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New Employee Recruitment Using Web-Based Oreste Method

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Abstract

Decisions taken in the long term will affect the quality and performance of the company in the long term. PT. Intan Havea Industry, as a rapidly growing company, faces challenges in selecting candidates who best meet the required criteria. The employee selection process is still subjective and time-consuming, so a system is needed that can support decision making objectively and efficiently. This study aims to design and develop a Decision Support System (DSS) that can help PT. Intan Havea Industry in selecting new employees more effectively and efficiently. The method used in this system is ORESTE (Organization, Ranking, and Evaluation of Socio-Technical and Environmental Factors), which is able to evaluate various relevant criteria in the employee requirements process. The ORESTE method was chosen because of its ability to handle multi-criteria problems and provide objective results based on comparisons between candidates. The system is built web-based, allowing flexible access and can be integrated with various devices. This system accepts input data in the form of assessment criteria for each candidate and interview results, and provides candidate rankings sorted based on the evaluation value of the ORESTE method. System testing shows that this application can provide recommendations for the right candidates based on objective analysis, minimize subjective bias, and speed up the selection process. The results of this study are expected to contribute to the development of a web-based information system that can support more accurate decision making in the employee recruitment process at PT. Intan Havea Industry and other companies. With this system, it is hoped that the employee recruitment proces

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1. Introduction

Human resources (HR) are widely acknowledged as a critical organizational asset because employee competence directly influences productivity, product quality, and the achievement of strategic objectives. In labor-intensive and quality-sensitive industries, such as latex glove production, the

recruitment of highly competent workers becomes even more vital. PT. Intan Havea Industry operates in the production of latex gloves used extensively in healthcare and other hygiene-driven sectors, requiring strict compliance with quality standards and Standard Operating Procedures (SOPs). The company's operational divisions—including production, sorting, packaging, logistics, and warehousing—demand specific skills, precision, and discipline from employees. However, ensuring that candidates possess the required competencies depends heavily on the effectiveness of the recruitment system. A poorly executed selection process may lead to productivity decline, increased operational errors, and higher financial risks. Therefore, a structured, objective, and technology-assisted recruitment approach is necessary to maintain high performance and consistency within production activities. The importance of enhancing HR decision-making has been emphasized in prior decision support research, which highlights the role of systematic evaluation in improving organizational outcomes (Octavia, 2020; Sinaga et al., 2021; Aris, 2021).

The recruitment process at PT. Intan Havea Industry is still conducted using conventional procedures involving administrative screening, interviews, and basic tests. Although commonly applied in many organizations, these methods often lack measurable parameters and are susceptible to assessor subjectivity. Without structured evaluation criteria, decision-makers may unintentionally rely on intuition or incomplete data, risking inaccurate judgments. In industries requiring precision and hygiene compliance, such as latex glove manufacturing, hiring employees who lack adequate competency may result in decreased productivity, quality defects, and increased monitoring and training costs. Mismatched employee placement can also cause operational delays and higher turnover rates. Therefore, the company faces significant challenges in maintaining recruitment accuracy. Prior studies have shown that decision-making in HR and organizational contexts frequently encounters similar issues of bias and inconsistency, reinforcing the need for computerized support systems that minimize subjective influence (Lubis, 2020; Cholil, 2021; Iswandy, 2017; Safira & Sari, 2025). To overcome these limitations, a more objective, efficient, and standardized method is required to ensure that the recruitment process aligns with job requirements and organizational expectations.

Various studies have demonstrated the effectiveness of Decision Support Systems (DSS) integrated with multi-criteria decision-making (MCDM) methods such as ORESTE in solving diverse selection problems. Research conducted by Octavia (2020) successfully applied the ORESTE method to employee transfer decisions, demonstrating its ability to produce objective rankings based on weighted preferences. Lubis (2020) further implemented ORESTE in the selection of health cadres, showing improved efficiency and accuracy in determining the best alternative candidates. Studies by Sinaga et al. (2021) and Wiranta Ginting (2021) have also validated the method's capability in evaluating alternatives across multiple criteria in retail and government sectors. Meanwhile, research by Basri & Salman (2022) and Fytya & Ratnawati (2025) highlighted that DSS integrated with ORESTE enhances decision accuracy and reduces bias in distributor and tuition-fee reduction selection problems. These findings collectively support the suitability of ORESTE for structured, transparent, and quantifiable decision-making. However, existing studies have primarily focused on non-industrial contexts and desktop-based systems. There is limited research applying ORESTE to employee recruitment in manufacturing, especially within industries requiring strict hygienic and quality standards such as latex glove production. This gap presents an opportunity to develop a more relevant and industrially aligned DSS.

The main objective of this research is to develop a web-based decision support system utilizing the ORESTE method to enhance the recruitment process at PT. Intan Havea Industry. The system aims to introduce an objective, measurable, and consistent framework for evaluating and ranking job applicants based on specific criteria required in various operational departments. By integrating MCDM principles, the system is expected to reduce assessment subjectivity, strengthen decision accuracy, and ensure that selected candidates meet competency standards in production, sorting, packaging, warehousing, and administrative functions. Furthermore, a web-based platform allows broader accessibility, faster data processing, and improved decision transparency compared to traditional recruitment methods or desktop-only systems. Previous research has shown the benefits of

DSS in improving decision efficiency across different application areas, reinforcing the potential advantages of implementing such a system in HR recruitment (Kristien Margi Suryaningrum, 2017; Alfina & Harahap, 2020; Sutopo, 2021; Meriano Setya Dwi Utomo, 2016). Ultimately, this study aims to provide PT. Intan Havea Industry with a modern, accurate, and reliable tool to optimize the employee selection process and support organizational performance.

Although numerous studies have implemented the ORESTE method across various decision-making domains, most existing applications remain desktop-based and are not specifically designed for HR recruitment in manufacturing environments. Prior research has focused mainly on selecting students, health cadres, suppliers, scholarship recipients, or employee transfers, leaving a gap in applying ORESTE to industries requiring rigorous quality control such as latex glove production. Furthermore, decision support implementations in previous studies generally emphasize internal organizational needs rather than industry-critical HR processes. Web-based systems, which offer broader accessibility and real-time processing capabilities, are also underrepresented in recent literature involving ORESTE. This research addresses these gaps by proposing a web-based DSS tailored to the recruitment needs of PT. Intan Havea Industry, integrating ORESTE with job-specific competency criteria across multiple operational divisions. The novelty lies in adapting an established MCDM method to a new context—industrial employee recruitment—while enhancing system accessibility through a web-based architecture. This contributes both theoretically and practically by extending the application scope of ORESTE and offering a technological solution that supports objective, transparent, and efficient decision-making (Basri & Salman, 2022; Fytya & Ratnawati, 2025; Octavia, 2020)..

2. Research Methodolgy

The waterfall method is a system approach that involves sequential, linear development. Therefore, if step one hasn't been completed, steps 2, 3, and so on cannot be completed. Step 3 can automatically be completed once steps 1 and 2 have been completed.

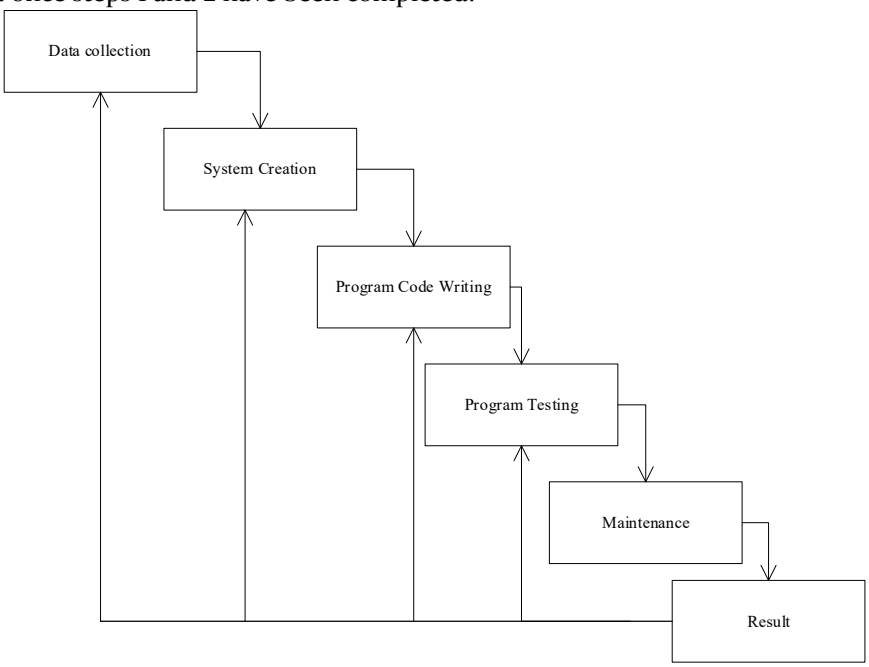

Figure 1. Waterfall Diagram

The following is an explanation of Figure 1 of the Waterfall research that will be implemented by the researcher in developing a Decision Support System for Employee Recruitment at PT. Intan Havea Industry using the Oreste Method:

1. Needs Analysis
   Contains the elements that must be included in the design results to be able to solve the existing problems according to the objectives. The data required for system design is prospective employee data. In completing this research, the author used two study methods:
   1)Field Study
   This method involves conducting a direct field study to collect data, namely a direct visit to the study location at Kim 1, Jl. Pulau Irian No. 13 Mabar, Percut Sei Tuan, Deli Serdang, Medan City 20371. The data collection techniques used by the author are:
   a. Observation
      This method involves observing employee data at PT. Intan Havea Industry as the research object.
   2). Interviews
   This technique involves face-to-face meetings with relevant parties to obtain clarification on previously unclear issues, particularly regarding the system mechanisms used in the company, and to ensure that the data collected is accurate.
2. Library Research
   The author conducted a literature study to obtain data related to the writing of this thesis from various sources, such as PHP application development guides, data management manuals, and books or journals discussing the concept of recruiting new employees at PT. Intan Havea Industry.
3. System Design
   In general, the Decision Support System for recruiting new employees uses the Oreste Pada Method, using the Unified Modeling Language design model designed using Visio 2013.
4. Program Syncope Writing
   Coding is the translation of a design into a language that can be recognized by a computer. This is performed by a programmer who will translate the transactions requested by the user. This stage is the actual stage in developing a system. In other words, computer usage will be maximized during this stage. The purpose of testing is to identify errors in the system and then correct them.
5. Program Testing
   In this research, program testing was conducted using black box (interface) testing, a software test that tests the application's functionality against its internal structure or operation. Specific knowledge of the application code/internal structure and general programming knowledge is not required; the testing is conducted for each designed hardware block.
6. System Maintenance
   After the program testing process is completed, more specific system maintenance is performed. Software that is difficult to deliver to users will inevitably undergo changes. These changes may be due to errors, the software having to adapt to a new environment, or because users require functional developments.

3. Results and Discussion

3.1. Discussion

1. Employee Recruitment Criteria:
   The criteria table can be seen in Table 1.

Table 1. Criteria Table

ID Criteria	Criteria Name	Bobot
C1	Areas of expertise	20
C2	Certification	30
C3	Interview test results	20
C4	Last education	15
C5	Psychological Test	15

Total	100

2. Determining Alternatives
The following data is used to determine employee alternatives, as can be seen in Table 2:

Table 2. Alternative Data

No	Name	C1	C2	C3	C4	C5
1	Mhd. Rangga Prakoso	Penyortiran	> 3Sertifikat	80 Nilai	S1	78 Nilai
2	Muammar Khadafi	Gudang dan Logistik	2 Sertifikat	90 Nilai	D3	87 Nilai
3	Muhammad Al Hasby Ginting	Gudang dan Logistik	> 3Sertifikat	80 Nilai	D3	77 Nilai
4	Muhammad Ary Irawan	Gudang dan Logistik	0 Sertifikat	90 Nilai	D2	90 Nilai
5	Muhammad Hakim Shaputra	Gudang dan Logistik	1 Sertifikat	88 Nilai	D3	86 Nilai
6	Ramot Lastropain Lumban Batu	Gudang dan Logistik	2 Sertifikat	89 Nilai	S1	90 Nilai
7	Risko Syahputra	Penyortiran	2 Sertifikat	77 Nilai	D3	90 Nilai
8	Romi Ferdiansyah Harahap	Packaging	0 Sertifikat	90 Nilai	SMA	89 Nilai
9	Russel Abia Siboro	Gudang dan Logistik	1 Sertifikat	88 Nilai	S1	90 Nilai
10	Samuel Parningotan Simbolon	Penyortiran	2 Sertifikat	90 Nilai	S1	66 Nilai
11	Satria Haikal Pardamaian Napitupulu	Gudang dan Logistik	2 Sertifikat	70 Nilai	SMA	70 Nilai
12	Tommy Herlambang	Gudang dan Logistik	1 Sertifikat	90 Nilai	S1	90 Nilai
13	Yazid Bustami	Penyortiran	0 Sertifikat	87 Nilai	S1	90 Nilai
14	Ahmad Farhan Lubis	Penyortiran	1 Sertifikat	80 Nilai	D3	88 Nilai
15	Ananda Ari Pratama	Production	3 Sertifikat	88 Nilai	S1	80 Nilai
16	Ilham Hanafi	Production	3 Sertifikat	90 Nilai	S1	90 Nilai
17	Hafiz Ramadhan	Penyortiran	1 Sertifikat	80 Nilai	S1	78 Nilai
18	Budi Setiawan	Gudang dan Logistik	3 Sertifikat	90 Nilai	S1	88 Nilai

3. Assessment of Alternatives in Each Criteria Based on Weight

No	Name	C1	C2	C3	C4	C5
1	Mhd. Rangga Prakoso	3	5	80	4	78
2	Muammar Khadafi	2	3	90	3	87
3	Muhammad Al Hasby Ginting	2	5	80	3	77
4	Muhammad Ary Irawan	2	1	90	2	90
5	Muhammad Hakim Shaputra	2	2	88	3	86
6	Ramot Lastropain Lumban Batu	2	3	89	4	90
7	Risko Syahputra	3	3	77	3	90
8	Romi Ferdiansyah Harahap	4	1	90	1	89
9	Russel Abia Siboro	2	2	88	4	90
10	Samuel Parningotan Simbolon	3	3	90	4	66
11	Satria Haikal Pardamaian Napitupulu	2	3	70	1	70
12	Tommy Herlambang	2	2	90	4	90
13	Yazid Bustami	3	1	87	4	90
14	Ahmad Farhan Lubis	3	2	80	3	88
15	Ananda Ari Pratama	5	4	88	4	80
16	Ilham Hanafi	5	4	90	4	90
17	Hafiz Ramadhan	3	2	80	4	78
18	Budi Setiawan	2	4	90	4	88

4. Normalization of Criteria Weights for Each Alternative Using the Oreste Method

Table 3 Normalization of Criteria Weights

No	Name	C1	C2	C3	C4	C5
1	Mhd. Rangga Prakoso	6.5	1.5	14.5	5.5	14.5
2	Muammar Khadafi	14	8	4	13	11
3	Muhammad Al Hasby Ginting	14	1.5	14.5	13	16
4	Muhammad Ary Irawan	14	17	4	16	4
5	Muhammad Hakim Shaputra	14	13	10	13	12
6	Ramot Lastropain Lumban Batu	14	8	8	5.5	4
7	Risko Syahputra	6.5	8	17	13	4
8	Romi Ferdiansyah Harahap	3	17	4	17.5	8
9	Russel Abia Siboro	14	13	10	5.5	4
10	Samuel Parningotan Simbolon	6.5	8	4	5.5	18
11	Satria Haikal Pardamaian Napitupulu	14	8	18	17.5	17
12	Tommy Herlambang	14	13	4	5.5	4
13	Yazid Bustami	6.5	17	12	5.5	4
14	Ahmad Farhan Lubis	6.5	13	14.5	13	9.5
15	Ananda Ari Pratama	1.5	4	10	5.5	13
16	Ilham Hanafi	1.5	4	4	5.5	4
17	Hafiz Ramadhan	6.5	13	14.5	5.5	14.5
18	Budi Setiawan	14	4	4	5.5	9.5

5. Calculate the Distance Score Value for Each Alternative.

Formula : D (a,cj) = $[\frac{1}{2}\ rj\backslash cjR + \frac{1}{2}$rcj (a)$R]1^R$

Given: R = Coefficient with a value of 3

Mhd. Rangga Prakoso (1,1) = $[\frac{1}{2}x6.5^3 + \frac{1}{2}x1^3]^{1/3}$ = 5.165

Mhd. Rangga Prakoso (1,2) = $[\frac{1}{2}x1.5^3 + \frac{1}{2}x2^3]^{1/3}$ = 1.785

Mhd. Rangga Prakoso (1,3) = $[\frac{1}{2}x14.5^3 + \frac{1}{2}x3^3]^{1/3}$ = 11.543

Mhd. Rangga Prakoso (1,4) = $[\frac{1}{2}x5.5^3 + \frac{1}{2}x4^3]^{1/3}$ = 4.866

Mhd. Rangga Prakoso (1,5) = $[\frac{1}{2}x14.5^3 + \frac{1}{2}x5^3]^{1/3}$ = 11.664

Table 4. Distance Score Values

No	Name	C1	C2	C3	C4	C5
1	Mhd. Rangga Prakoso	[1/2*6.5^3 + 1/2*1^3]1/3	[1/2*1.5^3 + 1/2*2^3]1/3	[1/2*14.5^3 + 1/2*3^3]1/3	[1/2*5.5^3 + 1/2*4^3]1/3	[1/2*14.5^3 + 1/2*5^3]1/3
2	Muammar Khadafi	[1/2*14^3 + 1/2*1^3]1/3	[1/2*8^3 + 1/2*2^3]1/3	[1/2*4^3 + 1/2*3^3]1/3	[1/2*13^3 + 1/2*4^3]1/3	[1/2*11^3 + 1/2*5^3]1/3
3	Muhammad Al Hasby Ginting	[1/2*14^3 + 1/2*1^3]1/3	[1/2*1.5^3 + 1/2*2^3]1/3	[1/2*14.5^3 + 1/2*3^3]1/3	[1/2*13^3 + 1/2*4^3]1/3	[1/2*16^3 + 1/2*5^3]1/3
4	Muhammad Ary Irawan	[1/2*14^3 + 1/2*1^3]1/3	[1/2*17^3 + 1/2*2^3]1/3	[1/2*4^3 + 1/2*3^3]1/3	[1/2*16^3 + 1/2*4^3]1/3	[1/2*4^3 + 1/2*5^3]1/3
5	Muhammad Hakim Shaputra	[1/2*14^3 + 1/2*1^3]1/3	[1/2*13^3 + 1/2*2^3]1/3	[1/2*10^3 + 1/2*3^3]1/3	[1/2*13^3 + 1/2*4^3]1/3	[1/2*12^3 + 1/2*5^3]1/3
6	Ramot Lastropain Lumban Batu	[1/2*14^3 + 1/2*1^3]1/3	[1/2*8^3 + 1/2*2^3]1/3	[1/2*8^3 + 1/2*3^3]1/3	[1/2*5.5^3 + 1/2*4^3]1/3	[1/2*4^3 + 1/2*5^3]1/3

No	Name	C1	C2	C3	C4	C5
7	Risko Syahputra	[1/2*6.5^3 + 1/2*1^3]1/3	[1/2*8^3 + 1/2*2^3]1/3	[1/2*17^3 + 1/2*3^3]1/3	[1/2*13^3 + 1/2*4^3]1/3	[1/2*4^3 + 1/2*5^3]1/3
8	Romi Ferdiansyah Harahap	[1/2*3^3 + 1/2*1^3]1/3	[1/2*17^3 + 1/2*2^3]1/3	[1/2*4^3 + 1/2*3^3]1/3	[1/2*17.5^3 + 1/2*4^3]1/3	[1/2*8^3 + 1/2*5^3]1/3
9	Russel Abia Siboro	[1/2*14^3 + 1/2*1^3]1/3	[1/2*13^3 + 1/2*2^3]1/3	[1/2*10^3 + 1/2*3^3]1/3	[1/2*5.5^3 + 1/2*4^3]1/3	[1/2*4^3 + 1/2*5^3]1/3
10	Samuel Parningotan Simbolon	[1/2*6.5^3 + 1/2*1^3]1/3	[1/2*8^3 + 1/2*2^3]1/3	[1/2*4^3 + 1/2*3^3]1/3	[1/2*5.5^3 + 1/2*4^3]1/3	[1/2*18^3 + 1/2*5^3]1/3
11	Satria Haikal Pardamaian Napitupulu	[1/2*14^3 + 1/2*1^3]1/3	[1/2*8^3 + 1/2*2^3]1/3	[1/2*18^3 + 1/2*3^3]1/3	[1/2*17.5^3 + 1/2*4^3]1/3	[1/2*17^3 + 1/2*5^3]1/3
12	Tommy Herlambang	[1/2*14^3 + 1/2*1^3]1/3	[1/2*13^3 + 1/2*2^3]1/3	[1/2*4^3 + 1/2*3^3]1/3	[1/2*5.5^3 + 1/2*4^3]1/3	[1/2*4^3 + 1/2*5^3]1/3
13	Yazid Bustami	[1/2*6.5^3 + 1/2*1^3]1/3	[1/2*17^3 + 1/2*2^3]1/3	[1/2*12^3 + 1/2*3^3]1/3	[1/2*5.5^3 + 1/2*4^3]1/3	[1/2*4^3 + 1/2*5^3]1/3
14	Ahmad Farhan Lubis	[1/2*6.5^3 + 1/2*1^3]1/3	[1/2*13^3 + 1/2*2^3]1/3	[1/2*14.5^3 + 1/2*3^3]1/3	[1/2*13^3 + 1/2*4^3]1/3	[1/2*9.5^3 + 1/2*5^3]1/3
15	Ananda Ari Pratama	[1/2*1.5^3 + 1/2*1^3]1/3	[1/2*4^3 + 1/2*2^3]1/3	[1/2*10^3 + 1/2*3^3]1/3	[1/2*5.5^3 + 1/2*4^3]1/3	[1/2*13^3 + 1/2*5^3]1/3
16	Ilham Hanafi	[1/2*1.5^3 + 1/2*1^3]1/3	[1/2*4^3 + 1/2*2^3]1/3	[1/2*4^3 + 1/2*3^3]1/3	[1/2*5.5^3 + 1/2*4^3]1/3	[1/2*4^3 + 1/2*5^3]1/3
17	Hafiz Ramadhan	[1/2*6.5^3 + 1/2*1^3]1/3	[1/2*13^3 + 1/2*2^3]1/3	[1/2*14.5^3 + 1/2*3^3]1/3	[1/2*5.5^3 + 1/2*4^3]1/3	[1/2*14.5^3 + 1/2*5^3]1/3
18	Budi Setiawan	[1/2*14^3 + 1/2*1^3]1/3	[1/2*4^3 + 1/2*2^3]1/3	[1/2*4^3 + 1/2*3^3]1/3	[1/2*5.5^3 + 1/2*4^3]1/3	[1/2*9.5^3 + 1/2*5^3]1/3

So from the table above we can get the following results:

No	Name	C1	C2	C3	C4	C5
1	Mhd. Rangga Prakoso	5.165	1.785	11.543	4.866	11.664
2	Muammar Khadafi	11.113	6.383	3.57	10.417	8.996
3	Muhammad Al Hasby Ginting	11.113	1.785	11.543	10.417	12.827
4	Muhammad Ary Irawan	11.113	13.5	3.57	12.765	4.555
5	Muhammad Hakim Shaputra	11.113	10.331	8.008	10.417	9.749
6	Ramot Lastropain Lumban Batu	11.113	6.383	6.459	4.866	4.555
7	Risko Syahputra	5.165	6.383	13.518	10.417	4.555
8	Romi Ferdiansyah Harahap	2.41	13.5	3.57	13.945	6.829
9	Russel Abia Siboro	11.113	10.331	8.008	4.866	4.555
10	Samuel Parningotan Simbolon	5.165	6.383	3.57	4.866	14.388
11	Satria Haikal Pardamaian Napitupulu	11.113	6.383	14.309	13.945	13.606
12	Tommy Herlambang	11.113	10.331	3.57	4.866	4.555
13	Yazid Bustami	5.165	13.5	9.574	4.866	4.555
14	Ahmad Farhan Lubis	5.165	10.331	11.543	10.417	7.89
15	Ananda Ari Pratama	1.298	3.302	8.008	4.866	10.51
16	Ilham Hanafi	1.298	3.302	3.57	4.866	4.555
17	Hafiz Ramadhan	5.165	10.331	11.543	4.866	11.664
18	Budi Setiawan	11.113	3.302	3.57	4.866	7.89

6. Calculating the Preference Value (Vi).

Table 5. Vi Value

No	Name	C1	C2	C3	C4	C5	Vi
1	Mhd. Rangga Prakoso	5.165 * 0.2 = 1.033	1.785 * 0.3 = 0.536	11.543 * 0.2 = 2.309	4.866 * 0.15 = 0.73	11.664 * 0.15 = 1.75	6.358
2	Muammar Khadafi	11.113 * 0.2 = 2.223	6.383 * 0.3 = 1.915	3.57 * 0.2 = 0.714	10.417 * 0.15 = 1.563	8.996 * 0.15 = 1.349	7.764
3	Muhammad Al Hasby Ginting	11.113 * 0.2 = 2.223	1.785 * 0.3 = 0.536	11.543 * 0.2 = 2.309	10.417 * 0.15 = 1.563	12.827 * 0.15 = 1.924	8.555
4	Muhammad Ary Irawan	11.113 * 0.2 = 2.223	13.5 * 0.3 = 4.05	3.57 * 0.2 = 0.714	12.765 * 0.15 = 1.915	4.555 * 0.15 = 0.683	9.585
5	Muhammad Hakim Shaputra	11.113 * 0.2 = 2.223	10.331 * 0.3 = 3.099	8.008 * 0.2 = 1.602	10.417 * 0.15 = 1.563	9.749 * 0.15 = 1.462	9.949
6	Ramot Lastropain Lumban Batu	11.113 * 0.2 = 2.223	6.383 * 0.3 = 1.915	6.459 * 0.2 = 1.292	4.866 * 0.15 = 0.73	4.555 * 0.15 = 0.683	6.843
7	Risko Syahputra	5.165 * 0.2 = 1.033	6.383 * 0.3 = 1.915	13.518 * 0.2 = 2.704	10.417 * 0.15 = 1.563	4.555 * 0.15 = 0.683	7.898
8	Romi Ferdiansyah Harahap	2.41 * 0.2 = 0.482	13.5 * 0.3 = 4.05	3.57 * 0.2 = 0.714	13.945 * 0.15 = 2.092	6.829 * 0.15 = 1.024	8.362
9	Russel Abia Siboro	11.113 * 0.2 = 2.223	10.331 * 0.3 = 3.099	8.008 * 0.2 = 1.602	4.866 * 0.15 = 0.73	4.555 * 0.15 = 0.683	8.337
10	Samuel Parningotan Simbolon	5.165 * 0.2 = 1.033	6.383 * 0.3 = 1.915	3.57 * 0.2 = 0.714	4.866 * 0.15 = 0.73	14.388 * 0.15 = 2.158	6.55
11	Satria Haikal Pardamaian Napitupulu	11.113 * 0.2 = 2.223	6.383 * 0.3 = 1.915	14.309 * 0.2 = 2.862	13.945 * 0.15 = 2.092	13.606 * 0.15 = 2.041	11.133
12	Tommy Herlambang	11.113 * 0.2 = 2.223	10.331 * 0.3 = 3.099	3.57 * 0.2 = 0.714	4.866 * 0.15 = 0.73	4.555 * 0.15 = 0.683	7.449
13	Yazid Bustami	5.165 * 0.2 = 1.033	13.5 * 0.3 = 4.05	9.574 * 0.2 = 1.915	4.866 * 0.15 = 0.73	4.555 * 0.15 = 0.683	8.411
14	Ahmad Farhan Lubis	5.165 * 0.2 = 1.033	10.331 * 0.3 = 3.099	11.543 * 0.2 = 2.309	10.417 * 0.15 = 1.563	7.89 * 0.15 = 1.184	9.188
15	Ananda Ari Pratama	1.298 * 0.2 = 0.26	3.302 * 0.3 = 0.991	8.008 * 0.2 = 1.602	4.866 * 0.15 = 0.73	10.51 * 0.15 = 1.577	5.16
16	Ilham Hanafi	1.298 * 0.2 = 0.26	3.302 * 0.3 = 0.991	3.57 * 0.2 = 0.714	4.866 * 0.15 = 0.73	4.555 * 0.15 = 0.683	3.378
17	Hafiz Ramadhan	5.165 * 0.2 = 1.033	10.331 * 0.3 = 3.099	11.543 * 0.2 = 2.309	4.866 * 0.15 = 0.73	11.664 * 0.15 = 1.75	8.921
18	Budi Setiawan	11.113 * 0.2 = 2.223	3.302 * 0.3 = 0.991	3.57 * 0.2 = 0.714	4.866 * 0.15 = 0.73	7.89 * 0.15 = 1.184	5.842

7. Ranking by Lowest Score (Employee Recruitment Quota: 3 People)

Table 6. Employee Recruitment Results

No	Name	Vi	Information
1	Ilham Hanafi	3.378	Worthy of Acceptance
2	Ananda Ari Pratama	5.160	Worthy of Acceptance
3	Budi Setiawan	5.842	Worthy of Acceptance
4	Mhd. Rangga Prakoso	6.358	Not Worth Accepting
5	Samuel Parningotan Simbolon	6.550	Not Worth Accepting
6	Ramot Lastropain Lumban Batu	6.843	Not Worth Accepting
7	Tommy Herlambang	7.449	Not Worth Accepting
8	Muammar Khadafi	7.764	Not Worth Accepting
9	Risko Syahputra	7.898	Not Worth Accepting

No	Name	Vi	Information
10	Russel Abia Siboro	8.337	Not Worth Accepting
11	Romi Ferdiansyah Harahap	8.362	Not Worth Accepting
12	Yazid Bustami	8.411	Not Worth Accepting
13	Muhammad Al Hasby Ginting	8.555	Not Worth Accepting
14	Hafiz Ramadhan	8.921	Not Worth Accepting
15	Ahmad Farhan Lubis	9.188	Not Worth Accepting
16	Muhammad Ary Irawan	9.585	Not Worth Accepting
17	Muhammad Hakim Shaputra	9.949	Not Worth Accepting
18	Satria Haikal Pardamaian Napitupulu	11.133	Not Worth Accepting

4. Conclusion

Based on the research conducted in developing a web-based decision support system for new employee recruitment using the ORESTE method at PT. Intan Havea Industry, it can be concluded that the system is capable of generating objective and structured ranking results for prospective employees. This ranking output supports the company in selecting candidates more accurately by relying on quantifiable criteria rather than subjective judgments. Furthermore, the implementation of the system significantly accelerates data processing in the recruitment decision-making process, allowing the company to handle large volumes of applicant data more efficiently and consistently across different recruitment periods. The use of the ORESTE method has proven effective in simplifying complex multi-criteria assessments by prioritizing candidates based on their relative performance, thus enhancing transparency, reliability, and accountability in the recruitment workflow. Additionally, the system developed in this study provides automated recruitment announcements for each selection period, which can be accessed directly by employees, ensuring timely and clear communication from the organization. Although the system has demonstrated strong functionality and considerable benefits, future research is recommended to expand the model by integrating additional decision-making methods to enhance accuracy, incorporating machine learning techniques for predictive candidate analysis, or adding mobile-based access to improve system usability. Further studies may also include integrating broader criteria such as behavioral assessments, psychometric testing, and long-term performance predictions to support more comprehensive recruitment evaluations. These enhancements can strengthen the system's capability and ensure its continued relevance in supporting organizational human resource strategies..

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