

## DECISION MAKING SYSTEMS FOR THE PERFORMANCE MEASUREMENT OF THE COVID-19 TASK FORCE IN PAGELARAN DISTRICT USING THE COMPARISON OF THE SIMPLE ADDITIVE WEIGHTING (SAW) METHOD AND THE WEIGHTED PRODUCT (WP) METHOD

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### Abstract

Coronavirus is a virus which originated in Wuhan, China because this virus was first discovered in Wuhan, China. The spread is very fast. According to the prevention manual, Coronavirus Disease (COVID-19) is clarified into 3, patients under surveillance, people under monitoring and people without symptoms. This virus entered Indonesia on March 2, 2020. In order to reduce the spread of the corona virus-19, the government is expected to be able to form a disciplined and best Covid-19 task force team. To determine the best task force team, it must follow the criteria which have been set with the best performance gets a reward or award. In measuring the performance of the Covid-19 task force towards the predetermined criteria, a decision-making system is used by using a comparison of the simple additive weighting method and the weighted product method, which in this method looks for the weighted summation of the performance branches on each alternative on each criterion on all attributes. The criteria for the productivity aspect describe supervision, socialization, and appeals. The criteria for service quality aspects explain the existence of information disclosure in conducting monitoring. The criteria for the quality aspect of human resources explain the direction and training in developing leadership. Responsiveness aspect criteria explain about the quick handling as well as health services and the provision of social assistance. The responsibility criteria explain the work procedures of the COVID-19 task force. The criteria for the accountability aspect explain the

### Keywords:

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WP,

Covid-19 Task Force,

Criteria

reporting of work and financial evaluations. The management aspect criteria describe project development. Criteria for field operation aspects explain the acceleration of handling and the capacity of health workers. By using these criteria and by using a comparison between the simple additive weighting (saw) and weighted product (wp) methods, it can be seen that the performance weight value of the COVID-19 task force in Pagelaran District, Pringsewu Lampung with the best results according to the specified criteria, is 92 and 0.14.

## I. INTRODUCTION

Corona virus is a virus which originally came from Wuhan, Hubei Province, China. This virus was discovered in December 2019. The spread which occurred was very fast where within 4 months a total of 414,179 confirmed cases were reported with 18,440 deaths from 192 countries/ regions [1]. This virus belongs to the group of deadly and dangerous viruses where this virus can cause respiratory infections and can cause death. Research shows that those aged over 60 years are more at risk of contracting COVID-19, especially those over 80 years old [2]. Indonesia reported its first case on March 2, 2020, suspected of being infected from a foreigner who visited Indonesia. According to the prevention manual, Coronavirus Disease (COVID-19) is classified into 3, patients who are under surveillance, people under monitoring and people without symptoms. [3]. In this case, the role of the COVID-19 task force is very important to record and appeal to government policies related to COVID-19 vigilance and prevention. According to the Covid-19 Handling and Economic Recovery Committee which was taken on March 1, 2021, there were a total of 1,341,314 positive cases, a total recovery of 1,151,915 and a total death of 36,325. (Covid19.go.id) [4].

Sri Rezeki et al (2020) have conducted research on the existence of a gap in the expectations of residents in the city of Medan in the Covid-19 task force group, but the community is satisfied with its performance and handling. What is meant by the gap in this case is the attitude of dissatisfaction in terms of the lack of interaction between officers and the community [5]. Latief syaipudin (2019) conducted research on the role of mass media in handling covid-19 in order to develop knowledge about the changes in the global impact caused by covid-19, where currently people really need information through mass media and up-to-date official websites to find out how the development of covid -19 [6].

From previous research, there are several shortcomings, including: the lack of an effective calculation where in the decision making system the performance of the COVID-19 task force is still less structured and lacks details in the delivery of information. To overcome this, the authors develop research on the performance of the Covid-19 task force by using a comparison of the Simple Additive Weighting (SAW) method and the Weight Product (WP) method in the Pagelaran sub-district, Pringsewu Lampung. So far, with positive patient cases, there are 15 people, 6 died and 7 recovered, with the average patient having a history of traveling long distances or immigrants from the red zone.

At this time, the community needs the best COVID-19 task force team who are ready to take care of the Covid-19 pandemic. To anticipate if there is an increase in the spread of the corona virus in the future, the Covid-19 task force itself is expected to be able to accelerate the handling of Covid-19 according to the direction of the executor and can increase the team's readiness by always spraying disinfectants to public facilities and residents' homes. They are also expected to record people who are exposed to COVID-19, to record people who are prone to illness such as the elderly, toddlers, and other chronic diseases, to urge the public, and to provide isolation rooms for people who have just returned or come from overseas. Currently, there is still a lot of information which is not detailed enough, the data which is less accurate, the results of the Covid-19 task force's draft decisions which are less effective, the data which is inefficient, and the level of public awareness and discipline in implementing health protocols, so that it becomes a problem and triggers the number of positive numbers continues to grow from time to time.

With this research, it can increase the experience and knowledge of researchers and can increase public awareness of the corona outbreak and can be used as study material for government policies which have been implemented so far. The main purpose of this research is to analyze the performance decision-making system of the COVID-19 task force using the weighted addition method using predetermined criteria, Simple Additive Weighting (SAW) and the Weight Product (WP) method where the best performance is awarded as a form of reward appreciation of the Covid-19 task force team in Pagelaran District.

## **II. LITERATURE REVIEW**

### **2.1 Concept of Decision Support System**

The system is a collection of sub-systems (elements) which are correlated with one another to achieve certain goals. Decision support system can be interpreted as a system designed and used to support management and make decisions. The concept of a decision support system was first introduced in early 1971 by Michael S. Scoot (Turban, 2001) with the term "Management Decision System". Bonczek et al (Turban, 2001) define a decision support system as a computer-based system consisting of three interacting components. These components are language systems, knowledge systems and problem processing systems. Little (Turban, 2001) defines a decision support system, which is a computer-based system which helps decision making by utilizing data and models. From the various definitions above, it can be concluded that a decision support system is a computer-based information system which aims to support decision making by utilizing data and models to achieve a certain goal. The components of a decision support system consist of:

a. Data management.

Data management provides the data required by the Database Management System (DBMS). DBMS is a structured data sub system which utilizes data and information from outside the environment or outside the company.

b. Model management.

Model management is a model subsystem in a decision-making system where the decision is taken from analyzing as a whole to obtain a solution.

c. Communication (subsystem dialog)

Communication is where the decision support system is determined from the ability to interact between the installed system and the user.

d. Knowledge Management.

Knowledge management is a decision support system management of information which comes purely from thinking to build information dissemination mechanisms within an organization.

The objectives of the Decision Support System (DSS) are:

1. Increase effectiveness to help make decisions and solve problems.
2. Build a group to take a structured right decision to help the company or organization.

The benefits of a decision support system are:

1. Expanding the ability to make decisions where decision making requires complex information, analysis and appropriate decisions to produce a final choice.
2. Helping decision makers to solve unstructured problems which in this case find the best solution [7].

## **2.2 Performance Measurement and Assessment of the Covid-19 Task Force**

In an effort to suppress the spread of the corona virus, the government formed a task force for handling COVID-19 on March 13, 2020 based on the Decree of the President of the Republic of Indonesia Number 7 of 2020. The task of the COVID-19 task force is to accelerate the handling of Coronavirus Disease 2019 (COVID-19). The COVID-19 task force works under the direct direction and responsibility of the president. In this case, giving the best performance can help the COVID-19 task force team in suppressing the spread of the Corona-19 virus.

The State Administration Agency/LAN (2000) defined performance as a description in the delivery of the implementation of an activity in realizing the goals of the mission and vision of the organization. Bastian (Tangkilian, 2005) defines that performance is a description of the achievement of the implementation of tasks in an organization to achieve the goals of the vision and mission of an organization. From the various definitions above, it can be concluded that the COVID-19 Task Force is a task force formed by the government in charge of carrying out an activity to accelerate handling in tackling Coronavirus Disease 2019 (COVID-19). In an effort to prevent the spread of the virus, the Covid-19 task force team must prioritize the alertness of the COVID-19 handling task force in an effort to increase public awareness in carrying out social distancing by always socializing the community. So far, there are still many people who have not obeyed the regulations by complying with health protocols and increasing the accuracy of the information and data provided by the public because there is still a lot of inaccurate data and information and very limited socialization cannot be used as a reference to reduce the risk of the Covid-19 pandemic. The objectives of the Covid Task Force are:

1. Increase resilience in the health sector.
2. Accelerate the handling of COVID-19 through synergies between ministries/ agencies and local governments.

3. Increase readiness and ability to prevent, detect and respond to COVID-19 [8].

### **2.3 Fuzzy Multiple Attribute Decision Making (FMADM)**

The Fuzzy Multiple Attribute Decision Making (FMADM) method can be used in calculating an object because this method aims to find the optimal value in a number of attributes through three approaches. The approaches are subjective approach, objective approach, and integration approach between subjective and objective. There are five methods used to help complete FMADM:

1. Simple Additive Weighting Method (SAW)
2. Weighted Product (WP)
3. Electre
4. Technique For Order Preference by Similarity to Ideal Solution (TOPSIS)
5. Analytic Hierarchy Process (AHP)

Simple Additive Weighting (SAW) is an addition method which has a weighted value where the basic concept of the Simple Additive Weighting (SAW) method is to find the weighted summation of the performance branches on each alternative on all attributes [9].

### **2.4 Assessment Aspects and Criteria**

The assessment from Vunny Wijaya, a researcher in the Social Sector in the Performance Evaluation of the Task Force for the Acceleration of Handling Covid-19, said that there were aspects of assessing the performance of the Covid-19 Task Force, including:

#### **a. Productivity Aspect**

The productivity aspect includes work performance where in an effort to prevent covid-19, the task force must intensively supervise socialization and make breakthroughs, ideas and innovations. This cannot be separated from the role of the community with the participation of the people who accept it well. The performance of the COVID-19 task force is also increasing.

#### **b. Service Quality Aspect**

Public service is an important aspect in delivering information related to the development of COVID-19. With the disclosure of information on COVID-19 patients, it can increase public awareness regarding the spread of the COVID-19 pandemic.

#### **c. Quality of Human Resources**

One of the criteria for evaluating the performance of the COVID-19 task force is the presence of good quality human resources. To have good quality human resources, by increasing enthusiasm in completing tasks while still paying attention to health service facilities which are in accordance with their competencies. In addition to health human resources, the Covid-19 cluster human resources also need to be given attention.

#### **d. Responsiveness aspect**

So far, there are still many people who complain about government services and actions related to the inequality of social assistance, inaccurate COVID-19 data and the lack of health services. In this case, the government needs to conduct a more tidy data collection.

The Covid-19 Task Force was formed by the Government of Indonesia with continuous socialization. Of course, it controls the community in implementing health protocols, which greatly help suppress or reduce the number of spread of the corona virus in various parts of Indonesia.

e. Accountability Aspect

This can be done by holding a press conference every month to evaluate the prevention and treatment which has been done so far.

### III. RESEARCH METHODS

#### 3.1 Data collection

The methods used for collecting data and information in this study are:

a. Observation

Observation according to Sugiyono (2015: 204) is a research activity on an object where there are two types of observations. Those are participant and non-participant.

At this observation stage, researchers made direct observations to the Covid-19 task force post in Pagelaran District, Lampung. In this case, the task force team is always on standby by providing a place of isolation, prompting to appeal to the community and registering people who come in and out of the red zone.

b. Literature review

Study Library according to Ruslan (2003:31) is a technique of collecting data by looking at reference books, scientific journals, or from published materials available in the library. At this stage, researchers have made several observations by looking at journals, internet books and looking for references available in the library.

c. Interview

According to Esterberg in Sugiyono (2015: 72), an interview is a meeting between two people to exchange information and ideas by means of question and answer so that it can become a conclusion or meaning in the topic. In this case, the researcher has conducted direct interviews with the head of the covid task force with the aim of finding information about the performance of the covid-19 task force that has been running during the pandemic.

#### 3.2 Criteria and Value of Simple Additive Weighting (SAW) and Weighted Product (WP)

Below is a discussion of the criteria and weights in this study in Pagelaran District.

**Table 2. C1. Productivity Aspects**

A	Doing Supervision
B	Conducting outreach and appeals for the prevention of covid-19
C	Knowledge, ability and behavior which is committed and contributes to the sustainability of the organization
D	Carrying out various activities and coordination

#### Sub Criteria C1

1	If all four aspects of productivity are met	5
2	If only three aspects of productivity are met	3

3	If only two aspects of productivity are met	2
4	If only one aspect of productivity is met	1

**Table 3. C2. Service Quality Aspect**

1	There is disclosure of information
2	Always optimistic, wise in using social media and mutual cooperation
3	Doing monitoring

**Sub Criteria C2**

1	If all three aspects of service are met	5
2	If only two aspects of service are met	3
3	If only one aspect of service is met	1

**Table 4. C3 Criteria for HR Quality Aspects**

1	Carrying out directives and training
2	Carrying out routine coordination
3	Carrying out various innovations
4	Developing leadership

**Sub Criteria C3**

1	If the four aspects of HR quality are met	5
2	If only three aspects of HR quality are met	4
3	If only two aspects of HR quality are met	3
4	If only one aspect of HR quality is met	1

**Table 5. C4 Criteria Aspects of Responsiveness**

1	Taking care quickly
2	Provision of health services
3	Community complaints and provision of social assistance

**Sub Criteria C4**

1	If all three aspects of responsiveness are met	5
2	If only two aspects of responsiveness are met	3
3	If only one aspect of responsiveness is met	2

**Table 6. C5. Responsibility Criteria Aspects**

1	Covid-19 task force work procedures
2	Strictness of preventive procedures

**Sub Criteria C5**

1	If both aspects of Responsibility are met	5
2	If only one aspect of Responsibility is met	3

**Table 7. C6. Accountability Aspect Criteria**

1	Activity reporting and performance evaluation
2	Finance report

#### Sub Criteria C6

1	If both aspects of Accountability are met	5
2	If only one aspect of Accountability is met	2

**Table 8. C7. Management Aspect Criteria**

1	Project development management
2	Management in operation

#### Sub Criteria C7

1	If both aspects of Management are met	5
2	If only one aspect of management is met	2

**Table 9. C8. Criteria for Field Operation Aspects**

1	Accelerate handling
2	Increase the capacity of health workers

#### Sub Criteria C8

1	If both aspects of field operations are met	5
2	If only one aspect of field operations is met	2

Based on the above, this study focuses on measuring the performance of the COVID-19 task force in the Pagelaran District, Pringsewu Regency, Lampung. By looking at several factors which become criteria and looking at the weight values, below is a table of the sub-criteria and weight values in this study.

**Table 10. Sub Criteria**

Number	Criteria code	Criteria	Weight Value
1	C1	Productivity Aspect	10%
2	C2	Service Quality Aspect	15%
3	C3	HR Quality Aspect	10%
4	C4	Responsiveness Aspect	20%
5	C5	Aspect of Responsibility	12%
6	C6	Accountability Aspect	13%
7	C7	Management Aspect	10%
8	C8	Field operation Aspects	10%

Source: Social Researcher (Vunny Wijaya, 2020)

### 3.3 Simple Additive Weighting (SAW) Calculation

Fishburn and MacCrimmon in (Munthe, 2013) suggest that the Siple Additive Weighting (SAW) method is a weighted addition method where the basic concept of the SAW method itself determines the weighted sum which can be seen from the performance branch on each alternative on each criterion of all attributes. According to Fisburn and Mac Crimmon in (Munthe, 2013), the basic principles of SAW are:

- The basic concept of SAW is to find the weighted sum of the normalized performance branches (R) for each alternative on all attribute weights (W).



- b. The saw method requires a matrix normalization process to a scale which can be compared with all available alternative branches.

From the conclusions above, the basic principle of the simple additive weighting (SAW) method is to find the weighted number in several alternatives, in which case it goes through a matrix normalization process on a scale so that it can be compared to existing alternative branches.

$$r_i = \begin{cases} \frac{X_{ij}}{\text{Max } x_{ij}} \\ \frac{\text{Min } x_{ij}}{X_{ij}} \end{cases} \dots\dots\dots 1$$

Where:

$R_{ij}$  = Normalized performance rating

$\text{Max}_{ij}$  = Maximum value of each row and column

$\text{Min}_{ij}$  = Minimum value of each row and column

$X_{ij}$  = Rows and columns of a matrix

With  $R_{ij}$  is the normalized performance branch of the alternative  $A_i$  on attribute  $C_j$ ;  $i=1,2,\dots,m$  and  $j=1,2,\dots,n$ .

$$V_i = \sum_{j=1}^n w_j r_{ij} \dots\dots\dots 2$$

A larger  $V_i$  value indicates that alternative  $A_i$  is preferred.

Where:

$V_i$  = The final value of the alternative

$W_i$  = Predefined weight

$R_{ij}$  = Matrix normalization

### 3.4 Calculation of Weighted Product (WP)

Weighted Product (WP) is a multi-attribute decision-making method using a multiplication technique to attach the characteristic rating attribute value where the rating value must be raised first according to the associated attribute. Below is the stage of calculating the problem with the Weighted Product (WP) method using vectors  $V$  and  $S$ .

1. Improvement of criterion weight with equation

$$W_j = \frac{w_j}{\sum w_j}$$

2. Calculating the value of the Vector  $S$

$$S_i = \prod_j X_{ij} w_j$$

3. Determining the value of the Vector  $V$  with the equation

$$V_i = \frac{\prod_{j=1}^n x_{ij}^{w_j}}{\prod_{j=1}^n (x_j)^{w_j}}$$

### 3.5 DISCUSSION

#### 4.1 Simple Additive Weighting (SAW) Manual Test

Based on the discussion above, this study discusses the performance measurement of the COVID-19 task force in the Pagelaran District, Pringsewu Regency, Lampung Province. Some of the factors which exist can be the basis of the criteria in this study. The weight value for each criterion becomes a reference for determining the weighted value of the performance branch for each alternative along with the weight value for each sub-criterion.

C1 = 5,3,2,1

C2 = 5,3,1

C3 = 5,4,3,1

C4 = 5,3,2

C5 = 5,2

C6 = 5,3

C7 = 5,2

C8 = 5,2

Based on the weight values above, here is the weighting table:

**Table 11.** Alternative Weighting Criteria

Alternatif	C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	C <sub>6</sub>	C <sub>7</sub>	C <sub>8</sub>
A <sub>1</sub>	5	3	4	5	5	5	5	2
A <sub>2</sub>	3	1	4	5	5	3	2	5
A <sub>3</sub>	1	3	5	3	2	3	2	5
A <sub>4</sub>	3	1	3	2	2	3	5	2
A <sub>5</sub>	2	1	1	3	2	5	5	5
A <sub>6</sub>	5	5	1	2	2	3	2	5
A <sub>7</sub>	2	3	4	3	5	5	2	2
A <sub>8</sub>	2	1	5	5	2	5	2	2
A <sub>9</sub>	3	3	1	1	5	5	5	5
A <sub>10</sub>	1	5	3	3	5	5	2	5

Based on the calculations in the discussion of the alternative weighting criteria above, the next discussion is about the normalized factor where the value of the normalization is obtained by calculating the value of the R<sub>ij</sub> performance branch (normalized performance branch). The following is a table of normalization factors:

**Table 112.** Normalized Factor

Alternatif	C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	C <sub>6</sub>	C <sub>7</sub>	C <sub>8</sub>
A <sub>1</sub>	1	0,6	0,8	1	1	1	1	0,4
A <sub>2</sub>	0,6	0,2	0,8	1	1	0,6	0,4	1
A <sub>3</sub>	0,2	0,6	1	0,6	0,4	0,6	0,4	1
A <sub>4</sub>	0,6	0,2	0,6	0,4	0,4	0,6	1	0,4

<b>A<sub>5</sub></b>	0,4	0,2	0,2	0,6	0,4	1	1	1
<b>A<sub>6</sub></b>	1	1	0,2	0,4	0,4	0,6	1	1
<b>A<sub>7</sub></b>	0,4	0,6	0,8	0,6	1	1	0,4	0,4
<b>A<sub>8</sub></b>	0,4	0,2	1	1	0,4	1	0,4	0,4
<b>A<sub>9</sub></b>	0,6	0,6	0,2	1	1	1	1	1
<b>A<sub>10</sub></b>	0,2	1	0,6	1	1	1	0,4	1

Based on the table above, the following is a calculation of the normalization factor in this study. Multiplying a column of values from the table above using an alternative weight value which has been determined based on the weighted value in this study. Based on the normalized factor table above, the calculation of the values in the column above is as follows:

$$V_1 = \sum_{j=1}^n w_j R_j$$

Based on the calculations above, for the value or weight of each alternative, it can be seen that the weights of the values are as follows:

V1 = 88  
 V2 = 64.8  
 V3 = 49.6  
 V4 = 49.6  
 V5 = 58.8  
 V6 = 67.6  
 V7 = 92  
 V8 = 62.8  
 V9 = 82  
 V10 = 82

### Manual Weighted Product (WP) Test

**Table 13.** Alternative weighting criteria

<b>Alternative</b>	<b>C<sub>1</sub></b>	<b>C<sub>2</sub></b>	<b>C<sub>3</sub></b>	<b>C<sub>4</sub></b>	<b>C<sub>5</sub></b>	<b>C<sub>6</sub></b>	<b>C<sub>7</sub></b>	<b>C<sub>8</sub></b>
<b>A<sub>1</sub></b>	5	3	4	5	5	5	5	2
<b>A<sub>2</sub></b>	3	1	4	5	5	3	2	5
<b>A<sub>3</sub></b>	1	3	5	3	2	3	2	5
<b>A<sub>4</sub></b>	3	1	3	2	2	3	5	2
<b>A<sub>5</sub></b>	2	1	1	3	2	5	5	5
<b>A<sub>6</sub></b>	5	5	1	2	2	3	2	5
<b>A<sub>7</sub></b>	2	3	4	3	5	5	2	2
<b>A<sub>8</sub></b>	2	1	5	5	2	5	2	2
<b>A<sub>9</sub></b>	3	3	1	1	5	5	5	5
<b>A<sub>10</sub></b>	1	5	3	3	5	5	2	5

## Weight Repair

$$W_j = \frac{w_j}{\sum w_j}$$

$$W_1 = \frac{10}{10 + 15 + 10 + 20 + 12 + 13 + 10 + 10} = \frac{10}{100} = 0,1$$

$$w_2 = \frac{15}{10 + 15 + 10 + 20 + 12 + 13 + 10 + 10} = \frac{15}{100} = 0,5$$

Normalisasi.

$$S_i = \prod_j^n X_{ij} w_j$$

$$s_1 = (5^{0,1})(3^{0,15})(4^{0,1})(5^{0,2})(5^{0,12})(5^{0,13})(5^{0,1})(2^{0,1}) = 4,13$$

$$s_2 = (3^{0,1})(1^{0,15})(4^{0,1})(5^{0,2})(5^{0,12})(3^{0,13})(2^{0,1})(5^{0,1}) = 3,11$$

$$s_3 = (1^{0,1})(3^{0,15})(5^{0,1})(3^{0,2})(2^{0,12})(3^{0,13})(2^{0,1})(5^{0,1}) = 2,72$$

$$s_4 = (3^{0,1})(1^{0,15})(3^{0,1})(2^{0,2})(2^{0,12})(3^{0,13})(5^{0,1})(2^{0,1}) = 2,25$$

$$s_5 = (2^{0,1})(1^{0,15})(1^{0,1})(3^{0,2})(2^{0,12})(5^{0,13})(5^{0,1})(5^{0,1}) = 2,46$$

$$s_6 = (5^{0,1})(5^{0,15})(1^{0,1})(2^{0,2})(2^{0,12})(3^{0,13})(2^{0,1})(5^{0,1}) = 2,71$$

$$s_7 = (2^{0,1})(3^{0,15})(4^{0,1})(3^{0,2})(5^{0,12})(5^{0,13})(2^{0,1})(2^{0,1}) = 3,10$$

$$s_8 = (2^{0,1})(1^{0,15})(5^{0,1})(5^{0,2})(2^{0,12})(5^{0,13})(2^{0,1})(2^{0,1}) = 2,67$$

$$s_9 = (3^{0,1})(3^{0,15})(1^{0,1})(1^{0,2})(5^{0,12})(5^{0,13})(5^{0,1})(5^{0,1}) = 2,71$$

$$s_{10} = (1^{0,1})(5^{0,15})(3^{0,1})(3^{0,2})(5^{0,12})(5^{0,13})(2^{0,1})(5^{0,1}) = 3,33$$

Rective Preference

$$V_i = \frac{\prod_{j=i}^n x_{ij} w_j}{\prod_{j=i}^n (x_j) w_j}$$

$$V_1 = \frac{4,13}{29,19} = 0,14$$

$$V_2 = \frac{3,11}{29,19} = 0,10$$

$$V_3 = \frac{2,72}{29,19} = 0,09$$

$$V_4 = \frac{2,25}{29,19} = 0,07$$

$$V_5 = \frac{2,46}{29,19} = 0,08$$

$$V_6 = \frac{2,71}{29,19} = 0,09$$

$$V_7 = \frac{3,10}{29,19} = 0,10$$

$$V_7 = \frac{3,10}{29,19} = 0,10$$

$$V_9 = \frac{2,71}{29,19} = 0,09$$

$$V_{10} = \frac{3,33}{29,19} = 0,11$$

### Comparison of Simple Additive Weighting (SAW) and Weighted Product (WP)

From the table above, it can be seen, the results of the assessment using SAW and WP in the SAW calculation, the highest value is found in criterion 7 with a result of 92. In the calculation using the WP method, the highest value is in criterion 1 with a result of 0.14. According to the comparison results above, it can be concluded that the final results of the comparison of the Simple Additive Weighting (SAW) and Weight Product (WP) methods have equally relevant values, 92 and 0.14.

Based on the results of the research above regarding the Covid-19 Task Force Performance Decision Making System by using a comparison of the System Additive Weighting method and the Weight Product (WP) method, the ranking can be determined. The results we can conclude from this study are in accordance with existing calculations and comparisons that covid-19 in Pagelaran District is still very low, but even though it is low, it does not deny that COVID-19 is not here. Therefore, it is necessary to always implement health protocols in accordance with the recommendations of the central government and local governments. Based on the table above, we can conclude that the highest weighted value of the COVID-19 Task Force Performance is  $V_7 = 92$ . Hopefully with this research, it can provide credible information for the community in Pagelaran District and of course this research can be useful for all circles of the wider community in the Pagelaran District and outside the Pagelaran.

Number	Alternative	SAW results	Rank	WP Results	Rank
1	A <sub>1</sub>	88	2	0,14	1
2	A <sub>2</sub>	64,8	5	0,10	3
3	A <sub>3</sub>	49,6	8	0,09	4
4	A <sub>4</sub>	49,6	8	0,07	6

5	A <sub>5</sub>	58,8	7	0,08	5
6	A <sub>6</sub>	67,6	4	0,09	4
7	A <sub>7</sub>	92	1	0,10	3
8	A <sub>8</sub>	62,8	6	0,10	3
9	A <sub>9</sub>	82	3	0,09	4
10	A <sub>10</sub>	82	3	0,11	2

#### IV. CONCLUSION

Based on the studies and research conducted, we can conclude about the results of this study. An analysis of a decision-making system based on the performance of the COVID-19 task force in Pagelaran District using various criteria for productivity aspects, service quality aspects, human resource quality, responsiveness aspects, responsibility aspects, and accountability aspects can determine the weighted value of the performance branches in each alternative on each criterion of all these attributes. In this case, to get the reward which has been determined in handling COVID-19, it must meet the criteria for the Covid-19 task force in accordance with the recommendations of the central government or regional government. The conclusion we can draw from the discussion above is that the highest values in the cases above are 92 and 0.14.

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