



**THE EFFECT OF LEARNING CAPABILITIES AND TECHNICAL
COMPETENCIES ON THE PERFORMANCE OF NON-ORGANIC
EMPLOYEES IN BANK INDONESIA REPRESENTATIVE OFFICES
CENTRAL JAVA PROVINCE**

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Abstract

This study was proposed to describe and analyze the influence of learning capabilities on the performance of non-organic employees in KpwBI Prov. Central Java, describes and analyzes the influence of learning capabilities on the competence of non-organic employees in KpwBI Prov. Central Java, describes and analyzes the influence of competence on the performance of non-organic employees in KpwBI Prov. Central Java. This research is quantitative with an explanatory research approach. The main objective is to test the causal relationship between independent variables (learning capabilities) and bound variables (HR performance) **with** Competency as a mediating variable. The quantitative approach was chosen because the research demands hypothesis testing and estimation of the parameters of the relationship between variables statistically. The primary collection method is a **cross-sectional survey** using a structured questionnaire. For causal and mediation analysis, Structural Equation Modeling (SEM) was used. The population in this study is non-organic employees at the Bank Indonesia representative office in Central Java Province. The sample in this study was 125 non-organic employees. Data analysis using the Partial Least Square (PLS) method with SmartPLS. The results of the study show that learning capabilities are proven to have a positive and significant influence on employee technical competence, learning capabilities also have a positive effect on employee performance, technical competence is proven to have a significant positive effect on employee performance.

Keywords: Learning Capabilities, Employee Competence, Employee Performance



INTRODUCTION

Institutional changes in modern organizations, especially strategic sectors such as Bank Indonesia, require adaptive and competent management of human resources (HR). In addition to organic human resources, non-organic workers have an important contribution in supporting organizational operations, but studies related to this group are still limited even though their proportion continues to increase in modern work structures.

In facing the VUCA era, learning capabilities and competencies are the main factors in improving individual performance. Theoretically, the level of education is expected to be directly proportional to performance. However, empirical facts show that there is a discrepancy. Data from Bappenas (2021) shows that around 70% of non-organic workers have a minimum level of education from Diploma to Bachelor's, but only about 45% are able to achieve above-average performance. This phenomenon indicates that formal education does not fully guarantee an improvement in individual performance.

This condition is strengthened by a World Bank report (2020) through *the Indonesia Skills Report* which states that around 58% of the workforce in Indonesia experiences *skills mismatch*, which is a mismatch between education level and job needs. This shows that competence is an important factor that bridges the relationship between education and performance, especially in the increasingly digitized financial sector.

On the other hand, the results of previous research still show inconsistencies. Some studies have found that education has a direct effect on performance, while other studies have shown that the influence becomes significant only through competence as a mediating variable. In addition, most of the research still focuses on organic human resources, so the study of non-organic labor is an important research gap.

Based on these conditions, this study aims to analyze the influence of education level on the performance of non-organic workers by considering competence as a mediating variable. This research is expected to make a theoretical contribution to the development of competency-based HR management models and become the basis for the formulation of more effective and targeted non-organic workforce management policies.

LITERATURE REVIEW

Learning Capabilities

Learning capability is the ability of individuals to manage the learning



process to acquire, integrate, and apply knowledge to improve performance and adapt to change (Hussain et al., 2023). This concept includes cognitive, motivational, and behavioral aspects, and is seen as an important factor in improving the competence and competitiveness of human resources. In addition, learning capabilities are also ambidextrous which includes *Exploration* and *Operation*, thus supporting optimal performance improvement (Ceptureanu et al., 2024).

In the context of technical work, learning capabilities are more practical and contextual, such as the ability to understand work instructions, implement new procedures, and adapt to changes. The learning process is not only obtained through formal training, but also through work experience and interaction in the work environment (*Workplace Learning*) (Augner, M., & Schermuly, 2024; Ellström, 2011). Operationally, learning capability indicators include *Experimentation*, *Risk-Taking*, *interaction with environment*, *Dialogue*, and *Participatory Decision Making* (Chiva, R., Alegre, J., & Lapiedra, 2007).

Technical Competence as a Link between Learning Capabilities and Performance

Competency is a combination of knowledge, skills, and attitudes that individuals need to carry out their work effectively, and is a basic characteristic that is directly related to superior performance (Spencer, Lyle M.; Spencer, 1993). In HR management, competencies include *Hard Skills* and *soft skills*, as well as acting as a link between education and performance, because a high level of education does not always guarantee optimal performance without the support of relevant competencies (Hasanah U et al., 2020). In particular, technical competence includes the ability to master job knowledge, procedural skills, and the application of operational techniques to produce quality, precise, and safe performance (Handyka et al., 2025) Technical competency indicators (Handyka et al., 2025):

- a. Mastery of job knowledge
- b. Procedural and technical skills
- c. Technical troubleshooting
- d. Adaptation to new technologies/equipment

Human Resource Performance

Human resource performance is the result of individual work in carrying out tasks that are measured through quality, quantity, timeliness, and responsibility (Robbins, S. P., & Judge, 2019). Performance is influenced by the



factors of ability, motivation, and work environment, and is an important indicator in assessing the effectiveness of the organization, especially in non-organic workers who are contractual (Fitriani, 2022). In addition, performance reflects the level of success of individuals in achieving work targets as well as their contribution to organizational productivity through synergy with other resources (Pusparini, R., & Sugandha, 2023). Performance evaluation also serves as a communication tool between the organization and employees in ensuring the conformity of work results with the set standards (Desfitriady, D., & Pandini, 2023). HR Performance Indicators (Nurzakiah, N., & Febrian, 2024) :

- a. Quality of work
- b. Working quantity
- c. Responsibilities
- d. Cooperation
- e. Initiatives

RESEARCH METHOD

This study uses a quantitative approach with the type of *explanatory research* to analyze the influence of *learning capabilities* on the performance of human resources with competence as a mediating variable. Data was collected through a *cross-sectional* survey using a Likert scale questionnaire to 125 non-organic employees at the Bank Indonesia Representative Office in Central Java Province. Variables are measured using indicators relevant to each construct. Data analysis was carried out using the PLS-SEM method using SmartPLS, including *testing the outer model* (validity and reliability) and *inner model* (the relationship between variables), as well as hypothesis testing based on a T-statistical value of > 1.96 at a significance level of 5%.

RESULTS AND DISCUSSION

Testing Measurement Model (Outer Model)

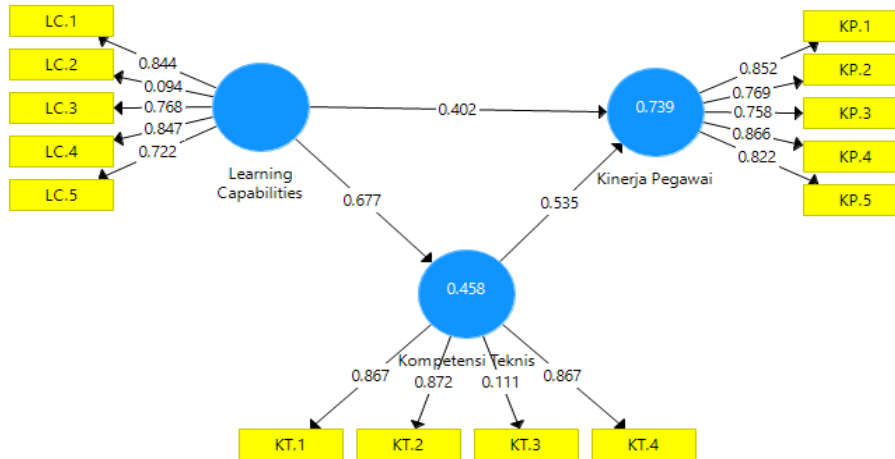


Figure 4.1

Testing the Measurement Model

Convergent Validity

Table 4.1
Value of Outer Loadings

	Kinerja Pegawai	Kompetensi Teknis	Learning Capabilities
KP.1	0,852		
KP.2	0,769		
KP.3	0,758		
KP.4	0,866		
KP.5	0,822		
KT.1		0,867	
KT.2		0,872	
KT.3		0,111	
KT.4		0,867	
LC.1			0,844
LC.2			0,094
LC.3			0,768
LC.4			0,847
LC.5			0,722

Source : Primary Data processed, 2025

The results of the validity test showed that all indicators in the Employee Performance variable (KP.1–KP.5) were valid with a loading factor value of 0.758–0.866, so that they were able to represent the construct well. In the Technical Competency variable, the indicators KT.1, KT.2, and KT.4 were declared valid, while KT.3 (0.111) was invalid and deleted. In the Learning Capabilities variable,



indicators LC.1, LC.3, LC.4, and LC.5 are valid, while LC.2 (0.094) is invalid and eliminated. In general, most indicators have met the validity criteria, so they can be used in advanced analysis. This is in line with previous research which emphasizes that relevant indicators are very important in measuring employees' competencies and learning abilities (Prasetyo, B., Rahmawati, I., & Kurniawan, 2025; Sari, D., & Nugroho, 2024; Wahyudi, 2024).

Table 4.2
AVE Value

	Rata-rata Varians Diekstrak (AVE)
Kinerja Pegawai	0,664
Kompetensi Teknis	0,569
Learning Capabilities	0,510

Based on Table 4.2, all variables, namely Employee Performance, Technical Competence, and Learning Capabilities, have an AVE value of > 0.50, thus meeting the convergent validity criteria. This shows that the construct is able to explain more than 50% of the variance of the indicator, so that all indicators are declared valid and suitable for use in advanced analysis

Internal Consistency Reliability

Table 4.3
Internal Consistency Reliability

	Cronbach's Alpha	Reliabilitas Komposit
Kinerja Pegawai	0,873	0,908
Kompetensi Teknis	0,686	0,811
Learning Capabilities	0,719	0,814

Based on Table 4.3, all constructs (Employee Performance, Technical Competence, and Learning Capabilities) show good reliability. Cronbach's Alpha values of 0.873, 0.719 and 0.686 indicate sufficient internal consistency, while the Composite Reliability values of 0.908, 0.811, and 0.814 have exceeded the 0.70 limit. Although Cronbach's Alpha Technical Competency is slightly below 0.70, the adequate Composite Reliability value indicates the construct remains reliable, making the instrument feasible for further analysis (Hair et al., 2021).



Discriminant Validity

**Table 4.4
Fornell Larcker (Correlation Values)**

	Kinerja Pegawai	Kompetensi Teknis	Learning Capabilities
Kinerja Pegawai	0,815		
Kompetensi Teknis	0,807	0,754	
Learning Capabilities	0,764	0,677	0,714

Based on Table 4.14, the Fornell-Larcker test shows that the validity of the discriminant has been met, because the square root value of AVE of each variable (Employee Performance = 0.815; Technical Competence = 0.754; Learning Capabilities = 0.714) higher than the correlation between latent variables. Thus, each construct is able to distinguish itself well from the others.

Structural Model Analysis

Coefficient of Determination (R-square)

**Table 4.5
Coefficient of Determination**

	R Square	Adjusted R Square
Kinerja Pegawai	0,739	0,735
Kompetensi Teknis	0,458	0,454

The results of the analysis showed that the R Square value of Employee Performance was 0.739 (Adjusted R Square 0.735), which means that 73.9% of the variation in employee performance can be explained by independent variables in the model, so that the model is relatively strong and consistent. Meanwhile, the value of the R Square of Technical Competency was 0.458 (Adjusted R Square 0.454), indicating that the model's ability to explain this variable was moderate. Thus, the model is more effective in predicting Employee Performance than Technical Competence, although there are still other factors outside the model that have an effect.

Effect Size (F-square)

**Table 4.6
Effect Size**

	Kinerja Pegawai	Kompetensi Teknis	Learning Capabilities
Kinerja Pegawai			
Kompetensi Teknis	0,593		
Learning Capabilities	0,335	0,846	

Based on Table 4.6, the correlation between Employee Performance and Technical Competence of 0.593 indicates a moderate to strong relationship, which means that the increase in technical competence tends to be followed by an increase in employee performance (Santoso, 2024). Meanwhile, the correlation between Employee Performance and Learning Capabilities of 0.335 is classified as weak to moderate, so the effect on performance is not as strong as technical competence due to other factors such as experience and work environment (Wijayanti, 2025).

On the other hand, the correlation between Technical Competency and Learning Capabilities of 0.846 shows a very strong relationship, which indicates a close relationship between technical skills and employees' learning abilities (Promise, 2024). Overall, technical competence is the dominant factor in improving performance, while learning ability plays a supporting factor.

Predictive Relevance (Q²)

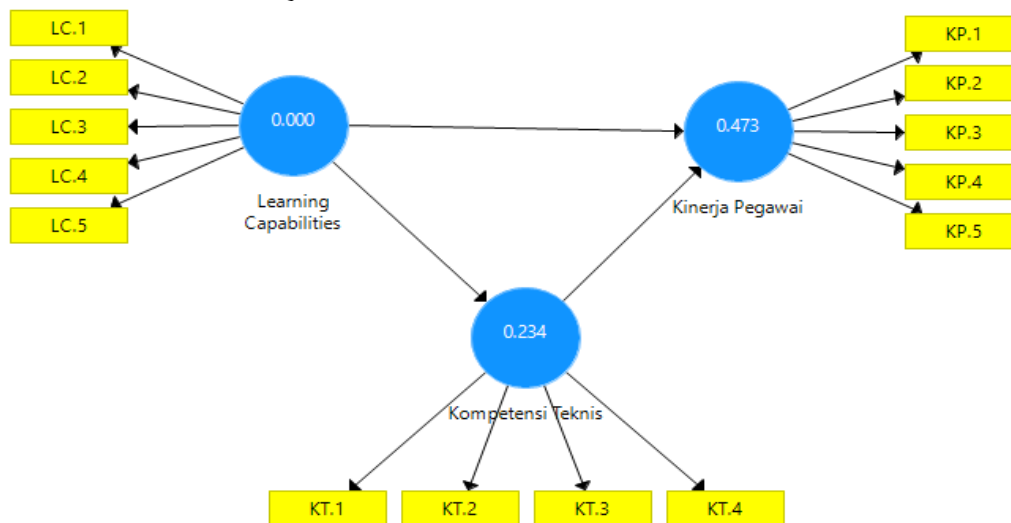


Figure 4.2
Blindfolding Results

The Q² value is obtained through a *blindfolding* procedure with a removal distance determined based on the data point. *Blindfolding* is a literacy method in which data points on endogenous variable indicators are systematically deleted, then estimates are made using the remaining data. The *blindfolding process* in PLS aims to assess the predictive relevance of the model through Stone-Geisser values.

Validation Redundancy – Cross-Construct

	SSO	SSE	Q ² (=1-SSE/SSO)
Kinerja Pegawai	625,000	329,190	0,473
Kompetensi Teknis	500,000	382,896	0,234
Learning Capabilities	625,000	625,000	

Validation Commuality – Cross-Construct

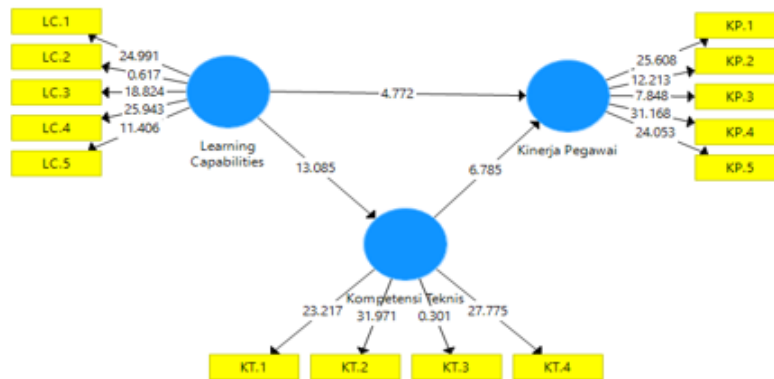
	SSO	SSE	Q ² (=1-SSE/SSO)
Kinerja Pegawai	625,000	318,919	0,490
Kompetensi Teknis	500,000	323,613	0,353
Learning Capabilities	625,000	433,468	0,306

**Table 4.7
Predictive Relevance**

Variabel	CV Commuality	CV Redudancy
Kinerja Pegawai	0,490	0,473
Kompetensi Teknis	0,353	0,234
Learning Capabilities	0,306	

The test results showed that the quality of the structural model met the eligibility criteria, demonstrated by the positive cross-validation value on commuality and redundancy on the entire endogenous construct. This indicates that the model has good predictive capabilities. In addition, the Q² value for all dependent variables is also greater than zero, so the model is declared to have predictive validity and is classified as fit (Tenenhaus et al., 2008).

Hypothesis Test



**Figure 4.3
Structural Model Testing**

**Table 4.8
Summary of Hypothesis Test Results**

Hipotesis	Jalur	Hipotesis	Hasil	Kesimpulan
H1	Learning Capabilities Kompetensi Teknis	-> Positif signifikan	Positif signifikan	Diterima
H2	Learning Capabilities Pegawai	-> Kinerja	Positif signifikan	Diterima
H3	Kompetensi Teknis Pegawai	-> Kinerja	Positif signifikan	Diterima



The Influence of Learning Capabilities on Technical Competence

The results of the analysis showed that *Learning Capabilities* had a positive and significant effect on Technical Competence with a path coefficient of 0.677. This indicates that the higher the employee's learning ability, the more technical competence they have. Descriptively, the *interaction with environment* indicator had the highest value (4,488), which indicates that active interaction with the work environment plays an important role in improving understanding of procedures and technical skills. In addition, *the experimentation* indicator (4,320) also reflects the tendency of employees to try new methods, which contributes to the development of competencies through work experience.

These findings confirm that learning ability—through interaction, experimentation, and adaptation—is a key factor in improving technical competence. This is in line with the view that individuals with high learning abilities are more adaptive to change and are able to develop skills on a sustainable basis (Nonaka, I., & Takeuchi, 2024; Smith, J., & Johnson, 2025). Thus, an alternative hypothesis (H1) is accepted, which shows that *Learning Capabilities* has a significant effect on Technical Competence.

The Influence of Learning Capabilities on Employee Performance

The test results showed that *Learning Capabilities* had a positive and significant effect on Employee Performance with a path coefficient of 0.402. This indicates that the improvement of employees' learning abilities will be followed by an increase in performance.

Descriptively, the *interaction with environment* indicator (4,488) shows that active interaction with the work environment encourages increased cooperation and responsibility. The *experimentation indicator* (4,320) reflects the tendency of employees to try new work methods that have an impact on work effectiveness, while dialogue (4,216) shows good communication that supports improvement of work quality and initiative.

Overall, learning ability plays a role in improving the quality, effectiveness, and productivity of work, as well as encouraging employees to be more adaptive to change. These findings are in line with previous research that stated that learning ability contributes to improved employee performance and work behavior (Brown, T., & Lee, 2024; Garcia, 2025). Thus, an alternative hypothesis (H1) is accepted.

The Influence of Engineering Competence on Employee Performance

The results of the analysis show that Technical Competence has a positive and significant effect on Employee Performance with a path coefficient value of 0.535. This indicates that the higher the technical competence that employees have, the



better the performance produced. Employees with good technical skills tend to be able to work more effectively, efficiently, and according to operational standards (Robbins, S. P., & Judge, 2024).

Descriptively, indicators of job knowledge mastery (4,352) and ability to solve technical problems (4,344) were the highest scores. This shows that employees have a good understanding of the task and are able to handle technical problems. These abilities have an impact on improving the quality of work (4,248), the quantity of work (4,040), and the ability to adapt to new technologies (4,104).

These findings confirm that technical competence is an important factor in improving employee performance, both in completing routine tasks and in encouraging work efficiency and innovation (Anderson, 2025). Thus, the zero hypothesis (H0) is rejected and the alternative hypothesis (H3) is accepted, which means that Technical Competence is proven to have a significant effect on the Performance of non-organic employees.

CONCLUSION

Based on the results of data analysis and discussion of the results of the research that has been carried out, it can be concluded that:

1. *Learning Capabilities* have been proven to play a role in improving employees' technical competence. Employees with high learning abilities tend to have a better mastery of job knowledge and are able to solve technical problems more effectively.
2. *Learning Capabilities* also have a direct influence on improving employee performance. Employees who are active in the learning process, able to adapt to the work environment, and open to new experiences generally show better work quality, responsibility, and cooperation skills.
3. Technical competence has been proven to make a positive contribution to employee performance. Employees who have good technical skills will be better able to complete work effectively and efficiently according to the needs of the organization.
4. The direct influence of *Learning Capabilities* on employee performance is greater than the indirect influence through technical competence. This shows that learning ability is a more dominant factor in encouraging employee performance improvement.

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