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Employee Performance Assessment Decision Support Using *Profile Matching* Method Compared to *Simple Additive Weight* Addition at Dharma Buddhi University, Tangerang

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Abstract

An employee performance evaluation of the Buddhist Dharma University is needed to see the potential of its human resources. To get an employee performance appraisal in one year requires a decision support system that is fast and measurable so that the information obtained is accurate. The method used in assessing employee performance uses profile matching and is compared with the SAW (simple additive weight) method so that the results can be properly compared. The purpose of employee appraisal is so that leaders can easily obtain information about employee performance ratings at Buddhii Dharma University. The results of the value using the profile matching method can be recommended for salary increases and positions of 4 employees. Which can be recommended for salary increases there are 17 employees and those who are not eligible for salary increases and positions are valued at 12 employees. And comparing with the Simple Additive Weight (SAW) method, there are 19 employees who are eligible to raise salaries and 14 employees who are not eligible to raise salaries and positions.

I. INTRODUCTION

Employees are very vital resources in a company or educational institution, because many employees play a role in every activity. Employee performance appraisal is an assessment process to produce high quality and dedicated employees. The leadership of the company or educational institution has a problem in being able to evaluate, in this case providing an assessment of the performance of its employees. The Dharma Buddhi University also evaluates employee performance, especially in all parts of the Dharma Buddhist University. This employee assessment is conducted at the end of each year by distributing assessment questionnaires. Then do an employee performance appraisal by counting all the number of assessment criteria. The results of the assessment are less effective and the results of the decision are slow, because the employee evaluation system has not been computerized, and an application program has not yet been made, so the leadership takes too long to make decisions in the work evaluation. To overcome the problems of the Buddhist Dharma University, it is necessary to make a decision support system for employee performance appraisal that can be accessed via the web with the profile matching method consisting of job criteria and self potential. All assessment data that has been entered will be calculated by Gap and core factor and secondary factor. Then the determination of the weights for each criterion has been made and will make it easier to make an appraisal report.

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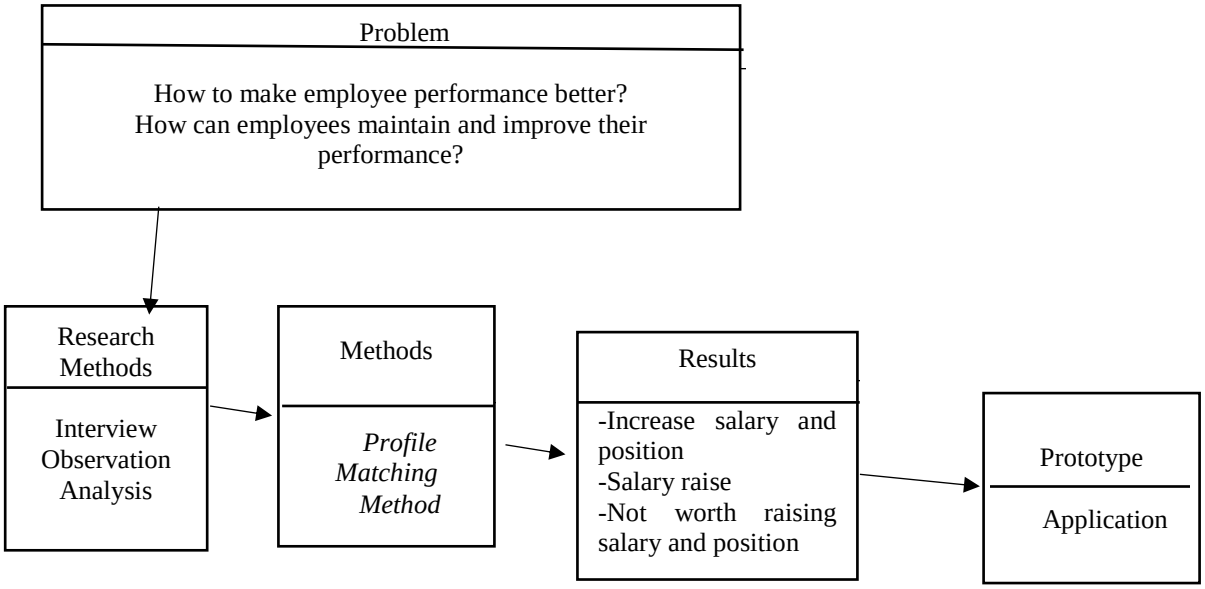

Fig 1. Framework

Employee performance appraisal can be seen from the side of the problems that exist in tangerang Buddhi Dharma University, by interviewing, observing and analyzing existing problems, we make a decision support system for employee performance appraisal so that results can be seen quickly through the profile matching method accessed through This web and Profile Matching method are compared with the SAW (Simple Additive Weight) method so that the results can be compared properly.

II. RELATED WORKS/LITERATURE REVIEW

Table 1. Literature Review

No	Tittle	Abstract	Object	Method	Results	Conclusion	Keyword
1	Decision support system for teacher performance assessment using the profile matching method [1] Ari Suhartanto, Kusrini, Henderi	By applying the Profile Matching method to assess Pedagogical Competence as a process of evaluating the performance of outstanding teachers for the scope of the Office of Education and Culture District. Madiun can increase the objectivity and accuracy of data. The data collected is a history of teacher performance appraisal in the form of documents and statements as well as supporting data in the form of documents of the rules and procedures for the performance evaluation process for	Employee performance appraisal	Case study research (case study) is different from survey research. In the survey research the sample size is quite extensive while in the case study the number of samples taken is very small or only a few people. But the similarity between survey research and case studies is that both explore the phenomeno. In this study, the authors collected data	The final result is that alternative Nur Rahayuningtyas gets the highest result with a value of 3,820 adrift of 0.021 with Sulasmi alternative and quite far adrift of Sri Harnanik's alternative by 0.155.	Teacher performance appraisal system for Pedagogical Competence using the Profile Matching method that has been applied has an accuracy rate of 95.67%. This is due to the decision making mechanism by assuming that the ideal level of predictor variables must be fulfilled by subjects. Assessment using SPK profile matching has a better level of objectivity	Decision Support System, Teacher Performance Assessment, Profile Matching

		outstanding teachers. Based on the testing of the system, the level of accuracy of the assessment obtained with three alternative samples has an average yield of 95.67%, which is calculated from comparing with the average final score of pedagogical competency assessment manually. The difference in average number is 4.33% smaller because the decision making mechanism with the profile matching method assumes that there is an ideal level of predictor variables that must be met by subjects. Assessment using Profile Matching has a better level of objectivity because to measure the value of each indicator the assessment variable is lowered again by sub-indicators and weighted using assessment parameters and calculated using decision making mechanisms by assuming that there is an ideal level of predictor variables that must be met by subject. In contrast to the manual assessment process which only includes the value of the level of fullness of each indicator by writing down numbers and counting only by adding them up.		and described the teacher performance appraisal process on Pedagogic competencies carried out by teacher performance appraisers officials in accordance with the actual conditions occurring at the study site and weighted the assessment parameters of indicators on Pedagogic competencies to determine scores to produce pedagogical competency scores.		because to measure the value of each indicator the assessment variable is lowered again with sub-indicators and weighted using assessment parameters and is calculated using a decision-making mechanism by assuming that there is an ideal level of predictor variables that must be met by subjects.	
2	Web-based lecturer assessment information system uses the profile matching method. [2] Moedjiono, Ardie Halim Wijaya, Aries Kusdaryono	The evaluation of lecturers' performance appraisal activities in tertiary institutions is carried out every semester with give questionnaire papers to students s aat before the end of the semester examination of the subject concerned begins. This makes the answers to the questionnaire inaccurate, because it takes time to fill out	Lecture r perfor mance evaluat ion		Test results are obtained lecturer performance appraisal process becomes faster and more accurate than ever with si manual stem, besides that the system This new can be accepted by para the user.	1. Prototype system supporters This web based decision has been tested with the black box testing method and the quality is tested based on ISO 9126. Test results obtained lecturer performance appraisal process becomes	Web-based prototype, decision support system, profile matching, assessment questionnai re, lecturer performanc e evaluation prototype

		the questionnaire is quite disturbing time of the student's final exam. Besides that, input is done d ith manual method by only a few staff, so the results obtained regarding the lecturer concerned are very slow because there is no effective and efficient system in determining the results of the evaluation lecturer performance. This research aims to The UK is developing a prototype of a performance appraisal system web-based lecturer using the Profile Matching method approach. The results of this study in the form of a prototype system that will facilitate the process of evaluating lecturer performance so that it can accelerate decision making process.				faster and more accurate than ever with si manual stem, besides that the system This new can be accepted by para the user. 2. With the use of the Profile method Matching on prototype system performance appraisal decision support this lecturer we can determine the weights ideal criteria desired when pe value the performance lecturer. Results ranking produced more accurately according to ideal criteria, so from this result the lecturers can maintain and repair teaching performance.	

III. METHODS

Profile Matching is a research method that can be used in decision support systems, the competency assessment process is carried out by comparing one value profile with several other competency value profiles, so that the results of the difference between the needs of the competencies needed are known, the difference between these competencies is called a gap, where the smaller the gap the higher the value.

According to Kusrini (2007) [3] the profile matching method is a method that is often used as a mechanism in decision making by assuming that there is an ideal level of predictor variables that must be met by the subjects studied, rather than the minimum level that must be met or passed. In the profile matching process, it is broadly a process of comparing the actual data value of a profile to be assessed with the expected profile value, so that the competency differences (also called gaps) can be known, the smaller the gap produced, the greater the value weights. The data analysis techniques are as follows:

1. Weighting
   The first step is weighting. At this stage the difference is made based on the results of the questionnaire with the target achievement value of each of the existing criteria. In ranking the criteria for their assessment in each gap, weights are given according to the following table:

Table 2. Information Weights Gap Value

No.	Gap Difference in	Weight Value	Remarks
1	0	5	Competence as needed
2	1	4,5	Individual competence is 1 level / level
3	-1	4	Individual competence is less than 1 level / level
4	2	3,5	Individual competence has an excess of 2 levels / levels
5	-2	3	Individual competencies lacking 2 levels / levels
6	3	2,5	Individual competencies are over 3 levels / level
7	-3	2	Individual competencies lacking 3 levels / levels
8	4	1,5	Individual competence is over 4 levels / level
9	-4	1	Individual competencies lacking 4 levels / levels

2. Core and Secondary Factor Grouping
   After determining the weight of the required gap value criteria, then each criterion is grouped again into two groups namely core factor and secondary factor. This grouping aims to get the main factors and supporting factors of the criteria that exist in employee performance appraisal. The formula for calculating the core factor and secondary factor is as follows:
   a. Core Factor (Main Factor)
      Core factors are the most important criteria in evaluating employee performance, which is expected to produce optimal performance. To calculate the core factor the formula is used:

$$NCF\,\frac{NC}{IC}$$

      Information:
      NCF : Average value of core factor
      NC : Total number of core factor values
      IC : Number of core factor items

   b. Secondary factor (supporting factor)
      Secondary factor is the criteria that exist in the core factor. To calculate the secondary factor a formula is used

$$NS.F\,\frac{NS}{IS}$$

      Information:
      NSF : The average value of the secondary factor
      NS : The total number of secondary factors
      IS : Number of secondary factor items

3. Calculation of Total Value
   From the calculation of core factors and secondary factors of each criterion, then the total value of each criterion is estimated, which is estimated to affect the performance of each profile. To calculate the total value of each criterion, a formula is used

$$N = (X)\%\,NCF\ +/X\%NSF$$

   Information:
   N : the total value of each aspect
   NCF : Core factor average value
   NSF : The average value of the secondary factor
   (X)% : The percentage value entered

4. Ranking

The final result of the profile matching process is the total employee performance appraisal that is eligible for salary and position increases or salary increases only and is not eligible for recommendations for salary and position increases. Determination refers to ranking on the calculation results shown by the formula:

Ranking = $50\%\ NCF + /50\%\ NSF$

Information:
NCF : *Core factor value*
NSF : *Secondary factor values*

The Simple Additive Weighting (SAW) method is the most well-known method and is widely used in meetings related to Multiple Attribute Decision Making (MADM) which is used to find optimal alternatives from adding alternatives with certain criteria.

Additive Weighting Method (SAW), often also known as the weighted sum method. The basic concept of this method is to find a weighted sum of performance appraisals on each alternative on all attributes [4].

The SAW method requires the decision matrix normalization process (X) to a scale that can be compared with all available alternative ratings:

$$rij = \begin{cases} \dfrac{xij}{Max\ i\ xij} & \text{if j is the benefit attribut} \\ \dfrac{\min i\ xij}{x\ ij} & \text{if j is the cost attribute} \end{cases}$$

Where:
rij = normalized performance rating.
Max i = maximum value of each row and column.
min i = minimum value of each row and column.
Xij = row and column of the matrix

(rij) is a normalized performance rating of alternatives on the attributes i = 1,2, ..., m and j = 1,2, ..., n.

Determination of the preference value for each Vi alternative is given as:

$$v\ i \sum_{j=1}^{n} w\ jrij$$

v i = Final value of the alternative
wj = Weight that has been determined
rij = Normalization matrix
A greater Vi value indicates that the Ai alternative is preferred

Decision support system is a computer-based interactive application that combines data and mathematical models to help the decision making process in handling a problem [5].

There are three main aspects in SPK, namely:

1. Data, the data used in DSS is data taken from a data warehouse in an organization that has been categorized based on needs.
2. The mathematical model, is part of analyzing data and functions to convert data into information and knowledge that is useful for decision making.
3. User interface. This aspect is an aspect that is directly seen and interacts with the end user or in this case the decision holder. The data displayed must provide valid, reliable information that can support decision making

Table 3. Weight Criteria for work and self potential

Criteria	Bobot (%)
Occupation	50
Self-potential	50

Table 4. Weight Assessment Method Profile Matching

No	Grading percent	Assessment of Profile Matching methods	Information
1	89, 6 %	4.60	Worth raise salary and position
2	87, 2 %	4.5	Raise salary
3	83, 6 %	4.4	Not worth raising salary and position

Table 5. Weight Assessment Method Simple Additive Weighting (SAW)

No	SAW Value range	Information
1	< 0.93	Not worth raising salary and position
2	0.94 - 0.97	Raise salary
3	>0.98	Worth raise salary and position

Table 6. Ordinal Scale (Assessment of Job Criteria and Self Potential)

Target Value	Information
1	very little
2	Less
3	Enough
4	Well
5	Very well

IV. RESULTS

1. Calculation of employee work (A)
2. Standard Value (B)
3. A - B = Weight gap results
4. Core factors and secondary factors

Table 7. Employee Job Gap Assessment

Employee Job Appraisal (A)								Campus standard grade (B)						Number of gaps (A - B)					
No	Occupation	1	2	3	4	5	6	Standard campus values						1	2	3	4	5	6
1	Rudy	5	5	4	5	4	4	5	5	5	4	4	5	0	0	-1	1	0	-1
2	Fenarly	5	4	4	4	5	4	5	5	5	4	4	5	0	-1	-1	0	1	-1
3	Fidellis	5	4	4	4	4	4	5	5	5	4	4	5	0	-1	-1	0	0	-1
4	Wita	4	4	4	4	4	4	5	5	5	4	4	5	-1	-1	-1	0	0	-1
5	Rina	5	4	5	4	4	4	5	5	5	4	4	5	0	-1	0	0	0	-1
6	Yuni	4	4	4	5	5	4	5	5	5	4	4	5	-1	-1	-1	1	1	-1
7	Jose fung	4	4	5	4	4	5	5	5	5	4	4	5	-1	-1	0	0	0	0
8	Hartana	4	5	4	5	4	5	5	5	5	4	4	5	-1	0	-1	1	0	0
9	Hary	4	5	4	4	4	4	5	5	5	4	4	5	-1	0	-1	0	0	-1
10	Andi	5	5	4	5	4	5	5	5	5	4	4	5	0	0	-1	1	0	0
11	Akbar	5	5	4	5	4	4	5	5	5	4	4	5	0	0	-1	1	0	-1
12	Subhana	5	4	4	4	5	4	5	5	5	4	4	5	0	-1	1	0	1	-1
13	Iskandar	5	4	4	4	4	4	5	5	5	4	4	5	0	-1	-1	0	0	-1
14	Frendy	4	4	4	4	4	4	5	5	5	4	4	5	-1	-1	-1	0	0	-1
15	Chatrine	5	4	5	4	4	4	5	5	5	4	4	5	0	-1	0	0	0	-1

16	Abidin	4	4	4	5	5	4	5	5	5	4	4	5	-1	-1	-1	1	1	-1
17	Sutandi	4	4	5	4	4	5	5	5	5	4	4	5	-1	-1	0	0	0	0
18	Benny	4	5	4	5	4	5	5	5	5	4	4	5	-1	0	-1	1	0	0
19	Susanto	4	5	4	4	4	4	5	5	5	4	4	5	-1	0	-1	0	0	-1
20	Septian	5	5	4	5	4	5	5	5	5	4	4	5	0	0	-1	1	0	0
21	Anik	5	5	4	5	4	4	5	5	5	4	4	5	0	0	-1	1	0	-1
22	Saipul	5	4	4	4	5	4	5	5	5	4	4	5	0	-1	-1	0	1	-1
23	Anwar	5	4	4	4	4	4	5	5	5	4	4	5	0	-1	-1	0	0	1
24	Gocang	4	4	4	4	4	4	5	5	5	4	4	5	-1	-1	-1	0	0	-1
25	Dhea	5	4	5	4	4	4	5	5	5	4	4	5	0	-1	0	0	0	-1
26	Richat	4	4	4	5	5	4	5	5	5	4	4	5	-1	-1	-1	1	1	-1
27	Abdul	4	4	5	4	4	5	5	5	5	4	4	5	-1	-1	0	0	0	0
28	Yakub		5	4	5	4	5	5	5	5	4	4	5	-1	0	-1	1	0	0
29	Roni	4	5	4	4	4	4	5	5	5	4	4	5	-1	0	-1	0	0	-1
30	Arol	5	5	4	5	4	5	5	5	5	4	4	5	0	0	-1	1	0	0
31	Alysia	5	5	4	5	4	4	5	5	5	4	4	5	0	0	-1	1	0	0
32	Budi	5	4	4	4	5	4	5	5	5	4	4	5	0	-1	-1	0	1	-1
33	Tomi	5	4	4	4	4	4	5	5	5	4	4	5	0	-1	-1	0	0	-1

Calculation of employee job appraisal (A) + Campus default value (B) = Number of gaps. The results are combined in the table as follows:

Table 8. Job Gap Equation Table

		Equation of the results of the gap (A - B)									
		A	**B**	**C**	**D**	**E**	**F**				
No	Occupation	**1**	**2**	**3**	**4**	**5**	**6**	**Core Factors**	**Secondary Factors**	**Calculation of CF & SF**	**Total Value**
1	Rudy	5	5	4	4.5	5	4	4.5	4.75	(60%*4.5) + (40%*4.75)	4.6
2	Fenarly	5	4	4	5	4.5	4	4.37	4.5	(60%*4.37) + (40%*4.5)	4.42
3	Fidellis	5	4	4	5	5	4	4.5	4.5	(60%*4.5) + (40%*4.5)	4.5
4	Wita	4	4	4	5	5	4	4.25	4.5	(60%*4.25)+ (40%*4.5)	4.35
5	Rina	5	4	5	5	5	4	4.75	4.5	(60%*4.75)+ (40%*4.5)	4.65
6	Yuni	4	4	4	4.5	4.5	4	4.12	4.25	(60%*4.12)+ (40%*4.25)	4.17
7	Jose fung	4	4	5	5	5	5	4.75	4.5	(60%*4.75)+ (40%*4,5)	4.65

8	Hartana	4	5	4	4.5	5	5	4.5	4.75	(60%*4.5) + (40%*4,75)	4.65
9	Hary	4	5	4	5	5	4	4.25	5	(60%*4.25)+ (40%*5)	4.55
10	Andi	5	5	4	4.5	5	5	4.75	4.75	(60%*4.75)+ (40%*4,75)	4.75
11	Akbar	5	5	4	4.5	5	5	4.75	4.75	(60%*4.75) + (40%*4,75)	4.75
12	Subhana	5	4	4	5	4.5	4	4.37	4.75	60%*4.37) + (40%*4,75)	4.52
13	Iskandar	5	4	4	5	5	4	4.5	4.5	(60%*4.5) + (40%*4,5)	4.5
14	Frendy	4	4	4	5	5	4	4.25	4.5	(60%*425) + (40%*4,5)	4.35
15	Chatrine	5	4	5	5	5	4	4.75	4.5	(60%*4.75)+ (40%*4,5)	4.65
16	Abidin	4	4	4	4.5	4.5	4	4.12	4.25	(60%*4.12) + (40%*4,25)	4.35
17	Sutandi	4	4	5	5	5	5	4.75	4.5	(60%*4.75)+ (40%*4.5)	4.65
18	Benny	4	5	4	4.5	5	5	4.5	4.75	(60%*4.5) + (40%*4.75)	4.65
19	Susanto	4	5	4	5	5	4	4.25	5	(60%*4.25)+ (40%*5)	4.55
20	Septian	5	5	4	4.5	5	5	4.75	4.75	(60%*4.75) + (40%*4.75)	4.75
21	Anik	5	5	4	4.5	5	4	4.5	4.75	(60%*4.5) + (40%*4.75)	4.6
22	Saipul	5	4	4	5	4.5	4	4.37	4.5	(60%*4.37)+ (40%*4.5)	4.38
23	Anwar	5	4	4	5	5	4	4.5	4.5	(60%*4.5) + (40%*4.5)	4.5
24	Gocang	4	4	4	5	5	4	4.25	4.5	(60%*4.25)+ (40%*4.5)	4.35
25	Dhea	5	4	5	5	5	4	4.75	4.5	(60%*4.75)+ (40%*4.5)	4.65
26	Richat	4	4	4	4.5	4.5	4	4.2	4.25	(60%*4.2) + (40%*4.25)	4.17
27	Abdul	4	4	5	5	5	5	4.75	4.5	(60%*4.75)+ (40%*4.5)	4.65
28	Yakub	4	5	4	4.5	5	5	4.5	4.75	(60%*4.5) + (40%*4,75)	4.65
29	Roni	4	5	4	5	5	4	4.25	5	(60%*4.25)+ (40%*5)	4.55

30	Arol	5	5	4	4.5	5	5	4.75	4.75	(60%*4.75) + (40%*4,75)	4.75
31	Alysia	5	5	4	4.5	5	5	4.75	4.75	(60%*4.75)+ (40%*4,7)	4.75
32	Budi	5	4	4	5	4.5	4	4.37	4.5	(60%*4.37)+ (40%*4.5)	4.42
33	Tomi	5	4	4	5	5	4	4.5	4.5	(60%*4.5) + (40%*4.5)	4.5

Information :

A. Core factor (CF) = quality of work, accuracy, diligence, discipline (A + C + E + F) / 4 = CF
B. Secondary factor (SF) = Work quantity, Efficiency (B + D) / 2 = SF
C. Core factor value = 60% * core factor
D. Secondary Factor Value = 40% * Secondary factor
E. Total value = result of core factor + secondary factor

Table 9. Assessment of Employee Self Potential

	Self-Assessment Potential Employee Criteria (A)								**Number of job criteria gaps (B)**							**Number of gaps (A - B)**						
No	**Self-potential**	1	2	3	4	5	6	7	**The standard value of self potential**							1	2	3	4	5	6	7
1	Rudy	5	4	5	4	4	4	4	4	5	5	5	5	4	5	0	-1	0	-1	-1	0	-1
2	Fenarly	4	4	4	5	4	4	4	4	5	5	5	5	4	5	0	-1	-1	0	-1	0	-1
3	Fidellis	4	4	4	4	5	4	4	4	5	5	5	5	4	5	0	-1	-1	-1	0	0	-1
4	Wita	5	5	5	4	5	4	4	4	5	5	5	5	4	5	1	0	0	-1	0	0	-1
5	Rina	4	5	4	4	4	4	4	4	5	5	5	5	4	5	0	0	-1	-1	-1	0	-1
6	Yuni	4	4	4	4	5	4	4	4	5	5	5	5	4	5	0	-1	-1	-1	0	0	-1
7	Jose fung	5	5	4	4	4	4	4	4	5	5	5	5	4	5	1	0	-1	-1	-1	0	1
8	Hartana	4	4	4	5	4	4	4	4	5	5	5	5	4	5	0	-1	-1	0	-1	0	-1
9	Hary	5	5	5	5	4	4	4	4	5	5	5	5	4	5	1	0	0	0	-1	0	-1
10	Andi	5	4	4	4	4	4	4	4	5	5	5	5	4	5	1	-1	-1	-1	-1	0	-1
11	Akbar	5	4	5	4	4	4	4	4	5	5	5	5	4	5	1	-1	0	-1	-1	0	-1
12	Subhana	4	4	4	5	4	4	4	4	5	5	5	5	4	5	0	-1	-1	0	-1	0	-1
13	Iskandar	4	4	4	4	5	4	4	4	5	5	5	5	4	5	0	-1	-1	-1	0	0	-1
14	Frendy	5	5	5	4	5	4	4	4	5	5	5	5	4	5	1	0	0	-1	0	0	-1
15	Chatrine	4	5	4	4	4	4	4	4	5	5	5	5	4	5	0	0	-1	-1	-1	0	-1
16	Abidin	4	4	4	4	5	4	4	4	5	5	5	5	4	5	0	-1	-1	-1	0	0	-1
17	Sutandi	5	5	4	4	4	4	4	4	5	5	5	5	4	5	1	0	-1	-1	-1	0	-1
18	Benny	4	4	4	5	4	4	4	4	5	5	5	5	4	5	0	-1	-1	0	-1	0	-1
19	Susanto	5	5	5	5	4	4	4	4	5	5	5	5	4	5	1	0	0	0	-1	0	-1
20	Septian	5	4	4	4	4	4	4	4	5	5	5	5	4	5	1	-1	-1	0	-1	0	-1
21	Anik	5	4	5	4	4	4	4	4	5	5	5	5	4	5	1	-1	0	-1	-1	0	-1

22	Saipul	4	4	4	5	4	4	4	4	5	5	5	5	4	5	0	-1	-1	0	-1	0	-1
23	Anwar	4	4	4	4	5	4	4	4	5	5	5	5	4	5	0	-1	-1	-1	0	0	-1
24	Gocang	5	5	5	4	5	4	4	4	5	5	5	5	4	5	1	0	0	-1	0	0	-1
25	Dhea	4	5	4	4	4	4	4	4	5	5	5	5	4	5	0	0	-1	-1	-1	0	-1
26	Richat	4	4	4	4	5	4	4	4	5	5	5	5	4	5	0	-1	-1	-1	0	0	-1
27	Abdul	5	5	4	4	4	4	4	4	5	5	5	5	4	5	1	0	-1	-1	-1	0	-1
28	Yakub	4	4	4	5	4	4	4	4	5	5	5	5	4	5	0	-1	-1	0	-1	0	-1
29	Roni	5	5	5	5	4	4	4	4	5	5	5	5	4	5	1	0	0	0	-1	0	-1
30	Arol	5	4	4	4	4	4	4	4	5	5	5	5	4	5	1	-1	-1	-1	-1	0	-1
31	Alysia	5	4	5	4	4	4	4	4	5	5	5	5	4	5	1	-1	0	-1	-1	0	-1
32	Budi	4	4	4	5	4	4	4	4	5	5	5	5	4	5	0	-1	-1	0	-1	0	-1
33	Tomi	4	4	4	4	5	4	4	4	5	5	5	5	4	5	0	-1	-1	-1	0	0	-1

Table 10 Equation Potential Gap Table Self

		Equation of the results of the gap (A - B)										
		A	**B**	**C**	**D**	**E**	**F**	**G**				
No	Self-potential	1	2	3	4	5	6	7	Core Factors	Secondary Factors	**Calculation of CF & SF**	**Total Value**
1	Rudy	4.5	4	5	4	4	5	4	4.11	5	(60%*4.11) + (40%*5)	4.46
2	Fenarly	5	4	4	5	4	5	4	4.4	4.5	(60%*4.4) + (40%*4.5)	4.44
3	Fidellis	5	4	4	4	5	5	4	4.4	4.5	(60%*4.4) + (40%*4.5)	4.44
4	Wita	4.5	5	5	4	5	5	4	4.5	5	(60%*4.5) + (40%*5)	4.7
5	Rina	5	5	4	4	4	5	4	4.4	4.5	(60%*4.4) + (40%*4.5)	4.44
6	Yuni	5	4	4	4	5	5	4	4.4	4.5	(60%*4.4) + (40%*4.5)	4.44
7	Jose fung	4.5	5	4	4	4	5	4.5	4.4	4.5	(60%*4.4) + (40%*4.5)	4.44
8	Hartana	5	4	4	5	4	5	4	4.4	4.5	(60%*4.4) + (40%*4.5)	4.44
9	Hary	4.5	5	5	5	4	5	4	4.5	4.5	(60%*4.5) + (40%*4.5)	4.7
10	Andi	4.5	4	4	4	4	5	4	4.1	4.5	(60%*4.1) + (40%*4.5)	4.26
11	Akbar	4.5	4	5	4	4	5	4	4.1	5	(60%*4.1) + (40%*5)	4.46
12	Subhana	5	4	4	5	4	5	4	4.4	4.5	(60%*4.4) + (40%*4.5)	4.44
13	Iskandar	5	4	4	4	5	5	4	4.4	4.5	(60%*4.4) + (40%*4.5)	4.44
14	Frendy	4.5	5	5	4	5	5	4	4.5	5	(60%*4.5) + (40%*5)	4.7
15	Chatrine	5	5	4	4	4	5	4	4.4	4.5	(60%*4.4) + (40%*4.5)	4.44
16	Abidin	5	4	4	4	5	5	4	4.4	4.5	(60%*4.4) + (40%*4.5)	4.44

17	Sutandi	4.5	5	4	4	4	5	4	4.3	4.5	(60%*4.3) + (40%*4.5)	4.38
18	Benny	5	4	4	5	4	5	4	4.4	4.5	(60%*4.4) + (40%*4.5)	4.44
19	Susanto	4.5	5	5	5	4	5	4	4.5	5	(60%*4.5) + (40%*5)	4.7
20	Septian	4.5	4	4	5	4	5	4	4.3	4.5	(60%*4.3) + (40%*4.5)	4.38
21	Anik	4.5	4	5	4	4	5	4	4.1	5	(60%*4.1) + (40%*5)	4.46
22	Saipul	5	4	4	5	4	5	4	4.4	4.5	(60%*4.4) + (40%*4.5)	4.44
23	Anwar	5	4	4	4	5	5	4	4.4	4.5	(60%*4.4) + (40%*4.5)	4.44
24	Gocang	4.5	5	5	4	5	5	4	4.5	5	(60%*4.5) + (40%*5)	4.7
25	Dhea	5	5	4	4	4	5	4	4.4	4.5	(60%*4.4) + (40%*4.5)	4.44
26	Richat	5	4	4	4	5	5	4	4.4	4.5	(60%*4.4) + (40%*4.5)	4.44
27	Abdul	4	5	5	4	4	5	4	4.2	4.5	(60%*4.2) + (40%*4.5)	4.52
28	Yakub	5	4	4	5	4	5	4	4.4	4.5	(60%*4.4) + (40%*4.5)	4.44
29	Roni	4.5	5	4	4	4	5	4	4.3	4.5	(60%*4.3) + (40%*4.5)	4.38
30	Arol	4.5	4	5	4	4	5	4	4.1	5	(60%*4.1) + (40%*5)	4.46
31	Alysia	4.5	4	4	5	4	5	4	4.3	4.5	(60%*4.3) + (40%*4.5)	4.38
32	Budi	5	4	4	5	4	5	4	4.4	4.5	(60%*4.4) + (40%*4.5)	4.44
33	Tomi	5	4	4	4	5	5	4	4.4	4.5	(60%*4.4) + (40%*4.5)	4.44

Information:

A. Core factor (CF) = creativity / initiative, collaboration, responsibility, leadership, honesty (A + B + D + E + G) / 2 = CF

B. Secondary factor (SF) = Ability to work alone, Obedience to carry out superior orders (C + F) / 2 = SF

C. Core factor value = 60% * core factor

D. Secondary factor value = 40% * secondary factor

E. Total value = result of core factor + secondary factor

Tabel 11. Calculation of Total Employment Value and Employee Self Potential

No	Employee	Job Criteria	Self-Potential Criteria	Total Value	Remarks
1	Rudy	4.6	4.46	4.53	Salary raise
2	Fenarly	4.42	4.44	4.43	Not worth raising salary and position
3	Fidellis	4.5	4.44	4.47	Not worth raising salary and position
4	Wita	4.35	4.17	4.52	Salary raise
5	Rina	4.65	4.44	4.54	Salary raise
6	Yuni	4.17	4.44	4.3	Not worth raising salary and position
7	Jose fung	4.65	4.44	4.54	Salary raise
8	Hartana	4.6	4.44	4.52	Salary raise

9	Hary	4.55	4.7	4.62	Increase salary and position
10	Andi	4.75	4.26	4.5	Salary raise
11	Akbar	4.75	4.46	4.6	Increase salary and position
12	Subhana	4.52	4.44	4.48	Not worth raising salary and position
13	Iskandar	4.5	4.44	4.47	Not worth raising salary and position
14	Frendy	4.35	4.7	4.52	Salary raise
15	Chatrine	4.65	4.44	4.54	Salary raise
16	Abidin	4.27	4.44	4.35	Not worth raising salary and position
17	Sutandi	4.65	4.38	4.52	Salary raise
18	Benny	4.6	4.44	4.52	Salary raise
19	Susanto	4.55	4.7	4.62	Increase salary and position
20	Septian	4.75	4.38	4.57	Salary raise
21	Anik	4.6	4.46	4.53	Salary raise
22	Saipul	4.38	4.44	4.41	Not worth raising salary and position
23	Anwar	4.5	4.44	4.47	Not worth raising salary and position
24	Gocang	4.35	4.7	4.52	Salary raise
25	Dhea	4.65	4.44	4.54	Salary raise
26	Richat	4.17	4.44	4.3	Not worth raising salary and position
27	Abdul	4.65	4.52	4.58	Salary raise
28	Yakub	4.6	4.42	4.51	Salary raise
29	Roni	4.55	4.38	4.46	Not worth raising salary and position
30	Arol	4.75	4.46	4.6	Increase salary and position
31	Alysia	4.75	4.38	4.56	Salary raise
32	Budi	4.42	4.44	4.43	Not worth raising salary and position
33	Tomi	4.5	4.44	4.47	Not worth raising salary and position

Note: The results of the merging of the core factor and secondary factor assessment of employee performance using the profile matching method consisting of job criteria and self-potential criteria that is value 4,62 = Hary, susanto, 4,60 = Akbar, Arol, 4,58 = Abdul, 4,57 = Septian, 4,56 = Alysia, 4,54 = Dhea, Rina, Jo se fung, Chatrine, 4,53 = Anik, Rudy, 4,52 = Gocang, Sutandi, Benny, frendy, Hartana, Wita, 4,50 = Andi, 4,51 = Yakub, 4,48 = Subhana, 4,47 = Tomi, iskandar, fidellis, Anwar, 4,46 = Roni, 4,43 = Budi, fenarly, 4,41 = Saipul, 4,35 = Abidin, 4,30 = Richat, Yuni, And that can be recommended for salary and position increases are at 4.62 and 4.60. Which can be recommended for salary increases are at values 4.58, 4.57, 4.56, 4.54, 4.53, 4.52, 4.51, 4.50, and those that are not eligible for a raise and are at 4.48, 4.47, 4.46, 4.43, 4.41, 4.35, 4.30, 4.30 which can be recommended for salary increases and positions must reach a minimum value of 4.60. and those recommended for salary increases of at least 4.50 and those who are not eligible for a raise in salary and position have a minimum value of 4.40. Based on the calculation of 33 eligible employees, it is recommended to raise salaries and positions of 4 employees and those who are eligible are recommended to raise 17 employees. That is not feasible to be recommended for salary increases and positions of 12 employees.

Table 12. Comparison of Employee Performance Appraisal with the *Simple Additive Weight* (SAW) Method

The SAW method			**Profile Matching Method**	
Employee name	Total Value	Information	Total Value	Information
Rudy	0,97	Salary raise	4.53	Salary raise
Fenarly	0,908	Not worth raising salary and position	4.43	Not worth raising salary and position
Fidellis	0,9	Not worth raising salary and position	4.47	Not worth raising salary and position
Wita	0,9405	Salary raise	4.52	Salary raise
Rina	0.928	Not worth raising salary and position	4.54	Salary raise
Yuni	0,937	Not worth raising salary and position	4.3	Not worth raising salary and position
Jose fung	0,946	Salary raise	4.54	Salary raise
Hartana	0,922	Not worth raising salary and position	4.52	Salary raise
Hary	0,967	Salary raise	4.62	deserve a raise in salary and position
Andi	0,9505	Salary raise	4.5	Salary raise
Akbar	0,9475	Salary raise	4.6	deserve a raise in salary and position
Subhana	0,908	Not worth raising salary and position	4.48	Not worth raising salary and position
Iskandar	0,9	Not worth raising salary and position	4.47	Not worth raising salary and position
Frendy	0,9405	Salary raise	4.52	Salary raise
Chatrine	0,944	Salary raise	4.54	Salary raise
Abidin	0,921	Not worth raising salary and position	4.39	Not worth raising salary and position
Sutandi	0,946	Salary raise	4.51	Salary raise
Benny	0,9415	Salary raise	4.54	Salary raise
Susanto	0,967	Salary raise	4.62	deserve a raise in salary and position
Septian	0,9505	Salary raise	4.56	Salary raise
Anik	0,97	Salary raise	4.53	Salary raise
Saipul	0,908	Not worth raising salary and position	4.41	Not worth raising salary and position
Anwar	0,9	Not worth raising salary and position	4.47	Not worth raising salary and position
Gocang	0,9405	Salary raise	4.52	Salary raise
Dhea	0,928	Not worth raising salary and position	4.54	Salary raise
Richat	0,937	Not worth raising salary and position	4.3	Not worth raising salary and position
Abdul	0,946	Salary raise	4.58	Salary raise
Yakub	0,9415	Salary raise	4.54	Salary raise
Roni	0,967	Salary raise	4.46	Not worth raising salary and position
Arol	0,9475	Salary raise	4.6	deserve a raise in salary and position
Sherly	0,97	Salary raise	4.56	Salary raise
Budi	0,908	Not worth raising salary and position	4.43	Not worth raising salary and position
Tomi	0,9	Not worth raising salary and position	4.47	Not worth raising salary and position

Table 13. Comparative Results Of The Saw Method And The Game Profile

Information	**The SAW method**	**Profile Matching Method**
Salary raise	19	17
Not worth raising salary and position	14	12
deserve a raise in salary and position	0	4

total respondents	33	33

Note: The results of employee performance values use the profile matching method with information worth raising salaries by 17 employees, then with information not worth raising salaries and positions by 12 employees, and information worth raising salaries and positions by 4 employees. And comparing with the Simple Additive Weight (SAW) method, there are 19 employees who are eligible to raise salaries and 14 employees who are not eligible to raise salaries and positions.

V. CONCLUSIONS

The results of calculations using the Core Factor (CF) profile matching method look for more important data, the secondary factor (SF) searches for less important data. The results of the merging of the core factor and secondary factor assessment of employee performance using the profile matching method which consists of job criteria and self-potential criteria, namely the value 4,62 = Hary, susanto, 4,60 = Akbar, Arol, 4,58 = Abdul, 4,57 = Septian, 4,56 = Alysia, 4,54 = Dhea, Rina, Jo se fung, Chatrine, 4,53 = Anik, Rudy, 4,52 = Gocang, Sutandi, Benny, frendy, Hartana, Wita, 4,50 = Andi, 4,51 = Yakub, 4,48 = Subhana, 4,47 = Tomi, iskandar, fidellis, Anwar, 4,46 = Roni, 4,43 = Budi, fenarly, 4,41 = Saipul, 4,35 = Abidin, 4,30 = Richat, Yuni. And that can be recommended for salary increases and positions of 4 employees. Which can be recommended for salary increases there are 17 employees and those who are not eligible for salary increases and positions are valued at 12 employees.
Comparison of the Profile Matching Method with the Simple Additive Weight (SAW) Method, the results of the employee's performance value using the profile matching method with information worth raising salaries of 17 employees, then with information not worth raising salaries and positions of 12 employees, and information worth raising salaries and positions as many as 4 employees, and compare with the Simple Additive Weight (SAW) method, there are 19 employees who are eligible to raise salaries and 14 employees who are not eligible to raise salaries and positions.

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