
KNOWLEDGE, LEARNING, AND IT: A COMPETENCE-BASED APPROACH TO EMPLOYEE PERFORMANCE

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Abstract

This study is motivated by the challenges faced by PT Regulus Inspira Land in improving employee performance amid globalization, advances in information technology, and the need for adequate competencies. Issues include the suboptimal implementation of knowledge management, an underdeveloped learning organization culture, limited digital skills, and employee competency gaps. The research aims to analyze the effect of knowledge management, learning organization, and information technology development on employee performance, with competence as an intervening variable. A descriptive-associative quantitative approach was applied using a questionnaire survey of PT Regulus Inspira Land employees in Depok, West Java, during 2025. The results indicate that all three independent variables positively influence competence, which in turn directly and indirectly enhances employee performance. The findings highlight that strengthening competence is key to maximizing the benefits of knowledge management, organizational learning, and technology adoption. Recommendations include developing technology-based training programs, reinforcing a continuous learning culture, and optimizing integrated knowledge management systems to sustainably improve employee performance. Keywords: knowledge management, learning organization, information technology, competence, employee performance

INTRODUCTION

Human Resources (HR) are a fundamental pillar of national development. Indonesia is currently in a demographic bonus phase, which represents a strategic opportunity to accelerate economic growth. However, this opportunity faces several challenges, such as disparities in the quality of education, skill mismatches, and relatively low worker productivity compared to

other ASEAN countries. Furthermore, the rapid digital transformation in the 5.0 era creates competitive pressures for companies to optimize their human resources. This is particularly relevant for PT Regulus Inspira Land, a growing company across various sectors, where employee performance is a key determinant of organizational success.

In the organizational context, employee performance is a crucial



element in achieving strategic goals. Previous studies have confirmed that knowledge management (Nonaka & Takeuchi, 1995; Rouhi et al., 2017), learning organization (Senge, 2006; Garvin et al., 2008), and the utilization of information technology (Van Laar et al., 2017; Wijaya & Eppang, 2021) significantly influence performance. Effective implementation of knowledge management has been proven to enhance collaboration and operational efficiency by up to 35% (Hislop et al., 2018), while learning organizations foster adaptive and innovative employees. On the other hand, the rapid development of information technology demands strong digital skills; however, data from the Ministry of Communication and Information (Kominfo, 2023) indicates that 60% of Indonesia's workforce is still at a basic level in this regard. Prior research also suggests that employee competence serves as a crucial mediating variable that strengthens the influence of these three factors on performance (Setiawan & Nafilah, 2022; Warmana & Wiguna, 2021).

Nevertheless, most previous studies examined these relationships partially or within a single-industry context, thus failing to provide an integrative view in multi-sector growing companies such as PT Regulus Inspira Land. This company operates across five different industries and faces specific challenges in integrating knowledge management, organizational learning, and information technology utilization to support competency and

performance improvement. The absence of comprehensive research examining the relationships of these three independent variables on performance through competence as a mediating variable in the context of emerging companies in Indonesia presents a critical research gap.

Based on these phenomena, this study was designed to analyze the influence of knowledge management, learning organization, and information technology development on the performance of employees at PT Regulus Inspira Land through competence. The ultimate objective of this study is to develop a comprehensive understanding of how these three factors contribute to employee performance, thereby providing a foundation for strategic decision-making in human resource management.

The findings of this research are expected to provide practical benefits for PT Regulus Inspira Land's management in designing competency development policies that integrate knowledge management, a learning culture, and the utilization of information technology. Theoretically, this study enriches the human resource management literature in Indonesia, particularly concerning integrative models of how these strategic variables influence employee performance through competence. These results may also serve as a reference for researchers and practitioners in developing adaptive HR strategies for the digital era and global competition.

METHOD

This research employs a quantitative approach with a descriptive-associative method. This approach was chosen as it allows for describing the characteristics of the studied variables while simultaneously analyzing the relationships and effects among variables determined in the conceptual framework (Sugiyono, 2019). A quantitative approach is appropriate for testing hypotheses formulated based on theoretical foundations and previous research findings.

The study was conducted at PT Regulus Inspira Land, headquartered in Depok, West Java, with respondents drawn from various business units of the company. The research site was chosen due to its relevance to the research problem and the availability of data aligned with the study's objectives. The research was carried out from January to March 2025, encompassing preparation, data collection, and data analysis.

The procedure began with identifying sources of data, consisting of both primary and secondary data. Primary data were obtained directly from respondents using a structured questionnaire developed based on the research variable indicators: knowledge management, learning organization, information technology development, competence, and employee performance. Secondary data were collected from company documents, internal reports, and

official publications relevant to the research topic.

Data collection employed a five-point Likert scale questionnaire to measure respondents' perceptions of each variable indicator. Respondents were selected through purposive sampling, a technique in which participants are chosen based on specific criteria aligned with the study's objectives (Sekaran & Bougie, 2016). In addition, a literature review from academic journals, books, and prior studies was conducted to strengthen the theoretical foundation and analysis.

Data analysis was conducted using Structural Equation Modeling (SEM) with LISREL software. This analysis was applied to test causal relationships among variables and assess the mediating role of employee competence in the relationship between knowledge management, learning organization, and information technology development on employee performance (Hair et al., 2019). The stages of analysis included validity and reliability testing of the instruments through confirmatory factor analysis, measurement model testing, and structural model testing.

RESULTS

This research involved 202 employees of PT Regulus Inspira Land, aiming to analyze the influence of knowledge management, learning organization, and information technology development on employee performance through competence. Data were collected using a questionnaire that was tested for validity and reliability through

confirmatory factor analysis before proceeding to the main analysis.

The research instruments were deemed valid as all indicators had factor loadings above 0.5. The Goodness of Fit (GOF) tests for all research variables—knowledge management, learning organization, information technology development, competence, and employee performance—showed that the measurement models were acceptable. Chi-Square values for all variables exceeded the cut-off value with p-values greater than 0.05, indicating that the models could be accepted. The RMSEA values for all variables were below 0.08, ranging

between 0.027 and 0.033, demonstrating strong model fit. The Goodness of Fit Index (GFI) values exceeded 0.90 for all variables, and the Comparative Fit Index (CFI) was a perfect 1.0, providing further evidence of excellent fit. Although the Adjusted Goodness of Fit Index (AGFI) values for some variables were slightly below the 0.90 threshold (ranging between 0.85 and 0.88), the deviations were minor and did not compromise the model's overall adequacy. Collectively, these results indicate that the measurement model used in this study was appropriate for further testing.

Table 1. Model Fit Test Results

Good of Fit	Cut Off Value	Knowledge Management	Learning Organization	Information Technology Development	Competence	Employee Performance
Chi-Square	> 0,05	236,24	199,07	124,51	189,72	173,79
P	> 0,05	0,080	0,063	0,064	0,060	0,052
RMSEA	≤ 0,08	0,027	0,029	0,033	0,030	0,031
GFI	≥ 0,90	0,91	0,93	0,94	0,93	0,94
CFI	≥ 0,95	1	1	1	1	1
AGFI	≥ 0,90	0,87	0,86	0,88	0,86	0,85

After the model fit test results were obtained, valid items were identified to measure the intended

constructs. These items were then processed to generate factor scores for each measurement scale. In this study,

the researcher did not use raw scores. To interpret the analysis results, the factor scores were transformed from a standardized scale (Z-score) into T-scores (true scores) with a mean of 50 and a standard deviation (SD) of 10 to ensure that no respondent received negative values.

Based on the results of the Structural Equation Modeling (SEM) analysis presented in Figure 1, the t-values for each path demonstrated the significance level of the relationships among the variables. The influence of the three exogenous variables on competence (KOM) showed that the learning organization (LO) had the strongest effect with a t-value of 6.76, followed by information technology development (TI) with a t-value of 5.18, and knowledge management (KM) with a t-value of 2.79. All of these exceeded the critical value of 1.96, indicating a significant effect on improving employee competence. Furthermore, the influence of competence (KOM) on employee performance (KK) yielded a t-value of 5.24, which was also significant.

For the direct paths to employee performance (KK), knowledge management (KM) had a t-value of 3.77 and information technology development (TI) had a t-value of 3.73, both of which were significant. However, the learning organization (LO) showed a t-value of only 1.15, which fell below the critical threshold of 1.96, indicating that this path was not statistically significant. This finding suggests that the influence of the learning organization (LO) on employee performance is predominantly indirect, operating through the mediating role of competence.

The model fit test demonstrated perfect results, with a Chi-Square value of 0.00, degrees of freedom (df) = 0, p-value = 1.00000, and RMSEA = 0.000. These results indicate that the proposed model achieved a perfect fit with the empirical data, thereby confirming that the structural relationships developed in this study can be accepted and convincingly interpreted.

.Table 2. Hypothesis Testing Results

Effect	Coefficient	Std. Error	T-Value	Sig.
KM -> KOM	0,172	0,062	2,791 > 1,96	Significant
LO -> KOM	0,283	0,075	3,769 > 1,96	Significant
TI -> KOM	0,463	0,068	6,765 > 1,96	Significant
KOM -> KK	0,318	0,061	5,238 > 1,96	Significant
KM -> KK	0,061	0,054	1,147 < 1,96	Not Significant
LO -> KK	0,344	0,066	5,183 > 1,96	Significant
TI -> KK	0,241	0,065	3,725 > 1,96	Significant
KM -> KOM -> KK	0,055	0,022	2,463 > 1,96	Significant

LO -> KOM -> KK	0,090	0,029	3,059 > 1,96	Significant
TI -> KOM -> KK	0,147	0,035	4,141 > 1,96	Significant

Based on the results of the path analysis, it was found that knowledge management (KM), learning organization (LO), and information technology development (TI) had a positive and significant effect on competence (KOM), with coefficients of 0.172 ($t = 2.791$), 0.283 ($t = 3.769$), and 0.463 ($t = 6.765$), respectively. Furthermore, competence (KOM) demonstrated a positive and significant influence on employee performance (KK), with a coefficient of 0.318 ($t = 5.238$).

For the direct influence on employee performance (KK), the variables learning organization (LO) (coefficient = 0.344; $t = 5.183$) and information technology development (TI) (coefficient = 0.241; $t = 3.725$) exhibited positive and significant effects, whereas knowledge management (KM) (coefficient = 0.061; $t = 1.147$) did not show a statistically significant effect.

The results of the indirect effect testing showed that knowledge management (KM), learning organization (LO), and information technology development (TI) had positive and significant effects on employee performance (KK) through the mediation of competence (KOM), with coefficients of 0.055 ($t = 2.463$), 0.090 ($t = 3.059$), and 0.147 ($t = 4.141$), respectively. These findings indicate that competence functions as an

intervening variable that strengthens the influence of knowledge management (KM), learning organization (LO), and information technology development (TI) on the improvement of employee performance.

These findings suggest that, in addition to exerting a direct influence on performance, the independent variables also affect performance through the enhancement of employee competence. In other words, competence acts as a mediating factor that amplifies the impact of knowledge management, learning organization, and information technology development on employee performance.

Overall, the results of this study demonstrate that the effective implementation of knowledge management, the establishment of a learning organization culture, and the optimal utilization of information technology will significantly enhance both competence and employee performance.

Discussion

The findings of this study indicate that knowledge management has a positive and significant effect on both competence and employee performance at PT Regulus Inspira Land. This result is consistent with Nonaka and Takeuchi's (1995) knowledge creation theory, which

emphasizes the conversion of tacit knowledge into explicit knowledge as a key driver of organizational capability enhancement. It is also aligned with the study by Rouhi, Bazvand, and Naderi (2017), which demonstrated that systematic knowledge management can significantly improve employee productivity.

In the context of PT Regulus Inspira Land, the implementation of knowledge-sharing practices and the documentation of standard operating procedures (SOPs) have facilitated knowledge transfer, thereby enabling employees to perform their tasks more effectively.

The study also found that the learning organization positively affects both competence and performance. This result reinforces Senge's (2006) view that continuous learning is a critical factor in shaping an adaptive workforce. Similarly, studies by Garvin, Edmondson, and Gino (2008) as well as Rumiati (2020) revealed that learning organizations enhance innovation and work quality through dimensions such as shared vision and team learning. In the case of PT Regulus Inspira Land, employee involvement in formulating work targets has strengthened their sense of ownership and increased motivation to achieve higher performance.

The positive influence of information technology development on competence and performance supports the findings of Wijaya and Eppang (2021), who concluded that the development of information technology systems has a significant

impact on productivity. Similarly, Hartini, Suseno, and Akbar (2023) emphasized that technology adoption provides a competitive advantage, although its effectiveness is highly dependent on user skills. At PT Regulus Inspira Land, the implementation of Customer Relationship Management (CRM) and Enterprise Resource Planning (ERP) applications has accelerated the flow of information across divisions; however, their success is heavily influenced by continuous technology training programs.

This study also found that competence mediates the influence of knowledge management, learning organization, and information technology development on performance. This result supports the studies of Warmana and Wiguna (2021) as well as Setiawan and Nafilah (2022), which state that high-quality competence strengthens the influence of organizational learning and technology on performance. Thus, enhancing competence becomes a key strategy to maximize the impact of knowledge management, learning organization, and information technology development on work outcomes.

When compared with previous studies conducted in the manufacturing and education sectors, the relationship patterns identified in this study are relatively consistent. However, this research contributes to the context of a multi-sector company with varying levels of technology adoption across its business units. This underscores the need for a

contextual implementation approach, aligning strategies in knowledge management, learning organization, and information technology development with the characteristics of each industry and the readiness of human resources.

CONCLUSION

Based on the results of the analysis and discussion, this study concludes that knowledge management, learning organization, and information technology development have a positive and significant effect on competence and employee performance at PT Regulus Inspira Land. Competence was proven to mediate the relationship between these three independent variables and performance, indicating that enhancing competence serves as a strategic pathway to maximize the impact of knowledge management, organizational learning culture, and technology adoption on performance. These findings align with the research objective of identifying the integrative role of knowledge management, learning organization, and information technology development in enhancing employee performance through competence as an intervening variable.

Based on the results of this study, several recommendations can be proposed. First, the management of PT Regulus Inspira Land should strengthen its knowledge management system through a structured information-sharing platform and consistent knowledge-sharing activities. In addition, the company needs to enhance the

implementation of a learning organization by encouraging cross-divisional learning, building a clear shared vision, and fostering continuous team collaboration.

The utilization of information technology should be optimized through ongoing training programs to ensure that all employees are able to fully leverage ERP, CRM, and other digital tools. Furthermore, competency development programs should focus on strengthening both technical skills and soft skills that are relevant to the demands of the digital era, enabling employees to continuously improve their performance and remain adaptive to changes in the business environment.

From an academic perspective, this study contributes to the literature on knowledge-based human resource management in the digital era. For future research, it is recommended to incorporate additional variables such as work motivation or transformational leadership and to test the model across different industry sectors to enhance the generalizability of the findings.

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