
Implementation of the Standard Deviation Multi-Objective Optimization by Ratio Analysis Method in Warehouse Staff Recruitment Selection

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ABSTRACT

The warehouse staff selection process has a crucial role in ensuring optimal operational efficiency and logistics management. A selection approach that considers aspects of technical skills, work experience, and compatibility with the organization's culture is essential in ensuring the efficiency and effectiveness of logistics management. The labor selection process, including in the context of warehouse staff recruitment, often faces challenges due to subjectivity in decision-making. The implementation of the SD-MOORA method is the main goal in this study in the process of accepting warehouse staff to improve the objectivity and accuracy of candidate selection, the results of this study are expected to contribute to improving the efficiency of the labor selection process and support data-based decision-making in human resource management. The data used in this study consists of 8 candidates and 6 criteria in the selection of warehouse staff admission. The final outcome of optimizing the SD-MOORA method for ranking warehouse staff admissions shows that GT secured the top rank with a value of 0.3827, indicating it is the most suitable candidate according to the selection criteria. AN followed in second place with a score of 0.3752, and BD placed third with a score of 0.3579. This study significantly contributes to advancing the development of decision support systems for warehouse staff selection by applying the SD-MOORA method. By objectively considering the weighting of criteria using standard deviations, this approach enhances both the accuracy and transparency of candidate rankings.

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INTRODUCTION

The warehouse staff selection process has a crucial role in ensuring optimal operational efficiency and logistics management. Competent warehouse staff can increase productivity through proper handling of goods, accurate stock management, and efficient order processing (Arshad, Setiawansyah, et al., 2024). Conversely, errors in selection can lead to operational inefficiencies, delays in distribution, and increased logistics costs. Therefore, the application of a systematic selection method, based on objective criteria such as technical skills, rigor, and the ability to work in a team, is a strategic step in supporting the

smooth supply chain. In supply chain management, warehouse staff act as the main link in the movement of goods from suppliers to customers. The success of warehouse operations depends not only on infrastructure and technology, but also on the competence of the human resources who run it. Factors such as accuracy in inventory recording, speed in processing incoming and outgoing goods, and compliance with work safety procedures are the main performance indicators in warehouse operations (Hadad et al., 2025).

A selection approach that considers aspects of technical skills, work experience, and compatibility

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with the organization's culture is essential in ensuring the efficiency and effectiveness of logistics management. The labor selection process, including in the context of warehouse staff recruitment, often faces challenges due to subjectivity in decision-making (Lu et al., 2022; Wang et al., 2025). Reliance on subjective judgment, such as the interviewer's personal preferences or other non-objective factors (Barman et al., 2024; Liu et al., 2024), can lead to the selection of candidates that are less suited to operational needs. In addition, the absence of a selection system that systematically considers various criteria, such as technical skills, experience, rigor, and teamwork skills, can reduce the effectiveness of the recruitment process. As a result, organizations are at risk of operational inefficiencies, increased training costs, and low employee retention. Therefore, a more structured and data-driven selection is essential to ensure that the selected candidates truly meet the job requirements and can contribute optimally to the company's efficiency and productivity (Gaddi et al., 2024; Setiawansyah, 2024b; Yudhistira et al., 2024).

The Decision Support System (DSS) plays an important role in prioritizing accuracy and objectivity in candidate selection by suppressing the influence of subjectivity during decision-making (Su et al., 2023; Tešić et al., 2022). By utilizing data-driven methods and multi-criteria analysis, DSS allows candidate assessments to be carried out systematically based on relevant indicators, such as technical skills, work experience, productivity, and teamwork ability. Additionally, the use of DSS can improve selection efficiency by automating the process of screening and ranking candidates, thereby reducing the potential for human bias (Megawaty et al., 2025; Setiawansyah, 2024a). Applying a structured decision approach, the labor selection process becomes more accurate and efficient, but also contributes to the efficiency and effectiveness of overall human resource management. In addition to increasing objectivity, DSS also allows companies to adjust the weight of selection criteria according to the specific needs of the job. With the flexibility to prioritize criteria, such as accuracy in stock recording for warehouse staff or communication skills for customer service staff, DSS can produce more accurate and relevant decisions. In addition, the use of technology in DSS allows integration with human resource management (HRM) systems and candidate databases, making the selection process more transparent and auditable (Tronnebati et al., 2024). Another advantage of DSS is its ability to provide comparative analysis of prospective employees, allowing companies to benchmark against the best candidates based on historical data and previous recruitment trends. With the proper implementation of DSS, companies can not only improve recruitment effectiveness, but also optimize available resources, reduce turnover rates, and increase employee job satisfaction through fairer and competency-based selection (Tronnebati et al., 2024; Zeng et al., 2023).

The Multi-Objective Optimization by Ratio Analysis (MOORA) method is one of the effective approaches in selecting candidates on multi-criteria issues (Magableh, 2024; Rani et al., 2023), including in the labor selection process. MOORA offers the advantage of handling a wide range of diverse criteria in a systematic and objective manner. This method works by normalizing the value of each criterion, then calculating the optimization ratio based on the criteria that are beneficial and must be minimized (cost criteria). In this way, MOORA is able to rank candidates more accurately, ensuring that selection decisions are based on measurable evaluations and not just subjectivity. MOORA has advantages in terms of simplicity of calculation as well as flexibility in accommodating various criteria weights according to the specific needs of the organization (Fidan et al., 2024; Yagmahan & Yilmaz, 2023). In the context of warehouse staff selection, for example, through this method, candidates can be evaluated based on criteria such as thoroughness, work experience history, work efficiency, and technical expertise. By implementing MOORA, companies can obtain more accurate recommendations in selecting the best candidates, thereby improving operational efficiency and reducing the potential for errors in recruitment. Therefore, MOORA is one of the right methods in the decision support system for optimal selection in multi-criteria issues (Wang, Darwis, et al., 2024).

The Standard Deviation Multi-Objective Optimization by Ratio Analysis (SD-MOORA) method is an effective approach to increase objectivity in candidate evaluation on multi-criteria problems (Arshad, Sintaro, et al., 2024; Isnain & Rahmanto, 2024). Weighting using Standard Deviation allows each criterion to gain weight based on the degree of variation in its data, where the criteria with higher variation will have more weight because they are considered more influential in candidate differentiation (Mukhametzyanov, 2021; Xie et al., 2024). This approach reduces subjectivity in weighting, which is often a challenge in decision-makers' preference-based methods. The SD-MOORA method is easily integrated within DSS, allowing for automation in the candidate evaluation process. With proper implementation, companies can reduce recruitment time and costs while improving accuracy in selecting competent staff. The SD-MOORA approach is an effective and innovative solution in selecting a multi-criteria-based workforce.

Research on decision support systems in the warehouse staff recruitment process is generally still dominated by conventional methods such as SAW, TOPSIS, and standard MOORA. Although these methods are capable of generating candidate rankings, their main weakness lies in the determination of criterion weights, which are often subjective, potentially causing bias in the final results. Several studies have attempted to address this by using objective weighting methods, but few have explored the integration of standard deviation as a statistical

approach to enhance accuracy and fairness in evaluation. In addition, the application of more adaptive methods to candidate data variations in the specific context of warehouse staff recruitment is still very limited. Thus, there is a research gap in the need for the development and implementation of the SD-MOORA method that can minimize subjectivity in weight determination, enhance system reliability, and provide more objective and transparent recommendations in the selection of warehouse staff.

This study aims to implement the SD-MOORA method in the process of accepting warehouse staff to improve the objectivity and accuracy of candidate selection, the results of this research are expected to contribute to improving the efficiency of the labor selection process and supporting data-based decision-making in human resource management.

RESEARCH METHOD

1. Research Concept Framework

The research framework is a systematic structure that summarizes the main steps in a study to achieve the research objectives that have been set (Sulistiani et al., 2023). With the existence of a research framework, the research process becomes more directed, consistent, and accountable academically (Wang, Setiawansyah, et al., 2024). In addition, the research framework also helps in establishing relationships between the variables being studied and ensuring that the approach used is in accordance with the research objectives. Figure 1 presents an overview of the research flow conducted.

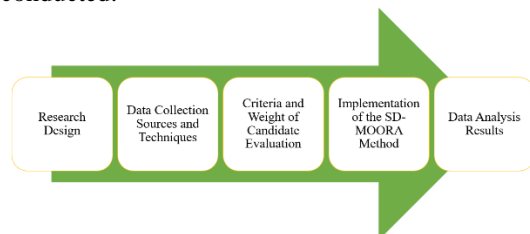


Figure 1. Research Concept Framework

This study will adopt a quantitative design with a case study approach to test the application of the SD-MOORA method in the selection of warehouse staff. This study uses data obtained from information from applicants for warehouse staff positions, including educational background, technical skills, work experience, and test and interview results. The data collection technique will involve observation of the recruitment process, interviews with HRD management to determine relevant selection criteria, and the use of questionnaires to assess the candidate's competence. The data used in this study consists of 8 candidates and 6 criteria in the selection of warehouse staff admission. The evaluation criteria used include rigor, work experience, technical skills, work speed, and ability to work in a team.

The weights for each criterion will be calculated using Standard Deviation (SD), which facilitates the giving of weights based on the degree of variation between the criteria. Once the weight is determined, the SD-MOORA method will be applied to normalize and calculate the optimization ratio for each candidate, resulting in a ranking that reflects the best candidate for the position. Analysis of the results of the application of this method will be carried out to assess the level of effectiveness of SD-MOORA in improving the objectivity and accuracy of candidate selection, as well as to compare candidate ratings between the SD-MOORA method and conventional selection methods. This research is expected to show how the application of this method can improve efficiency, accuracy, and objectivity in the selection of warehouse staff in accordance with the company's operational needs.

2. Standard Deviation Multi-Objective Optimization by Ratio Analysis (SD-MOORA) Method

The Standard Deviation Multi-Objective Optimization by Ratio Analysis (SD-MOORA) method is a combination of the Standard Deviation (SD) weighting method with Multi-Objective Optimization by Ratio Analysis (MOORA) in multi-criteria decision-making. This method aims to improve objectivity in choosing the best alternative by referring to various relevant criteria. SD-MOORA provides an edge in decision selection by improving the accuracy of weighting criteria and ensuring that alternative rankings are carried out in a more fair and measurable manner.

A decision matrix is a table that presents alternative decisions based on a number of criteria used in a multi-criteria decision-making process. Typically, this matrix contains numerical values that show the performance of each alternative against each criterion.

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

The next stage is to normalize the data that has been collected so that all criteria are at a consistent scale. This is important to avoid bias from scale differences between criteria. Normalization is carried out by dividing the value of each criterion by the maximum or minimum value in the existing data. This normalization makes the data more comparable.

$$x_{ij}^* = \frac{x_{ij}}{\sqrt{[\sum_{i=1}^j x_{ij}^2]}} \quad (2)$$

Standard Deviation (SD) is a statistical measure that describes the extent to which data is scattered or varies from the average value. In the context of the Standard Deviation Multi-Objective Optimization by Ratio Analysis (SD-MOORA) method, calculating the SD for each criterion is an

important step to determine the right weight for each criterion in the candidate selection process.

$$\sigma_j = \sqrt{\frac{1}{n} \sum_{i=1}^n (x_{ij}^* - \bar{x}_{ij})^2} \quad (3)$$

Calculating the criterion weights in the Standard Deviation Multi-Objective Optimization by Ratio Analysis (SD-MOORA) method involves using the Standard Deviation (SD) to determine how important each criterion is in distinguishing candidates. The determination of the weight of each criterion is carried out by considering the degree of variation of data relevant to the criteria. The greater the variation, the greater the weight given, as the criteria with greater variation are considered more relevant in distinguishing candidates.

$$w_j = \frac{\sigma_j}{\sum_{j=1}^n \sigma_j} \quad (4)$$

Once the data is weighted, the next step is to calculate the optimization ratio for each candidate. This optimization ratio is calculated by comparing the weighted values between the criteria that should be maximized (e.g., technical skills) and the criteria that should be minimized (e.g., less relevant experience). This ratio results in a ranking for each candidate based on an optimal combination of criteria.

$$y_i = \sum_{j=1}^n w_j * x_{ij}^* - \sum_{j=g+1}^n w_j * x_{ij}^* \quad (5)$$

RESULTS AND DISCUSSION

In the process of hiring warehouse staff, selecting the right candidate is essential to ensure optimal operational efficiency and inventory management. The application of the SD-MOORA method as an objective and systematic multi-criteria decision-making approach. The Standard Deviation method is used to determine the weight of the criteria based on the level of variability of the data, thus providing a more representative weight distribution to the actual conditions. Furthermore, the MOORA method is applied to evaluate and rank candidates based on their performance against various criteria. With the SD-MOORA method, the selection process becomes more transparent and data-based, reducing subjectivity in decision-making. The results of the SD-MOORA method provide recommendations for the best candidates with a more accurate analysis, so that they can be used as a basis for improving the effectiveness of recruiting warehouse staff in the company.

1. Warehouse Staff Receipt Data Source

The data source in this study was obtained from the results of the performance evaluation of prospective warehouse staff who participated in the selection process. Data was collected through a variety of methods, including interviews, skills tests, as well as direct assessments from warehouse managers of candidates who had undergone the trial

phase. In addition, supporting data is also obtained from the company's recruitment documents, which include employment history, skills certifications, and psychological test results. In this study, each candidate is assessed based on several key criteria that reflect the competencies and performance required for warehouse staff positions. The criteria data used are shown in table 1.

Table 1. Criteria Data

Code	Criteria Name	Type
K1	Work Speed	Benefit
K2	Accuracy in Stock Management	Benefit
K3	Teamwork Skills	Benefit
K4	Responsibility	Benefit
K5	Understanding of Warehouse Management System	Benefit
K6	Problem-Solving Ability	Benefit

Work Speed is the candidate's ability to complete tasks quickly and efficiently, especially in the process of storing, retrieving, and distributing goods. Accuracy in Stock Management is the ability to record, calculate, and manage stock accurately to avoid errors in inventory. Teamwork Ability is a skill in collaborating with colleagues to ensure warehouse operations run smoothly. Responsibility is an attitude of professionalism in carrying out duties and maintaining the reliability of warehouse operations. Understanding the Warehouse Management System is the ability to understand and operate a digital-based stock management system (WMS – Warehouse Management System) or manual methods used by the company. Problem Solving Ability is a skill in overcoming obstacles or operational obstacles that can occur in the warehouse, such as delivery delays or stock mismatches.

The warehouse staff candidate assessment data above illustrates an evaluation based on several criteria that are considered important in determining a candidate's eligibility for the position. This assessment includes eight key criteria that focus on competencies and skills relevant to tasks in the warehouse environment. Each candidate is rated on a scale of 1 to 10, with higher scores indicating better performance or quality. The assessment data of the warehouse staff candidates used is shown in table 2.

Table 2. Assessment Data

Name	K1	K2	K3	K4	K5	K6
AN	8	7	9	8	7	9
BD	7	8	8	9	6	8
CH	6	7	7	6	8	7
DE	9	6	7	7	8	8
EK	8	9	6	8	7	7
FD	7	8	8	8	7	8
GT	8	8	9	9	8	7
HD	6	7	6	7	9	6

This assessment data can be used in the selection process using the SD-MOORA method to objectively determine the best candidates.

2. Implementation of the SD-MOORA Method in Warehouse Staff Reception

The application of the SD-MOORA method in the selection of warehouse staff admissions aims to produce objective and accurate decisions by considering various relevant criteria. This method combines ratio analysis with standard deviation calculation to assess and compare each candidate based on several important criteria. In its application, first normalization is carried out to the assessment data for each criterion, then the weight is calculated for each criterion based on the standard deviation. Furthermore, a ranking process is carried out for candidates, which results in a priority order based on their performance in each criterion that has been analyzed. By using SD-MOORA, companies can select the best candidates more systematically and transparently, reduce the influence of subjectivity in the decisions taken, and guarantee that all important factors in the performance of the warehouse staff are considered objectively.

The decision matrix serves as a table that presents alternative decisions according to the relevant criteria in the multicriteria decision-making process, which is created with the (1) approach.

$$X = \begin{bmatrix} 8 & 7 & 9 & 8 & 7 & 9 \\ 7 & 8 & 8 & 9 & 6 & 8 \\ 6 & 7 & 7 & 6 & 8 & 7 \\ 9 & 6 & 7 & 7 & 8 & 8 \\ 8 & 9 & 6 & 8 & 7 & 7 \\ 7 & 8 & 8 & 8 & 7 & 8 \\ 8 & 8 & 9 & 9 & 8 & 7 \\ 6 & 7 & 6 & 7 & 9 & 6 \end{bmatrix}$$

The next stage is to normalize the data that has been collected so that all criteria are at a consistent scale, this is important to avoid bias from scale differences between criteria. Normalization is carried out using (2).

$$x_{11}^* = \frac{x_{11}}{\sqrt{[\sum_{i=1}^j x_{11,18}^2]}} = \frac{8}{\sqrt{(8^2) + (7^2) + (6^2) + (9^2) + (8^2) + (7^2) + (8^2) + (6^2)}}$$

$$x_{11}^* = \frac{8}{21.048} = 0.3801$$

The overall results of the normalization value calculation are shown in table 3.

Table 3. Normalization Data

Name	K1	K2	K3	K4	K5	K6
AN	0.3	0.3	0.4	0.3	0.3	0.4
	801	278	196	621	278	215
BD	0.3	0.3	0.3	0.4	0.2	0.3
	326	746	730	074	810	746

Name	K1	K2	K3	K4	K5	K6
CH	0.2	0.3	0.3	0.2	0.3	0.3
	851	278	264	716	746	278
DE	0.4	0.2	0.3	0.3	0.3	0.3
	276	810	264	169	746	746
EK	0.3	0.4	0.2	0.3	0.3	0.3
	801	215	798	621	278	278
FD	0.3	0.3	0.3	0.3	0.3	0.3
	326	746	730	621	278	746
GT	0.3	0.3	0.4	0.4	0.3	0.3
	801	746	196	074	746	278
HD	0.2	0.3	0.2	0.3	0.4	0.2
	851	278	798	169	215	810

Standard Deviation (SD) is a statistical measure that describes the extent to which the data is scattered or varies from the average value, calculating SD using (3) for each criterion is an important step to determine the appropriate weight for each criterion in the candidate selection process.

$$\sigma_1 = \sqrt{\frac{1}{n} \sum_{i=1}^n (x_{11,18}^* - \bar{x}_{11,18})^2}$$

$$\sigma_1 = \sqrt{\frac{1}{8} * 0.017776524}$$

$$\sigma_1 = \sqrt{0.002222065} = 0.0471$$

$$\sigma_2 = \sqrt{\frac{1}{n} \sum_{i=1}^n (x_{21,18}^* - \bar{x}_{21,18})^2}$$

$$\sigma_2 = \sqrt{\frac{1}{8} * 0.013157895}$$

$$\sigma_2 = \sqrt{0.001644737} = 0.0406$$

$$\sigma_3 = \sqrt{\frac{1}{n} \sum_{i=1}^n (x_{31,38}^* - \bar{x}_{31,38})^2}$$

$$\sigma_3 = \sqrt{\frac{1}{8} * 0.021739130}$$

$$\sigma_3 = \sqrt{0.002717391} = 0.0521$$

$$\sigma_4 = \sqrt{\frac{1}{n} \sum_{i=1}^n (x_{41,48}^* - \bar{x}_{41,48})^2}$$

$$\sigma_4 = \sqrt{\frac{1}{8} * 0.015368852}$$

$$\sigma_4 = \sqrt{0.001921107} = 0.0438$$

$$\sigma_5 = \sqrt{\frac{1}{n} \sum_{i=1}^n (x_{51,58}^* - \bar{x}_{51,58})^2}$$

$$\sigma_5 = \sqrt{\frac{1}{8} * 0.013157895}$$

$$\sigma_5 = \sqrt{0.001644737} = 0.0406$$

$$\sigma_6 = \sqrt{\frac{1}{n} \sum_{i=1}^n (x_{61,68}^* - \bar{x}_{61,68})^2}$$

$$\sigma_6 = \sqrt{\frac{1}{8} * 0.013157895}$$

$$\sigma_6 = \sqrt{0.001644737} = 0.0406$$

Calculate the weight of the criteria in the SD-MOORA method based on the degree of variation in the data related to the criteria. The greater the variation, the greater the weight given, since the criteria with greater variation are considered more relevant which is calculated using (4).

$$w_1 = \frac{\sigma_1}{\sum_{j=1}^n \sigma_{1,6}}$$

$$w_1 = \frac{0.0471}{0.0471 + 0.0406 + 0.0521 + 0.0438 + 0.0406 + 0.0406}$$

$$w_1 = 0.1780$$

$$w_2 = \frac{\sigma_2}{\sum_{j=1}^n \sigma_{1,6}}$$

$$w_2 = \frac{0.0406}{0.0471 + 0.0406 + 0.0521 + 0.0438 + 0.0406 + 0.0406}$$

$$w_2 = 0.1532$$

$$w_3 = \frac{\sigma_3}{\sum_{j=1}^n \sigma_{1,6}}$$

$$w_3 = \frac{0.0521}{0.0471 + 0.0406 + 0.0521 + 0.0438 + 0.0406 + 0.0406}$$

$$w_3 = 0.1969$$

$$w_4 = \frac{\sigma_4}{\sum_{j=1}^n \sigma_{1,6}}$$

$$w_4 = \frac{0.0438}{0.0471 + 0.0406 + 0.0521 + 0.0438 + 0.0406 + 0.0406}$$

$$w_4 = 0.1655$$

$$w_5 = \frac{\sigma_5}{\sum_{j=1}^n \sigma_{1,6}}$$

$$w_5 = \frac{0.0406}{0.0471 + 0.0406 + 0.0521 + 0.0438 + 0.0406 + 0.0406}$$

$$w_5 = 0.1532$$

$$w_6 = \frac{\sigma_6}{\sum_{j=1}^n \sigma_{1,6}}$$

$$w_6 = \frac{0.0406}{0.0471 + 0.0406 + 0.0521 + 0.0438 + 0.0406 + 0.0406}$$

$$w_6 = 0.1532$$

Once the data is weighted, the next step is to calculate the optimization ratio for each candidate. This optimization ratio is calculated by comparing the weighted values between the criteria that must be maximized (e.g. technical skills) and the criteria that must be minimized (e.g. less relevant experience) calculated using (5).

$$y_1 = \sum_{j=1}^n w_{1,6} * x_{11,61}^*$$

$$y_1 = (w_1 * x_{11}^*) + (w_2 * x_{21}^*) + (w_3 * x_{31}^*) + (w_4 * x_{41}^*) + (w_5 * x_{51}^*) + (w_6 * x_{61}^*)$$

$$y_1 = (0.1780 * 0.3801) + (0.1532 * 0.3278) + (0.1969 * 0.4196) + (0.1655 * 0.3621) + (0.1532 * 0.3278) + (0.1532 * 0.4215)$$

$$y_1 = 0.3752$$

The calculation of the overall optimization value is shown in table 4.

Name	Final Value of Optimization
AN	0.3752
BD	0.3579
CH	0.3178
DE	0.3507
EK	0.3477
FD	0.3576
GT	0.3827
HD	0.3161

The final result of the application of the SD-MOORA method in the ranking of warehouse staff admissions is in the form of a list of candidate rankings based on the final score obtained from the calculation of this method. The ranking results in the receipt of warehouse staff are shown in table 5.

Name	Final Value of Optimization	Ranking
GT	0.3827	1
AN	0.3752	2
BD	0.3579	3
FD	0.3576	4
DE	0.3507	5
EK	0.3477	6
CH	0.3178	7
HD	0.3161	8

Based on the final results of the optimization of the SD-MOORA method in the ranking of warehouse staff admissions, the first rank with a value of 0.3827 was obtained by GT, which shows that it is the best candidate who meets the selection criteria the best. The second place with a value of 0.3752 was obtained by AN, and the first place with a value of 0.3579 was obtained by BD. The narrow score difference between BD and FD, who ranked fourth with 0.3576, shows that the competition between the two is quite tight. Furthermore, DD occupies the fifth position with 0.3507, followed by EK in sixth place with 0.3477. Meanwhile, CH and HD are ranked seventh and eighth respectively with scores of 0.3178 and 0.3161. The results of this ranking provide an objective evaluation of the level of suitability of each candidate with the company's needs, so that it becomes a reference in choosing the best warehouse staff.

An important contribution of this research lies in the development of decision support systems for the warehouse staff selection process by applying the SD-MOORA method. By considering the weighting of the criteria objectively using standard deviations, this method improves accuracy and transparency in candidate ranking. In contrast to conventional methods that often rely on subjective assessment, the approach used guarantees that candidate evaluations are carried out based on factors that are important for the operational needs of the warehouse. In addition, this research also provides new insights into the application of multi-criteria methods for labor recruitment, especially in the logistics and warehousing industry. The results of this study can be used as a reference for companies in improving the efficiency of warehouse staff selection and as a basis for further development in optimizing the recruitment system based on data analysis.

CONCLUSION

This study aims to apply the SD-MOORA method in the selection process of warehouse staff to enhance objectivity and accuracy in identifying the best candidates. The results are expected to contribute to greater efficiency in the workforce selection process and support data-driven decision-making in human resource management. According to the SD-MOORA ranking, GT ranked first with a final score of 0.3827, confirming that he is the most suitable candidate who best meets the selection criteria. AN secured second place with a score of 0.3752, while BD placed third with a score of 0.3579. These rankings provide an objective assessment of how well each candidate aligns with the company's needs, offering a solid foundation for decision-making in recruiting the best warehouse staff. This research makes a valuable contribution to the development of decision support systems for warehouse staff selection by applying the SD-MOORA method. By objectively considering the weighting of

criteria through standard deviations, this approach enhances both the accuracy and transparency of candidate rankings. The findings of this study can serve as a reference for companies looking to improve the efficiency of warehouse staff selection and provide a foundation for further developments aimed at optimizing the recruitment process through data analysis.

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