833	12	22
A27	8.020	1,049	256,344	24	23
A28	7.160	1,885	132,187	12	23
A29	8.300	1,821	137,592	12	24
A30	7.960	1,590	165,160	12	25
A31	8.060	3,600	46,307	1	111
A32	7.870	1,078	249,294	12	23
A33	7.970	9,257	4,904	12	12
A34	7.340	8,832	5,590	4	16
A35	8.780	1,401	189,875	3	155

Where :

A1-A35 = alternative/title of animation

C1 = criteria User Score (Benefit)

C2 = criteria Popularity (Benefit)

C3 = criteria Number of community members (Benefit)

C4 = criteria Number of episodes (Cost)

C5 = criteria Duration (minutes/ episode) (Cost)

The classification of attributes as either "benefit" or "cost" is based on the characteristics of each criterion in representing user preferences regarding anime. User Rating, the number of community members, and popularity are categorized as benefit criteria because higher values indicate perceived quality and greater levels of acceptance or community engagement. Conversely, the number of episodes and duration are categorized as cost criteria because the study considers the efficiency of viewing time; thus, fewer episodes and shorter runtimes imply a lower time commitment for the user. Consequently, this benefit-cost classification is determined by the directional nature of the preferences associated with each criterion in facilitating the optimal selection of anime.

A. Weighting stage

The steps taken in this research after data collection included weighting the criteria using the entropy method. The steps involved in this method include:

1) Creating a decision matrix

The decision matrix in this case can be seen in Figure 4.1.

X=	8,190	947	281,377	25	23
	8,000	2,798	73,172	12	23
	7,620	1,989	123,464	20	23
	8,650	357	660,866	13	23
	...	...	...	...	...
	7,970	9,257	4,904	12	12
	7,340	8,832	5,590	4	16
	8,780	1,401	189,875	3	155

Figures. 2. Decision matrix

Figure 2 shows that the number of alternatives is 35 and the number of criteria is 5, forming a 35x5 matrix. Each number in the X matrix indicates the performance value of each alternative against a specific criterion. The values in each column have quite significant scale differences, ranging from units to hundreds of thousands. This difference indicates that the data presented is still initial or raw data. To be able to compare objectively, the data in this matrix needs to go through a normalization process. This decision matrix will serve as the main foundation in the process of determining the best alternative in the next stage.

2) *Normalization of the decision matrix.* Normalization is performed to convert alternative performance values into a scale that allows for comparison across criteria. Based on the decision matrix that has been made and looking at the type of each criterion where C1 to C3 are benefit criteria and C4 and C5 are cost criteria, the max/min value of each criterion can be calculated as follows: Max value of C1 (benefit) = 8,910; Max value of C2 (benefit) = 11,873;

Max value of C3 (benefit) = 660,866; Min value C4 (Cost) = 1; Min value C5 (Cost) = 12.

The results of the decision matrix normalization can be seen in Table 2.

Based on equations 2 and 3 and the benefit or cost characteristics of each criterion, matrix normalization for criteria C1 through C3 is calculated using equation 2, while criteria C4 through C5 are calculated using equation 3. This approach is adopted because criteria C1 through C3 exhibit benefit characteristics, whereas criteria C4 and C5 exhibit cost characteristics.

TABLE 2
NORMALIZATION OF THE DECISION MATRIX

Alter native	C1	C2	C3	C4	C5
A1	0.9191	0.0797	0.4257	0.04	0.52173
A2	0.8978	0.2356	0.1107	0.08	0.52173
A3	0.8552	0.1675	0.1868	0.05	0.52173
...	...	...	...	...	...
A33	0.8945	0.7796	0.0074	0.08	1
A34	0.8237	0.7438	0.0084	0.25	0.75
A35	0.9854	0.1179	0.2873	0.33	0.07741
$\sum_{ij}$	30.664	8.1319	8.8662	7.56	16,1522

3) *Calculate the proportion value.* Calculate the proportion value using equation (4). The way to calculate the proportion value is by dividing the value of the element by the sum of the values of the elements in the same column using the equation. The results of the proportion value calculation can be seen in Table 3.

TABLE 3
PROPORTIONAL VALUE

Alter native	C1	C2	C3	C4	C5
A1	0.0299	0.00980	0.04802	0.00528	0.03230
A2	0.0292	0.02897	0.01248	0.01101	0.03230
A3	0.0278	0.02060	0.02107	0.00660	0.03230
...	...	...	...	...	...
A33	0.0291	0.09587	0.00083	0.01101	0.06191
A34	0.0268	0.09147	0.00095	0.03304	0.04643
A35	0.0321	0.01451	0.03240	0.04405	0.00479

4) *Calculating the entropy value.* This stage is carried out to measure the uncertainty in the distribution of data for a criterion using equation (5). The results of the entropy value calculation can be seen in Table 4

TABLE 4
ENTROPY VALUE

Alternative	C1	C2	C3	C4	C5
A1	-3.51	-4.624	-3.036	-5.242	-3.432
A2	-3.53	-3.541	-4.382	-4.508	-3.432
A3	-3.58	-3.882	-3.859	-5.019	-3.432
A33	-3.53	-2.344	-7,085	-4.508	-2.782
A34	-3.62	-2.391	-6.954	-3.409	-3.069
A35	-3.44	-4.232	-3.429	-3,122	-5,340
$\sum p_{ij} \ln(p_{ij})$	-3.55	-3.214	-3,199	-2.799	-3.458

With a value of $E_j = -0.281266414$

C1 = 0.999023;

C2 = 0.904209;

C3 = 0.899849;

C4 = 0.787274;

C5 = 0.972829

The entropy value represents the level of information diversity for each criterion. A higher entropy value indicates a lower level of information variation provided by the criterion. Conversely, a lower entropy value indicates greater variation in alternative values, meaning the criterion possesses higher discriminative power.

Based on the entropy calculation results, C4 has the lowest entropy value at 0.787274, indicating that this criterion possesses a relatively higher level of information diversity compared to the other criteria. This characteristic gives C4 greater discriminative power in distinguishing performance among alternatives. Conversely, C1 has the highest entropy value at 0.999023, indicating that performance values across alternatives for this criterion are relatively homogeneous. Thus, C1 provides a lower level of differentiating information compared to C4.

5) *Calculate the dispersion value.* Calculate the dispersion value using equation (6) to measure how far the criteria contribute to decision making by considering the entropy value. The results of the dispersion value can be seen as follows:

$d1 = 0.000977$;

$d2 = 0.095791$;

$d3 = 0.100151$;

$d4 = 0.027171$;

$d5 = 0.027171$

$\sum d_j = 0.436816$

Based on the calculation results, criterion 4 has the largest dispersion value, namely 0.212726. The smallest dispersion value is in criterion 1, with a value of 0.000977, indicating very low data variation. The total dispersion value ($\sum d_j$) of 0.436816 is used as the basis for determining the criteria weights in the next stage.

6) *Calculating the criteria weight.* This weight is calculated by normalizing the dispersion value that has been obtained using equation (7). The results of the criteria weight are as follows:

$w1 = 0.002237$;

$w2 = 0.219294$;

$w3 = 0.229274$;

$w4 = 0.486992$;

$w5 = 0.062203$

The weight of each of these criteria will then be used in the ranking calculation.

B. Ranking stage

Ranking was performed using the MABAC method. Entropy weighting yields the following weights for each criterion: With the initial decision matrix as in Figure 4.1, the next step is to normalize the initial matrix elements (X) where for criteria 1 to 3 we use equation (8) and for criteria 4 and 5 we use equation (9). The results can be seen in Table 5

TABLE 5
NORMALIZATION OF INITIAL MATRIX ELEMENTS (X)

	C1 Benefits	C2 Benefits	C3 Benefits	C4 Cost	C5 Cost
X_{i+}	8,910	11,873	660,866	102	155
X_{i-}	6,140	357	2,247	1	12

After finding the normalization value of the initial matrix elements, the next step is to calculate the weighted matrix elements as in equation (10). The results of the weighted matrix elements can be seen in Table 6

TABLE 6
WEIGHTED MATRIX ELEMENT

Alter native	C1	C2	C3	C4	C5
A1	0.0038	0.2305	0.3264	0.8582	0.1196
A2	0.0037	0.2657	0.2539	0.9209	0.1196
A3	0.0034	0.2503	0.2714	0.8823	0.1196
...	...	...	...	...	...
A33	0.0037	0.3887	0.2301	0.9209	0.1244
A34	0.0032	0.3806	0.2304	0.9595	0.1226
A35	0.0043	0.2391	0.2945	0.9643	0.0622

The next stage in MABAC is to determine the estimated border area matrix (G) as in equation (11). With 35 alternatives, the value of m is 0.028571429 . This value will be used in the calculation of G so that the results are obtained. $GC1 = 0.003541718$; $GC2 = 0.261243065$; $GC3 = 0.282836898$; $GC4 = 0.903799472$; $GC5 = 0.11141882$

The next step is to calculate the alternative distance matrix elements from the estimated border area (Q) according to equation (12) and the final step is to carry out alternative ranking (S) as in equation (13) where this ranking is carried out to see the results of the calculation of the final number of Q values, where the highest value becomes rank 1. The ranking results can be seen in Table 7.

TABLE 7
S VALUE

Alternative	C1	C2	C3	C4	C5	S
A1	0.00035	-0.0307	0.04	-0.045	0.0082	-0.024
A2	0.00019	0.0045	-0.02	0.0171	0.0082	0.0012
A3	-0.0001	-0.0108	-0.01	-0.021	0.0082	-0.035
...	...	...	...	...	...	...
A16	-0.0004	0.1773	-0.053	0.0701	-0.016	0.1769
...	...	...	...	...	...	...
A33	0.00017	0.1275	-0.05	0.017	0.0129	0.105
A34	-0.0003	0.1194	-0.052	0.055	0.0112	0.133
A35	0.00082	-0.0220	0.011	0.060	0.0492	0.0018

In the MABAC method, the highest S-value shown in Table 7 indicates the first rank, while the lowest S-value indicates the lowest rank.

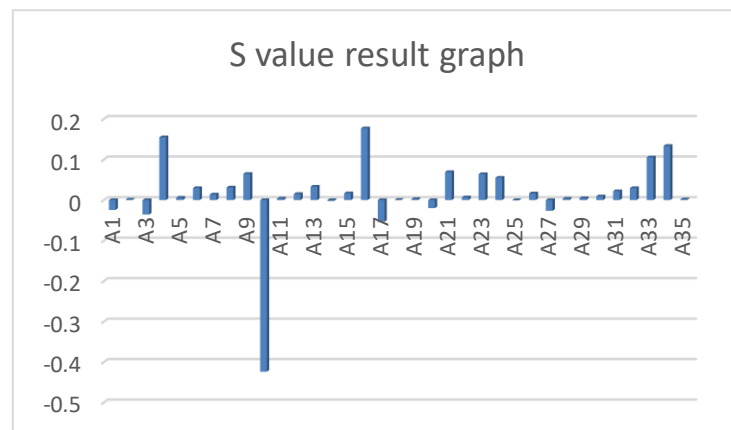
TABLE 8
MABAC ALTERNATIVE RANKING

S-Value	Alternative	Ranking
0,17699	A16	1
0,155011	A4	2
0,133668	A34	3
0,105198	A33	4
0,069095	A21	5
0,064532	A9	6
0,064074	A23	7
0,055217	A24	8
0,033318	A13	9
0,031071	A8	10
0,02978	A6	11
0,029659	A32	12
0,021935	A31	13
0,016991	A15	14
0,016593	A26	15
0,01519	A12	16
0,013787	A7	17
0,009323	A30	18

0,006685	A22	19
0,005835	A5	20
0,004835	A29	21
0,003787	A11	22
0,003686	A28	23
0,00261	A19	24
0,001836	A35	25
0,001206	A2	26
0,000457	A18	27
-0,00073	A25	28
-0,00219	A14	29
-0,01966	A20	30
-0,02409	A1	31
-0,02618	A27	32
-0,03557	A3	33
-0,05344	A17	34
-0,42369	A10	35

Table 8 shows the ranking of all alternatives used in this study. From Table 8, it can be seen that Alternative 16(A16) holds the first rank, while Alternative 10(A10) holds the last rank.

Based on the ranking results with the highest S value, namely 0.17699 for alternative 16. The graph of the S value results can be seen in Figure 3.



Figures. 3. S value result graph

In addition to ranking using the MABAC method, this study also compares the results with the TOPSIS method to determine rankings and assess sensitivity regarding the MABAC method. The TOPSIS ranking results, obtained after completing the method's procedural stages, are shown in Table 9. Weighted normalized matrix

TABLE 9
ALTERNATIVE RANKING

Alternative	C1	C2	C3	C4	C5
A1	0,0004	0,0093	0,0494	0,0939	0,0046
A2	0,0004	0,0274	0,0128	0,0451	0,0046
A3	0,0004	0,0195	0,0217	0,0752	0,0046
...	...	...	...	...	...
A33	0,0004	0,0907	0,0009	0,0451	0,0024
A34	0,0004	0,0865	0,0010	0,0150	0,0032
A35	0,0004	0,0137	0,0333	0,0113	0,0308

After determining the Positive Ideal Solution and the Negative Ideal Solution, the distances of the alternatives from the positive and negative ideal solutions can be calculated, as shown in Table 10.

TABLE 10
POSITIVE AND NEGATIVE IDEAL SOLUTIONS

Alternative	Alternative Distance	
	Positif D_i^+	Negatif D_i^-
A1	0,15503	0,29468
A2	0,14232	0,34027
A3	0,15289	0,31038
...	...	...
A33	0,12496	0,35040
A34	0,11933	0,37851
A35	0,13499	0,37360

The next step is to calculate the preference value for each alternative and rank them based on the highest preference values, as shown in Table 9.

TABLE 11
TOPSIS ALTERNATIVE RANKING

Ranking	Preference value	Alternative
1	0,772989	A16
2	0,76031	A34
3	0,75149	A21
4	0,744858	A4
5	0,738688	A8
6	0,737121	A33
7	0,736478	A31
8	0,734582	A35
9	0,733302	A11
10	0,729898	A23
11	0,726913	A24
12	0,719238	A13
13	0,718763	A9
14	0,717677	A6
15	0,717599	A32
16	0,712052	A26
17	0,711801	A12
18	0,710677	A15
19	0,709566	A30
20	0,707704	A5
21	0,707466	A22
22	0,707231	A29
23	0,706951	A28
24	0,70588	A19
25	0,705086	A2
26	0,705053	A25
27	0,703521	A18
28	0,701484	A14
29	0,682288	A20
30	0,671823	A7
31	0,669979	A3
32	0,65885	A27
33	0,655268	A1
34	0,644985	A17
35	0,098943	A10

The method was evaluated using comparative or robustness analysis rather than pure sensitivity analysis by comparing the MABAC method with other methods. The test results indicate that the use of an alternative method, Entropy-TOPSIS, yields a consistent top-ranked alternative: A16.

IV. KESIMPULAN

This study employs an integration of the Entropy method for weighting and the MABAC method for ranking to support the decision-making process in selecting the best anime series. The criteria used are user score, popularity, number of community members, number of episodes, and duration.

The weighting results using the entropy method indicate that the lowest weight corresponds to Criterion 1 (0.002237), while the highest weight corresponds to Criterion 4 (0.486992).

Based on the MABAC ranking results, Alternative 16 (A16) achieved the highest final score ($S = 0.17699$), thereby establishing it as the best alternative according to the criteria used in the study. These results demonstrate that the Entropy-MABAC integration can be utilized to systematically rank alternatives based on criterion weights derived from data characteristics.

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