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Application of Simple Additive Weighting Method to Determine Outstanding School Principals

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Abstract: The principal is a teacher who is given an additional assignment to be a leader in a school, the task of the principal can regulate, control and empower the community in the surrounding area, selection of outstanding school principals, so far both the school and Kuantan Singingi District Education Office determine the outstanding headmaster does not have an application that can simplify the work in calculating the weight value to determine the principals who are pretending, the assessment carried out so far is only manual, the application of the SAW method is used to select the best alternative from a number of alternatives - each participant will be ranked from highest to lowest. The results obtained from this study are that the system built can facilitate selection, so the selection process becomes more effective, efficient and transparent.

Keywords - SAW; SPK; Application; System; Achievement.

I. INTRODUCTION

The development of current information technology from time to time is very amazing besides facilitating all activities and human work, the work done can be more effective and efficient.

The principal is a teacher who is given an additional assignment to be a leader in a school, the task of the principal can regulate, control, and empower the community in the surrounding environment, therefore to become a principal who achievers the principal must fulfill the criteria in accordance with the assessment manual the selection of high school principals, so far both the school and the Kuantan Singingi District Education Office in determining high school principals do not have an application that can simplify work in calculating weight values to determine the principals who are pretending, the assessments that have been done are manual the data entered in the Education Office are then selected one by one and matched according to the assessment indicators in the assessment guide book for high school principals, by doing this method the work will take a long time, besides it u the data entered will not be properly selected and transparent.

The SAW method can be interpreted as a ranking method for selecting the best alternative from a number of alternatives. By applying the SAW method to the selection of high school principals, this can simplify the selection process and avoid fraud so that the selection process becomes transparent and efficient.

II. LITERATURE REVIEW

A. Definition of Decision Support Systems

Decision Support System is an interactive information system that provides information, modeling, and manipulating data. The system is used to help make decisions in situations that are semi-structured and unstructured situations. (Nurdin Bahtiar, M.T, et al, 2012).

Another definition (Irwan Purdianto, 2013), Decision Support System is a system intended to support managerial decision makers in semi-structured decision situations. DDS is intended to be a tool for decision makers to expand their capacities, but not to negate their judgment. SPK can also be said as a computer system that processes data into information to make decisions from specific semi-structured problems.

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B. Simple Additive Weighting (SAW)

The SAW method is often also known as the weighted sum method. The basic concept of the SAW method is to find a weighted sum of performance ratings on each alternative of all attributes. The SAW method requires the process of normalizing the decision matrix (X) to a scale that can be compared with all available alternative ratings. Equated as follows :

$$r_{ij} = \begin{cases} \dfrac{x_{ij}}{\max\limits_{i} x_{ij}} & \text{If j attributes gain} \textit{(benefit)} \\ \dfrac{\min\limits_{i} x_{ij}}{x_{ij}} & \text{If j is an ordinary attribute (cost)} \end{cases}$$

Information :

rij = normalized performance rating
xij = the attribute value that is owned by each criterion
Max xij = the biggest value of each criterion (i)
Min xij = the smallest value of each criterion (i)
benefit = if the biggest value is the best
cost = if the smallest value is the best

Where rij is the normalized performance rating of the alternative Ai in the Cj attribute; i = 1,2, ..., m and j = 1,2, ..., n. The preference value for each alternative (Vi) is given as follows:

$$V_i = \sum_{j=1}^{n} w_j \, r_{ij}$$

Information :

Vi = ranking for each alternative
wj = the weight value of each criterion
rij = normalized performance rating

A larger Vi value indicates that the alternative Ai is more chosen. The steps of the SAW method are:

1) Determine the criteria that will be used as a reference in decision making, namely C.
2) Determine the suitability rating of each alternative on each criterion.
3) Make a decision matrix based on criteria (C), then normalize the matrix based on equations adjusted for the type of attribute (attribute gain or cost attribute) so that the normalized R.
4) The final result is obtained from the ranking process, namely the sum of the multiplication of normalized matrix R with the weight vector so that the largest value chosen as the best alternative (A) is obtained as a solution.

The advantages of the Simple Additive Weighting (SAW) model compared to other decision-making models lie in its ability to make more precise assessments because it is based on predetermined criteria and preference weight values, besides SAW can also select the best alternatives from a number of alternatives available because of the ranking process after determining the weight values for each attribute.

III. RESULT AND DISCUSSION

The criteria used in determining the principal's performance are as follows:

1. Written Test
2. Social Competence
3. Portfolio
4. Best Practice
5. Video
6. Interview
7. Exemplary
8. Presentation

From the 8 criteria above, it can be explained that each criterion from C1 - C8 is taken according to the teacher's achievement evaluation.

1. Written Test Criteria

Written test criteria are used to find out Managerial, Supervision and evaluation, Entrepreneurship, and creative and innovative breakthrough programs of a school principal. The weight of the assessment on the written test criteria can be seen in the table below :

Table 1 Written Test Criteria

Criteria	Score	Range	Point
Written est	60 – 70	Very less	0
	71 – 80	Less	0,33
	81 – 90	Well	0,67
	91 – 100	Very good	1

2. Social Competence

The criteria for social competence are used to know cooperation, active communication, social interaction of a school principal. The weighting of the criteria on social competency criteria can be seen in the table below :

Table 2 Criteria for Social Competence

Criteria	Score	Range	Point

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Social Competence	1	Less	0
	2	Well	0,5
	3	Very good	1

3. Portfolio

The portfolio criteria are used to find out the sources / presenters, awards and services, school achievement awards led, writing / innovation, school collaboration with other agencies, and the management of professional organizations of a principal. The weighting of the criteria on portfolio criteria can be seen in the table below :

Table 3 Portfolio Criteria

Criteria	Score	Range	Point
Portfolio	1	Very less	0
	2	Less	0,33
	3	Well	0,67
	4	Very good	1

4. Best practice

Best practice criteria are used to find out the original, important / relevant, scientific, and usefulness of a school principal. The weighting of the assessment on the best practice criteria can be seen in the table below :

Table 4 Criteria for Best Practice

Criteria	Score	Range	Point
Best Practice	1	Very less	0
	2	Less	0,25
	3	Medium	0,5
	4	Well	0,75
	5	Very good	1

5. Video

The video criteria are used to determine the role of the principal in the family, the role of the principal in the community, the role of the principal in the school, the superior program of the school, the development of school values and culture, testimony from the stake holder. The weighting of the criteria for video criteria can be seen in the table below :

Table 5 Video Criteria

Criteria	Score	Range	Point
Video	1	Very less	0
	2	Less	0,25
	3	Medium	0,5
	4	Well	0,75
	5	Very good	1

6. Interview

Interview criteria are used to determine the ability to plan, implement school leadership, the ability to manage change (agent of change), ability to manage resources, the ability to build partnerships and entrepreneurship, program sustainability, the ability to build a school literacy culture, English language skills, innovative management insights and creative a school principal. The weighting of the evaluation criteria can be seen in the table below :

Table 6 Interview Criteria

Criteria	Score	Range	Point
Interview	1	Very less	0
	2	Less	0,25
	3	Medium	0,5
	4	Well	0,75
	5	Very good	1

7. Exemplary

Exemplary criteria are used to determine the assessment of the example of a school principal. The weighting of the criteria on exemplary criteria can be seen in the table below :

Table 7 Exemplary Criteria

Criteria	Score	Range	Point
Exemplary	1	Very less	0
	2	Less	0,25
	3	Medium	0,5
	4	Well	0,75
	5	Very good	1

8. Presentation

Presentation criteria are used to determine systematic and logical assessment in material delivery, mastery of material, mastery of typewriters (computer, power point), accuracy of answering questions, appearance and attitude, timeliness in presentation, poster value (design, content, relevance) headmaster. The weighting of the criteria on presentation criteria can be seen in the table below :

Table 8 Presentation Criteria

Criteria	Score	Range	Point

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Presentation	1	Very less	0
	2	Less	0,25
	3	Medium	0,5
	4	Well	0,75
	5	Very good	1

Discussion and Results

The participant data that has been received and is used as an alternative in determining the headmaster of a foundation by using the SAW method, wherein the data of the participant will be displayed based on predetermined criteria. The participant data can be seen in the table below :

Table 9 Name of Participants

No	Name of Participant
1.	Selamat Riadi, S.Pd
2.	Andriwan, S.Pd
3.	Juti, S.Pd
4.	Herman, S.Pd
5.	Drs. Joni Aprizal, S.Pd
6.	Tri Wahyuni, M.M
7.	Masdian, S.Pd

The results will be obtained by looking for the ranking / ranking of each participant. The steps for resolving:

1. Determine the criteria that will be used as a reference in making decisions, namely Ci.
2. Determine the suitability rating of each alternative on each criterion.

Table 10 Alternative Tables and Participant Criteria

No	Alternative	Criteria							
		C1	C2	C3	C4	C5	C6	C7	C8
1.	Selamat Riadi, S.Pd	91 - 100	3	4	4	3	5	5	4
2.	Andriwan, S.Pd	71 - 80	3	4	2	4	4	5	4
3.	Juti, S.Pd	81 - 90	2	4	4	3	4	5	3
4.	Herman, S.Pd	81 - 90	2	3	2	4	3	4	2
5.	Drs. Joni Aprizal, S.Pd	71 - 80	3	3	3	4	5	4	3
6.	Tri Wahyuni, M.M	91 - 100	3	4	3	3	5	4	3
7.	Masdian, S.Pd	91 - 100	2	3	3	4	2	5	3

Real data of 7 participants above, then the value will be converted as follows:

Table 11 Each Alternative Conversion Value

No	Alternative	Criteria							
		C1	C2	C3	C4	C5	C6	C7	C8
1.	Selamat Riadi, S.Pd	1	1	1	0,75	0,5	1	1	0,75
2.	Andriwan, S.Pd	0,33	1	1	0,25	0,75	0,75	1	0,75
3.	Juti, S.Pd	0,67	0,5	1	0,75	0,5	0,75	1	0,5
4.	Herman, S.Pd	0,67	0,5	1	0,25	0,75	0,5	0,75	0,25
5.	Drs. Joni Aprizal, S.Pd	0,33	1	0,67	0,5	0,75	1	0,75	0,5
6.	Tri Wahyuni, M.M	1	1	1	0,5	0,5	1	0,75	0,5
7.	Masdian, S.Pd	1	0,5	0,67	0,5	0,75	0,25	1	0,5

The next step will be continued in the third step, namely:

Make a decision matrix based on Ci criteria, then normalize the matrix based on equations that are adjusted to the type of attribute so that the normalized matrix R. Based on the table above, X decision matrix can be formed using the followingformula (1) data:

$$X = \begin{pmatrix} 1 & 1 & 1 & 0,75 & 0,5 & 1 & 1 & 0,75 \\ 0,33 & 1 & 1 & 0,25 & 0,75 & 0,75 & 1 & 0,75 \\ 0,67 & 0,5 & 1 & 0,75 & 0,5 & 0,75 & 1 & 0,5 \\ 0,67 & 0,5 & 1 & 0,25 & 0,75 & 0,5 & 0,75 & 0,25 \\ 0,33 & 1 & 0,67 & 0,5 & 0,75 & 1 & 0,75 & 0,5 \\ 1 & 1 & 1 & 0,5 & 0,5 & 1 & 0,75 & 0,5 \\ 1 & 0,5 & 0,67 & 0,5 & 0,75 & 0,25 & 1 & 0,5 \end{pmatrix}$$

To get the normalized matrix, that is by using formula :

A. Normalization for Criteria (C1) Written Test :

$$R11 = \frac{1}{\text{Max } \{1;0,33;0,67;0,67;0,33;1;1\}} = \frac{1}{1} = 1$$

$$R12 = \frac{0,33}{\text{Max } \{1;0,33;0,67;0,67;0,33;1;1\}} = \frac{0,33}{1} = 0,33$$

$$R13 = \frac{0,67}{\text{Max } \{1;0,33;0,67;0,67;0,33;1;1\}} = \frac{0,67}{1} = 0,67$$

$$R14 = \frac{0,67}{\text{Max } \{1;0,33;0,67;0,67;0,33;1;1\}} = \frac{0,67}{1} = 0,67$$

$$R15 = \frac{0,33}{\text{Max } \{1;0,33;0,67;0,67;0,33;1;1\}} = \frac{0,33}{1} = 0,33$$

$$R16 = \frac{1}{\text{Max } \{1;0,33;0,67;0,67;0,33;1;1\}} = \frac{1}{1} = 1$$

$$R17 = \frac{1}{\text{Max } \{1;0,33;0,67;0,67;0,33;1;1\}} = \frac{1}{1} = 1$$

B. Normalization for Criteria (C2) Social Competence:

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$$R21 = \frac{1}{\text{Max } \{1;1;0,5;0,5;1;1;0,5\}} = \frac{1}{1} = 1$$

$$R22 = \frac{1}{\text{Max } \{1;1;0,5;0,5;1;1;0,5\}} = \frac{1}{1} = 1$$

$$R23 = \frac{0,5}{\text{Max } \{1;1;0,5;0,5;1;1;0,5\}} = \frac{0,5}{1} = 0,5$$

$$R24 = \frac{0,5}{\text{Max } \{1;1;0,5;0,5;1;1;0,5\}} = \frac{0,5}{1} = 0,5$$

$$R25 = \frac{1}{\text{Max } \{1;1;0,5;0,5;1;1;0,5\}} = \frac{1}{1} = 1$$

$$R26 = \frac{1}{\text{Max } \{1;1;0,5;0,5;1;1;0,5\}} = \frac{1}{1} = 1$$

$$R27 = \frac{0,5}{\text{Max } \{1;1;0,5;0,5;1;1;0,5\}} = \frac{0,5}{1} = 0,5$$

C. Normalization for Criteria (C3) Portfolio:

$$R31 = \frac{1}{\text{Max } \{1;1;1;1;0,67;1;0,67\}} = \frac{1}{1} = 1$$

$$R32 = \frac{1}{\text{Max } \{1;1;1;1;0,67;1;0,67\}} = \frac{1}{1} = 1$$

$$R33 = \frac{1}{\text{Max } \{1;1;1;1;0,67;1;0,67\}} = \frac{1}{1} = 1$$

$$R34 = \frac{1}{\text{Max } \{1;1;1;1;0,67;1;0,67\}} = \frac{1}{1} = 1$$

$$R35 = \frac{0,67}{\text{Max } \{1;1;1;1;0,67;1;0,67\}} = \frac{0,67}{1} = 0,67$$

$$R36 = \frac{1}{\text{Max } \{1;1;1;1;0,67;1;0,67\}} = \frac{1}{1} = 1$$

$$R37 = \frac{0,67}{\text{Max } \{1;1;1;1;0,67;1;0,67\}} = \frac{0,67}{1} = 0,67$$

D. Normalization for Criteria (C4) Best Practice:

$$R41 = \frac{0,75}{\text{Max } \{0,75;0,25;0,75;0,25;0,5;0,5;0,5\}} = \frac{0,75}{0,75} = 1$$

$$R42 = \frac{0,25}{\text{Max } \{0,75;0,25;0,75;0,25;0,5;0,5;0,5\}} = \frac{0,25}{0,75} = 0,33$$

$$R43 = \frac{0,75}{\text{Max } \{0,75;0,25;0,75;0,25;0,5;0,5;0,5\}} = \frac{0,75}{0,75} = 1$$

$$R44 = \frac{0,25}{\text{Max } \{0,75;0,25;0,75;0,25;0,5;0,5;0,5\}} = \frac{0,25}{0,75} = 0,33$$

$$R45 = \frac{0,5}{\text{Max } \{0,75;0,25;0,75;0,25;0,5;0,5;0,5\}} = \frac{0,5}{0,75} = 0,67$$

$$R46 = \frac{0,5}{\text{Max } \{0,75;0,25;0,75;0,25;0,5;0,5;0,5\}} = \frac{0,5}{0,75} = 0,67$$

$$R47 = \frac{0,5}{\text{Max } \{0,75;0,25;0,75;0,25;0,5;0,5;0,5\}} = \frac{0,5}{0,75} = 0,67$$

E. Normalization for Criteria (C5) Video:

$$R51 = \frac{0,5}{\text{Max } \{0,5;0,75;0,5;0,75;0,75;0,5;0,75\}} = \frac{0,5}{0,75} = 0,67$$

$$R52 = \frac{0,75}{\text{Max } \{0,5;0,75;0,5;0,75;0,75;0,5;0,75\}} = \frac{0,75}{0,75} = 1$$

$$R53 = \frac{0,5}{\text{Max } \{0,5;0,75;0,5;0,75;0,75;0,5;0,75\}} = \frac{0,5}{0,75} = 0,67$$

$$R54 = \frac{0,75}{\text{Max } \{0,5;0,75;0,5;0,75;0,75;0,5;0,75\}} = \frac{0,75}{0,75} = 1$$

$$R55 = \frac{0,75}{\text{Max } \{0,5;0,75;0,5;0,75;0,75;0,5;0,75\}} = \frac{0,75}{0,75} = 1$$

$$R56 = \frac{0,5}{\text{Max } \{0,5;0,75;0,5;0,75;0,75;0,5;0,75\}} = \frac{0,5}{0,75} = 0,67$$

$$R57 = \frac{0,75}{\text{Max } \{0,5;0,75;0,5;0,75;0,75;0,5;0,75\}} = \frac{0,75}{0,75} = 1$$

F. Normalization for Criteria (C6) Interview:

$$R61 = \frac{1}{\text{Max } \{1;0,75;0,75;0,5;1;1;0,25\}} = \frac{1}{1} = 1$$

$$R62 = \frac{0,75}{\text{Max } \{1;0,75;0,75;0,5;1;1;0,25\}} = \frac{0,75}{1} = 0,75$$

$$R63 = \frac{0,75}{\text{Max } \{1;0,75;0,75;0,5;1;1;0,25\}} = \frac{0,75}{1} = 0,75$$

$$R64 = \frac{0,5}{\text{Max } \{1;0,75;0,75;0,5;1;1;0,25\}} = \frac{0,5}{1} = 0,5$$

$$R65 = \frac{1}{\text{Max } \{1;0,75;0,75;0,5;1;1;0,25\}} = \frac{1}{1} = 1$$

$$R66 = \frac{1}{\text{Max } \{1;0,75;0,75;0,5;1;1;0,25\}} = \frac{1}{1} = 1$$

$$R67 = \frac{0,25}{\text{Max } \{1;0,75;0,75;0,5;1;1;0,25\}} = \frac{0,25}{1} = 0,25$$

G. Normalization for Criteria (C7) Exemplary:

$$R71 = \frac{1}{\text{Max } \{1;1;1;0,75;0,75;0,75;1\}} = \frac{1}{1} = 1$$

$$R72 = \frac{1}{\text{Max } \{1;1;1;0,75;0,75;0,75;1\}} = \frac{1}{1} = 1$$

$$R73 = \frac{1}{\text{Max } \{1;1;1;0,75;0,75;0,75;1\}} = \frac{1}{1} = 1$$

$$R74 = \frac{0,75}{\text{Max } \{1;1;1;0,75;0,75;0,75;1\}} = \frac{0,75}{1} = 0,75$$

$$R75 = \frac{0,75}{\text{Max } \{1;1;1;0,75;0,75;0,75;1\}} = \frac{0,75}{1} = 0,75$$

$$R76 = \frac{0,75}{\text{Max } \{1;1;1;0,75;0,75;0,75;1\}} = \frac{0,75}{1} = 0,75$$

$$R77 = \frac{1}{\text{Max } \{1;1;1;0,75;0,75;0,75;1\}} = \frac{1}{1} = 1$$

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H. Normalization for Criteria (C8) Presentation:

$$R81 = \frac{0,75}{Max\ \{0,75;0,75;0,5;0,25;0,5;0,5;0,5\}} = \frac{0,75}{0,75} = 1$$

$$R82 = \frac{0,75}{Max\ \{0,75;0,75;0,5;0,25;0,5;0,5;0,5\}} = \frac{0,75}{0,75} = 1$$

$$R83 = \frac{0,5}{Max\ \{0,75;0,75;0,5;0,25;0,5;0,5;0,5\}} = \frac{0,5}{0,75} = 0,67$$

$$R84 = \frac{0,25}{Max\ \{0,75;0,75;0,5;0,25;0,5;0,5;0,5\}} = \frac{0,25}{0,75} = 0,33$$

$$R85 = \frac{0,5}{Max\ \{0,75;0,75;0,5;0,25;0,5;0,5;0,5\}} = \frac{0,5}{0,75} = 0,67$$

$$R86 = \frac{0,5}{Max\ \{0,75;0,75;0,5;0,25;0,5;0,5;0,5\}} = \frac{0,5}{0,75} = 0,67$$

$$R87 = \frac{0,5}{Max\ \{0,75;0,75;0,5;0,25;0,5;0,5;0,5\}} = \frac{0,5}{0,75} = 0,67$$

Based on the results of the normalization calculation of the X matrix, we can determine the normalized R matrix as follows :

$$R = \begin{pmatrix} 1 & 1 & 1 & 1 & 0,67 & 1 & 1 & 1 \\ 0,33 & 1 & 1 & 0,33 & 1 & 0,67 & 1 & 1 \\ 0,67 & 0,5 & 1 & 1 & 0,67 & 0,67 & 1 & 0,75 \\ 0,67 & 0,5 & 1 & 0,33 & 1 & 0,5 & 0,75 & 0,33 \\ 0,33 & 1 & 0,67 & 0,67 & 1 & 1 & 0,75 & 0,67 \\ 1 & 1 & 1 & 0,67 & 0,67 & 1 & 0,75 & 0,67 \\ 1 & 0,5 & 0,67 & 0,67 & 1 & 0,25 & 1 & 0,67 \end{pmatrix}$$

After the normalization process is done or the normalized matrix has been obtained, the next step is to determine the importance of each criterion determined by the decision maker, symbolized by (W). The suitability rating of each alternative on each criterion can be seen in the table below :

Table 12 Interests of Each Criteria

Criteria	Range	Bobot
(C1) Written Test	Very Important (SP)	1
(C2) Social Competence	Very Important (SP)	1
(C3) Portfolio	Very Important (SP)	1
(C4) Best Practice	Very Important (SP)	1
(C5) Video	Very Important (SP)	1
(C6) Interview	Very Important (SP)	1
(C7) Exemplary	Very Important (SP)	1
(C8) Presentation	Very Important (SP)	1

So the weight range taken between C1 - C8 is :

W = [1 1 1 1 1 1 1 1]

Then the last step is to get the ranking process by switching the weight (W) to the normalized matrix (R) as shown below:

V1 = (1)(1) + (1)(1) + (1)(1) + (1)(1) + (0,67)(1) + (1)(1) + (1)(1) + (1)(1)
= 1 + 1 + 1 +1 + 0,67 + 1 + 1 + 1
= 7,67

V2 = (0,33)(1) + (1)(1) + (1)(1) + (0,33)(1) + (1)(1) + (0,67)(1) + (1)(1) + (1)(1)
= 0,33 + 1 + 1 + 0,33 + 1 + 0,67 + 1 + 1
= 6,33

V3 = (0,67)(1) + (0,5)(1) + (1)(1) + (1)(1) + (0,67)(1) + (0,67)(1) + (1)(1) + (0,75)(1)
= 0,67 + 0,5 + 1 + 1 + 0,67 + 0,67 + 1 + 0,75
= 6,26

V4 = (0,67)(1) + (0,5)(1) + (1)(1) + (0,33)(1) + (1)(1) + (0,5)(1) + (0,75)(1) + (0,33)(1)
= 0,67 + 0,5 + 1 + 0,33 + 1 + 0,5 + 0,75 + 0,33
= 5,08

V5 = (0,33)(1) + (1)(1) + (0,67)(1) + (0,67)(1) + (1)(1) + (1)(1) + (0,75)(1) + (0,67)(1)
= 0,33 + 1 + 0,67 + 0,67 + 1 + 1 + 0,75 + 0,67
= 6,09

V6 = (1)(1) + (1)(1) + (1)(1) + (0,67)(1) + (0,67)(1) + (1)(1) + (0,75)(1) + (0,67)(1)
= 1 + 1 + 1 + 0,67 + 0,67 + 1 + 0,75 + 0,67
= 6,76

V7 = (1)(1) + (0,5)(1) + (0,67)(1) + (0,67)(1) + (1)(1) + (0,25)(1) + (1)(1) + (0,67)(1)
= 1 + 0,5 + 0,67 + 0,67 + 1 + 0,25 + 1 + 0,67
= 5,67

All V1-V7 ranking values from the results of multiplication with normalization are combined, so that the ranking results in the table below are obtained.

Table 13 Overall Total Value

No	Alternative	Criteria								Results
		C1	C2	C3	C4	C5	C6	C7	C8	
1.	Selamat Riadi, S.Pd	1	1	1	1	0,67	1	1	1	7,67
2.	Andriwan, S.Pd	0,33	1	1	0,33	1	0,67	1	1	6,33
3.	Juti, S.Pd	0,67	0,5	1	1	0,67	0,67	1	0,75	6,26
4.	Herman, S.Pd	0,67	0,5	1	0,33	1	0,5	0,75	0,33	5,08
5.	Drs. Joni Aprizal, S.Pd	0,33	1	0,67	0,67	1	1	0,75	0,67	6,09
6.	Tri Wahyuni, M.M	1	1	1	0,67	0,67	1	0,75	0,67	6,76
7.	Masdian, S.Pd	1	0,5	0,67	0,67	1	0,25	1	0,67	5,67

The results of the grouping above have not yet obtained the actual results for the 7 participants made as an alternative, so the ranking process needs to be done by sorting the highest yield values to the lowest results.

Table 14 Participant Ranking Results

No	Alternative	Criteria								Results	Ranking
		C1	C2	C3	C4	C5	C6	C7	C8		
1.	Selamat Riadi, S.Pd	1	1	1	1	0,67	1	1	1	7,67	1
2.	Tri Wahyuni, M.M	1	1	1	0,67	0,67	1	0,75	0,67	6,76	2
3.	Andriwan, S.Pd	0,33	1	1	0,33	1	0,67	1	1	6,33	3
4.	Juti, S.Pd	0,67	0,5	1	1	0,67	0,67	1	0,75	6,26	4
5.	Drs. Joni Aprizal, S.Pd	0,33	1	0,67	0,67	1	1	0,75	0,67	6,09	5
6.	Masdian, S.Pd	1	0,5	0,67	0,67	1	0,25	1	0,67	5,67	6
7.	Herman, S.Pd	0,67	0,5	1	0,33	1	0,5	0,75	0,33	5,08	7

From the table above, we get a rating of 7 participants, of which the rank 1 is named Selamat Riadi, S.Pd from 7 participants.

IV. CONCLUSION

After analyzing and applying the Simple Additive Weighting (SAW) method in Determining the Principal of an Experimental School, conclusions can be taken as follows:

1. With the application of the Simple Additive Weighting (SAW) method, it can help the Education Office in determining the

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achievements of principals quickly, precisely, and transparently.
2. The system built can facilitate the selection, this is evidenced by the comparison between manual systems with computerized systems.
3. Selection using the Simple Additive Weighting (SAW) method can choose the best alternative from several alternatives using each criterion.

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