

Developing an Effective Employee Selection Model to Improve Company Performance at PT. Citra Niaga Abadi

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Submitted : 10-06-2024, Accepted : 10-07-2024, Published : 10-08-2024

Abstract

This study aims to develop and analyze an effective employee selection model and its effect on company performance, by considering the role of employee suitability as a moderating variable. This study uses quantitative methods with linear regression techniques to test the relationship between the Employee Selection Model, Employee Suitability, and Company Performance. The results of the analysis show that the Employee Selection Model has a significant effect on Employee Suitability ($B = 0.581$, $t = 10.289$, $\text{sig.} = 0.000$) with a coefficient of determination ($R^2 = 0.519$). After adding the moderation variable, it was found that the Employee Selection Model and Employee Suitability together have a significant effect on Company Performance ($F = 32.548$, $\text{sig.} = 0.000$), although the coefficient of determination has decreased ($R^2 = 0.402$). The conclusion of this study is that the Employee Selection Model has a major role in improving Company Performance, both directly and with the moderation of Employee Suitability. However, the impact of Employee Suitability on Company Performance is smaller than that of the Employee Selection Model. Therefore, companies need to focus more on developing a competency-based selection system to ensure that recruited employees have the abilities and characteristics that match the needs of the organization.

Keywords : Employee Selection, Employee Suitability, Company Performance, Organizational Effectiveness.

Introduction

In today's competitive business landscape, an effective employee selection process is critical for organizations aiming to achieve competitive advantage and improve organizational performance. This process not only identifies candidates who align with job requirements but also fosters employee productivity, loyalty, and job satisfaction (Sella & Riofita, 2024). By selecting the right individuals, companies can significantly improve their overall performance, as effective recruitment and selection are closely linked to organizational success (Bristol-Alagbariya et al., 2024). Furthermore, a well-structured selection process contributes to the development of a skilled workforce, which is a critical component of human resource management (HRM) that drives sustainable competitive advantage (Muratbekulu et al., 2024). Ultimately, investing in a strong employee selection strategy enables organizations to attract and retain the best talent, thereby improving their productivity and market

position (Bristol-Alagbariya et al., 2024). Many organizations struggle to create an optimal selection model, often relying on traditional methods such as interviews and psychological testing. While these approaches have their advantages, they can lead to a mismatch between employees and job demands, negatively impacting overall performance (Kazmi et al., 2024). In contrast, the adoption of technologies such as artificial intelligence (AI) and predictive analytics is gaining traction. AI can automate candidate screening, reducing human bias and increasing efficiency (Kazmi et al., 2024). Predictive analytics enhances this process by analyzing historical data to identify candidates who are likely to succeed in a particular role, thereby minimizing the risk of mismatch (Samvelyan & Shahnazaryan, 2024). However, the effectiveness of these modern methods is still debated, as organizations must ensure that their selection models are based on a thorough job analysis to accurately match candidate skills and competencies to job requirements (Parween & Goyal, 2025). Ultimately, a data-driven approach that integrates these technologies can lead to better decision-making and improved employee fit. To develop a more effective employee selection model, it is important to integrate competency-based selection methods with organizational culture analysis and data-driven recruitment strategies. Competency-based selection focuses on identifying key skills and behaviors required for job performance, ensuring that candidates have the competencies necessary to succeed in the organization (Perwitasari & Riharjo, 2025). Additionally, analyzing organizational culture helps identify candidates who align with the company's values and norms, driving better fit and increasing retention (Rokhani, 2024). By using data-driven recruiting and predictive analytics, organizations can leverage metrics to optimize their selection process, predict candidate success, and reduce bias (Warohmah & Riofita, 2024). Additionally, leveraging employee performance metrics allows companies to determine top performers, guiding targeted recruitment efforts (Khairina et al., 2024). This comprehensive approach not only improves recruitment effectiveness but also maximizes new employees' potential contributions to organizational growth and performance.

In analyzing various selection models across industries, it is critical to consider the integration of predictive analytics, machine learning, and artificial intelligence, as these technologies enhance the recruitment process. Predictive analytics can predict candidate success based on historical data,

allowing HR managers to make informed decisions and reduce bad hires (Warohmah & Riofita, 2024). Machine learning further automates candidate evaluation, minimizing bias and increasing efficiency in identifying top talent (Sobolieva-Tereshchenko, 2024). Additionally, competency-based selection focuses on critical skills and abilities, ensuring that candidates meet the specific needs of the role, which can lead to lower turnover rates (Br & Bhavikatti, 2024). The incorporation of AI tools streamlines recruitment, reduces decision-making errors, and saves time, ultimately benefiting organizational performance (Yuliana & Senen, 2023). Finally, psychological assessments provide a deeper understanding of a candidate's suitability for a role, improving the accuracy of selection decisions (Opada et al., 2024). By synthesizing these methods, HR managers can develop more effective selection models that are tailored to contemporary business challenges.

Literature Review

Employee Selection Theory

Employee selection is a strategic process in human resource management (HRM) that aims to place the right individuals in the right positions. According to Schmidt & Hunter (1998), effective selection methods can increase organizational productivity by up to 40% by selecting individuals who have the skills, personality, and motivation to match the job.

Employee selection is a critical component of Human Resource Management (HRM), which is strategically aimed at aligning the right individuals with the right roles to improve organizational performance. Effective selection methods, as highlighted by Schmidt and Hunter (1998), can increase productivity by up to 40% by ensuring candidates have the skills, personality, and motivation required for their positions (Musthaf, 2024). The process involves various techniques, such as interviews and psychological testing, which are essential to evaluate the candidate's suitability for the job (Kaur et al., 2024). A strong emphasis on person-job fit where an individual's abilities and personality align with the needs of the job further contributes to increased job satisfaction and retention (Musaba et al., 2024). By implementing a systematic employee selection process, organizations can make informed decisions that not only improve operational efficiency but also

encourage a more engaged and productive workforce (Warohmah & Riofita, 2024). In addition, the Resource-Based View (RBV) theory (Barney, 1991) states that superior human resources are strategic resources that can provide a competitive advantage for a company. Therefore, selecting quality employees through effective selection is a key factor in increasing organizational competitiveness.

Employee Selection Methods

The evolution of employee selection methods from traditional approaches to technology-based strategies has significantly improved selection accuracy. According to Pulakos (2005), the integration of data-based approaches and artificial intelligence (AI) can increase selection accuracy by up to 25% compared to conventional methods (Mollay et al., 2024). These modern techniques utilize objective metrics and predictive analytics, which utilize statistical models and machine learning algorithms to identify top candidates and predict job performance (Kalinouskaya, 2024). Adoption of AI not only streamlines the recruitment process but also helps reduce bias, leading to more informed and efficient decision-making (Kazmi et al., 2024). Ultimately, improving selection accuracy is critical for organizations, as it directly impacts employee performance, productivity, and engagement, thereby reducing turnover and driving better job fit (Tay et al., 2024). This shift towards technology-driven methods underscores the importance of embracing innovation in the recruitment landscape.

Effective Employee Selection Models

To improve the effectiveness of the recruitment process, various selection models have been developed, each with unique strengths. The Competency-Based Selection Model emphasizes measuring core competencies that are critical to job success, ensuring candidates possess the requisite skills and abilities (SHALINI & MURTHY, 2024). Complementing this, the Multistage Selection Process uses a step-by-step approach, including CV analysis, interviews, and skills testing, to comprehensively evaluate candidates and minimize the risk of bad hires (Samvelyan &

Shahnazaryan, 2024). Additionally, AI-driven Selection Models leverage algorithms for in-depth data analysis, increasing the accuracy and efficiency of candidate assessment while reducing bias (Warohmah & Riofita, 2024). Integrating these models with data analytics enables organizations to identify trends and insights that inform recruitment strategies, ultimately leading to better hiring decisions (Zhang et al., 2024). Additionally, leveraging technology enhances the recruitment process by providing tools that increase efficiency and speed in identifying top talent (Norman & Pahlawati, 2024). Together, these approaches create a robust framework for selecting candidates who align with the organization's values and needs.

Methods

This study uses a quantitative approach to measure the effectiveness of various employee selection methods in improving company performance. This approach was chosen in order to obtain objective data that can be analyzed statistically. In addition, this study also adopts descriptive and explanatory methods to describe employee selection practices used by companies and explain the relationship between selection models and company performance. Population This study will be conducted at a manufacturing company, Samples will be taken using purposive sampling techniques, Number of Respondents 100 respondents consisting of HR managers, supervisors, and employees who have gone through the selection process in the last 1-3 years. Variables in this study, concerning Independent Variables (X): Employee Selection Model with dimensions of competency-based interviews, Psychological tests and assessment centers, Use of AI in selection, People analytics in recruitment, while Dependent Variables (Z): Company Performance with dimensions of Employee productivity, Employee retention, Job satisfaction, Efficiency of the selection process. And the mediator variable is Employee suitability.

Results and Discussion

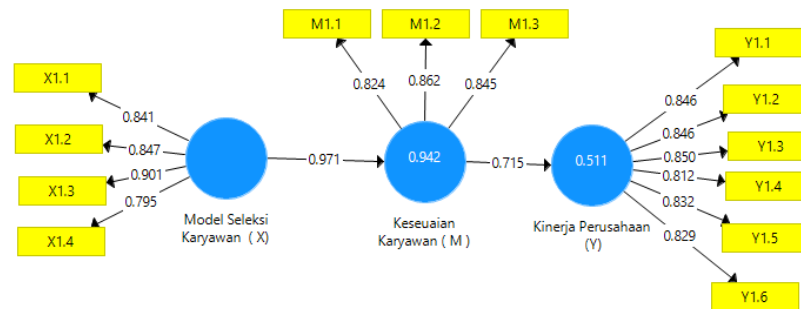


Figure 1. Research Model

1. Validity & Reliability Test

Validity Test Table

Correlations		
	Sig. (2-tailed)	Information
Employee Selection Model	0,000	Valid
Employee Suitability	0,000	Valid
Company performance	0,000	Valid
**. Correlation is significant at the 0.01 level (2-tailed).		

Interpretation

All items in this study have a significance value of 0.000 (<0.005), thus the items in this study are declared valid.

Table Reliability Test

Reliability Statistics	
Cronbach's Alpha	N of Items
0,795	3

Interpretation

All items in this study have a Cronbach's Alpha value of 0.795 (>0.70), thus all items in this study can be declared reliable and can be continued in the next research stage.

1. Linear Regression Analysis Model 1

R Square Table

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,721 ^a	0,519	0,514	1,288
a. Predictors: (Constant), Employee Selection Model				

Interpretation

The R square value in model 1 is 0.519, thus the influence of the Employee Selection Model has an influence of 51.9% on Company performance, while the remaining 49.1% is influenced by other variables outside this study.

Table T test

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,348	0,763		3,075	0,003
	Employee Selection Model	0,581	0,056	0,721	10,289	0,000
a. Dependent Variable: Employee Suitability						

Interpretation

Significance Test of t Variable Employee Selection Model

The value of $t = 10.289$ with $p\text{-value} = 0.000$ (less than 0.05). This means that the Employee Selection Model has a significant influence on Employee Suitability. While the Standardized Beta Value = 0.721, indicates that the Employee Selection Model has a positive and strong relationship with Employee Suitability.

1. Determinant Coefficient Analysis

Model 2

Table R Square

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,634 ^a	0,402	0,389	2,603
a. Predictors: (Constant), Employee Suitability, Employee Selection Model				

Interpretation

The R Square value = 0.402 or 40.2% indicates that after entering the moderating variable, the Employee Selection Model and the moderating variable together explain 40.2% of the variability in Employee Fit. Thus, the influence of the Employee Selection Model on Employee Fit is lower than before the moderating variable (R^2 in Model 1 = 51.9%). The remaining 59.8% is explained by other factors not included in the model..

Table F test

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	440,928	2	220,464	32,548	,000 ^b
	Residual	657,032	97	6,774		
	Total	1097,960	99			
a. Dependent Variable: Company performance						
b. Predictors: (Constant), Employee Suitability, Employee Selection Model						

Interpretation

1. F value (F-statistic)

The F value = 32.548 shows how much the overall regression model is able to explain the variation in the dependent variable (Company performance). This fairly large F value indicates that the model has a fairly good ability to explain changes in the dependent variable based on the

independent variables used.

2. Significance (Sig.)

The Sig. value = 0.000 (below 0.05) indicates that the overall regression model is significant at the 95% confidence level. This means that at least one of the independent variables in the model has a significant effect on the dependent variable. In other words, the Employee Selection Model and Employee Suitability together have a significant effect on Company performance.

Table t-test

Coefficients^a

		Unstandardized		Standardized			
		Coefficients		Coefficients			
Model		B	Std. Error	Beta	t	Sig.	
1	(Constant)	8,135	1,615		5,036	0,000	
	Employee Selection Model	0,654	0,165	0,450	3,970	0,000	
	Employee Suitability	0,410	0,204	0,228	2,009	0,047	

a. Dependent Variable: Company performance

Interpretation

1. Interpretation of Each Variable

1. Employee Selection Model

B value = 0.654, $t = 3.970$, and Sig. = 0.000 indicates that this variable has a significant effect on Company performance at a 95% confidence level (because Sig. < 0.05). Beta value (Standardized Coefficient) = 0.450 indicates that the Employee Selection Model has a fairly strong effect compared to other variables in the model. Thus, the better the Employee Selection Model, the more significant the Company performance will be.

2. Employee Suitability

B value = 0.410, $t = 2.009$, and Sig. = 0.047 indicates that this variable has a significant effect on Company performance, although with a smaller effect compared to the Employee Selection

Model. Beta value = 0.228 shows that Employee Suitability has a lower influence than the Employee Selection Model in explaining Company performance. Thus, the higher the level of employee suitability in the organization, the higher the Company performance, but its influence is smaller than the Employee Selection Model.

Conclusion

Based on the test results, this study examines the effect of the Employee Selection Model on Employee Suitability in Model 1, as well as its impact on Company performance with the addition of the Employee Suitability moderation variable in Model 2.

1. In Model 1, the t-test results show that the Employee Selection Model has a significant effect on Employee Suitability with a value of $B = 0.581$, $t = 10.289$, and $\text{sig.} = 0.000$. This shows that the better the employee selection system implemented by the company, the higher the level of employee suitability in the organization. The Beta value = 0.721 shows a strong influence of the Employee Selection Model on Employee Suitability.

2. Furthermore, the results of the R Square test in Model 1 show that 51.9% of the variation in Employee Suitability can be explained by the Employee Selection Model, while the other 48.1% is influenced by other factors outside the model. Thus, it can be concluded that an effective employee selection system has a significant contribution in determining the level of employee suitability in the company.

3. After developing the model by adding the Employee Suitability variable in Model 2, there was a change in the strength of the model. The results of the R Square test of Model 2 showed that the coefficient of determination decreased to 0.402, which means that only 40.2% of the variation in Company performance can be explained by the Employee Selection Model and Employee Suitability. This decrease indicates that although Employee Suitability plays a role in improving Company

performance, its effect is not too dominant in the relationship between the Employee Selection Model and Company performance.

4. However, the results of the F test in Model 2 show that overall, the Employee Selection Model and Employee Suitability together still have a significant effect on Company performance, with an F value = 32.548 and sig. = 0.000. This means that these two variables are still relevant in explaining Company performance.

5. Furthermore, the results of the t test of Model 2 show that the Employee Selection Model remains the most influential factor on Company performance, with a B value = 0.654, $t = 3.970$, and sig. = 0.000. Meanwhile, Employee Suitability also has a significant effect on Company performance, but with a smaller effect ($B = 0.410$, $t = 2.009$, sig. = 0.047). This shows that although Employee Suitability has an impact on Company performance, its effect is weaker than the Employee Selection Model.

Final Conclusion

From the results of this analysis, it can be concluded that the Employee Selection Model has a dominant role in improving Company performance, both directly and with the Employee Suitability variable as a moderation. However, the addition of the Employee Suitability variable does not significantly strengthen the relationship between the Employee Selection Model and Company performance, but rather slightly reduces the model's ability to explain the dependent variable. Therefore, companies need to put more emphasis on the effectiveness of the employee selection system as the main factor in improving organizational performance, while still considering the role of Employee Suitability as a supporting factor.

References

- Br, D., & Bhavikatti, Dr. V. I. (2024). A Study on Implementation and Evaluation Methods in Recruitment and Selection Process. *International Journal For Multidisciplinary Research*.
<https://doi.org/10.36948/ijfmr.2024.v06i05.29625>
- Bristol-Alagbariya, B., Ayanponle, L. O., & Ogedengbe, D. (2024). Operational efficiency through HR management: Strategies for maximizing budget and personnel resources. *International*

- Journal of Management & Entrepreneurship Research, 6(12), 3860–3870.
<https://doi.org/10.51594/ijmer.v6i12.1743>
- Kalinouskaya, I. (2024). Recruitment based on artificial intelligence technologies.
<https://doi.org/10.34660/inf.2020.41.65.002>
- Kaur, A. P., Deshmukh, A. R., Kumar, P., & Kumar, R. (2024). Recruitment and Selection Process and Its Evaluation at Emergence Learning Solutions. International Journal For Multidisciplinary Research, 6(6). <https://doi.org/10.36948/ijfmr.2024.v06i06.33757>
- Kazmi, S., Siddiqui, S., & Zafar, H. (2024). Harnessing the Power of A.I Technologies for Optimal Employee Recruitment and Selection Strategies. Pedagogi: Jurnal Penelitian Pendidikan, 7(2), 130–152. <https://doi.org/10.21009/jdmb.07.2.8>
- Mollay, M. H., Sharma, D. S., Kale, A. P., Anawade, P., & Gahane, S. (2024). Smart Hiring: Leveraging AI for Effective Employee Selection. 1–6.
<https://doi.org/10.1109/idicaiei61867.2024.10842754>
- Muratbekulu, R., Talapbayeva, G., Utepkaliyeva, K., & Yerniyazova, Z. (2024). Modern approaches to recruitment in small and medium –sized enterprises: effective strategies and methods. H. Dosmühamedov Atyndağy Atyrau Memlekettik Universitetiniñ Habarşysy, 272–282.
<https://doi.org/10.47649/vau.24.v75.i4.24>
- Musaba, M., Mawardi, A. A. K., Ihsan, S., Laksono, A. D., & Supratikta, H. (2024). A Review of The Effectiveness of Recruitment Approaches: Enhancing Employee Quality and Organizational Competitiveness. 2(3), 341–350. <https://doi.org/10.70001/idea.v2i3.181>
- Musthaf, M. (2024). Exploring the Complexities of Employee Selection: A Descriptive Study. Indian Scientific Journal Of Research In Engineering And Management, 08(03), 1–5.
<https://doi.org/10.55041/ijrsrem29857>
- Norman, E., & Pahlawati, E. (2024). Peran Artificial Intelligence dalam Rekrutmen dan Seleksi: Meningkatkan Efisiensi dan Akurasi dalam MSDM. Sci-Tech Journal, 3(1), 45–59.
<https://doi.org/10.56709/stj.v3i1.320>
- Opada, F. M. M., Ibrahim, M. B. H., Irawan, A., Akbar, M. A., & Rasyid, A. (2024). Talent

- Acquisition Strategies: A Comprehensive Examination of Recruitment Policies for Organizational Success. *Advances in Human Resource Management Research*, 2(2).
<https://doi.org/10.60079/ahrmr.v2i2.185>
- Parween, S., & Goyal, A. (2025). Artificial Intelligence's (AI) Implication in Employee's Acquisition. *Journal of Management and Entrepreneurship*, 18(4), 15–22.
<https://doi.org/10.70906/20241804015022>
- Perwitasari, N. D., & Riharjo, I. B. (2025). Building A Model of Measurement, Assessment of Potential and Job Competence in Human Capital Development. *Journal of Economics, Finance and Management Studies*, 08(01). <https://doi.org/10.47191/jefms/v8-i1-27>
- Rokhani, S. (2024). Development of an Effective and Efficient Employee Recruitment and Selection System. *Indonesian Journal of Innovation Multidiscipliner Research*, 2(4), 247–259.
<https://doi.org/10.69693/ijim.v2i4.214>
- Samvelyan, N. A., & Shahnazaryan, G. H. (2024). Անձնակազմի ընտրության արդյունավետության բարձրացման ուղիները / Ways to Enhance Recruitment Efficiency. *Region i Mir*, 211–217. <https://doi.org/10.58587/18292437-2024.6-211>
- Sella, S., & Riofita, H. (2024). Peran Manajemen Sumber Daya Manusia dalam Mencapai Tujuan Strategis Perusahaan. *Pajak Dan Manajemen Keuangan.*, 1(5), 75–82.
<https://doi.org/10.61132/pajamkeu.v1i5.680>
- SHALINI, D. N., & MURTHY, S. (2024). An Analysis Techniques of Talent Acquisition of Employees Development with Reference to Bharathi Associates, Hassan, Karnataka. *Indian Scientific Journal Of Research In Engineering And Management*, 08(12), 1–9.
<https://doi.org/10.55041/ijsrem40216>
- Soboliev-Tereshchenko, O. (2024). Systematic approach to the strategy management of recruiting and hiring of personnel. *Європейський Науковий Журнал Економічних Та Фінансових Інновацій*, 1(13), 21–29. <https://doi.org/10.32750/2024-0103>
- Tay, C. Y., Ying, C., Yeo, S. F., & Cheah, C. S. (2024). Revolutionizing Recruitment: The Rise of Artificial Intelligence in Talent Acquisition. *Paper Asia*, 40(6b), 191–199.

<https://doi.org/10.59953/paperasia.v40i6b.270>

Warohmah, W., & Riofita, H. (2024). Pengaruh Metode Seleksi Terhadap Kualitas Karyawan Baru.

Jurnal Manajemen Dan Bisnis Ekonomi, 3(1), 331–338. <https://doi.org/10.54066/jmbe-itb.v3i1.2789>

Yuliana, R., & Senen, S. H. (2023). A Systematic Literature Review of Organizational Performance through Talent Management Strategies. <https://doi.org/10.58812/wsjee.v1i12.435>

Yuliana, R., & Senen, S. H. (2023). A Systematic Literature Review of Organizational Performance through Talent Management Strategies. <https://doi.org/10.58812/wsjee.v1i12.435>

Zhang, M., Zhang, N., Yang, J., Feng, D., & Li, J. G. (2024). Application of Competency Model in Enterprise Human Resource Recruitment Management. *Advances in Transdisciplinary Engineering*. <https://doi.org/10.3233/atde240421>.