

THE MEDIATING ROLE OF TALENT MANAGEMENT IN THE RELATIONSHIP BETWEEN KNOWLEDGE MANAGEMENT AND EMPLOYEE ENGAGEMENT ON EMPLOYEE PERFORMANCE

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Abstract: *In an era of increasingly competitive business environments, companies are required to optimize the potential of human resources as a strategic asset. Rapid technological advancements, market dynamics, and high workforce mobility encourage organizations to develop appropriate strategies for managing employee knowledge, engagement, and talent. Many companies face the problem of competency loss due to weak knowledge sharing and low employee engagement, which ultimately leads to high turnover rates. This condition emphasizes that knowledge management, employee engagement, and talent management are critical factors in improving employee performance. This study aims to analyze the effect of knowledge management and employee engagement on employee performance, with talent management serving as a mediating variable at PT Bank Sumut Head Office in Medan. This research adopts an associative research design with a quantitative approach. Data were collected through the distribution of questionnaires to 83 respondents selected using purposive sampling from a population of 473 employees working across 18 divisions. The sampling criteria included employees who had worked for at least one year at the Bank Sumut Head Office. Data analysis was conducted using the Partial Least Squares Structural Equation Modeling (PLS-SEM) method. The results indicate that knowledge management and employee engagement have a significant effect on employee performance, both directly and indirectly through talent management as a mediating variable. These findings suggest that integrated management of knowledge, employee engagement, and talent management can drive improvements in employee performance. This study also provides practical implications for company management in strengthening sustainable human resource development strategies*

Keywords: *Knowledge Management, Employee Engagement, Talent Management, Employee Performance*

Introduction

Rapid changes in technology, market demands, and the expectations of new generations of workers have transformed the way organizations operate (Ciampi et al., 2022). Companies are now confronted with conditions in which innovation, adaptability, and employee engagement have become critical determinants of success. In such circumstances, employee performance is no longer merely a numerical indicator in performance evaluation reports, but rather a reflection of resilience, creativity, and the ability to collaborate in responding to continuously evolving challenges (Odetta & Rasa, 2023). Paying close attention to employee performance is therefore essential, as employees are the primary drivers of business processes and key determinants of long-term organizational competitiveness (Ippolitova & Serhienko, 2025). When organizations

neglect this aspect, the risks of declining productivity, low engagement, and high turnover rates increase. Conversely, appropriate attention can enhance motivation, loyalty, and innovation, thereby strengthening the organization's position amid uncertainty and change (Liu et al., 2023; Siahaan, 2020a).

In the knowledge-based economy era, companies compete not only in terms of price and products but also in their ability to manage and leverage the knowledge possessed by employees (Mantow & Nilasari, 2022; Wongmahesak et al., 2025). Knowledge management has become a crucial strategy to ensure that individual knowledge can be identified, stored, and shared effectively within organizations (Shah et al., 2024). However, in practice, many companies still face challenges, such as knowledge being merely documented without proper implementation, a lack of knowledge-sharing culture, and the loss of critical competencies when expert employees leave the organization (Mantow & Nilasari, 2022; Masduki & Sopiyan, 2021; Shah et al., 2024; Zulfikar, 2024). These conditions indicate that the success of knowledge management plays a decisive role in the effectiveness of talent management, as talent development requires access to structured and reliable knowledge (Masduki & Sopiyan, 2021; Zulfikar, 2024). When knowledge management is implemented effectively, organizations can more easily identify high-potential employees, support learning processes through knowledge sharing, and create a talent pipeline capable of responding to business challenges (Banuari et al., 2021). Thus, knowledge management serves as a foundation that strengthens talent management programs such as talent pools, succession planning, and training initiatives. Talents developed from a strong knowledge base tend to be more innovative, productive, and more strongly engaged with the organization, as they perceive opportunities for growth and development. Ultimately, the integration of knowledge management and talent management has been shown to drive sustainable improvements in organizational performance (Banuari et al., 2021; Mantow & Nilasari, 2022; Masduki & Sopiyan, 2021; Moghli, 2025; Wulandari et al., 2023; Zulfikar, 2024).

Employee engagement is closely associated with talent management. When organizations successfully create an environment that fosters engagement, talent management strategies become more effective (Sinisterra et al., 2024). Employees who feel emotionally and professionally connected to the organization are more willing to participate in development programs, training initiatives, and job rotations that form part of talent management practices (Ekhsan et al., 2023). They also tend to demonstrate higher loyalty, making it easier for organizations to retain high-potential employees. Conversely, low levels of engagement often lead to suboptimal talent management outcomes, as employees lack motivation to develop or may leave the organization before their potential is fully realized (Tahir, 2023). The integration of employee engagement and talent management ultimately has a significant impact on organizational performance. Engaged employees who are managed through effective talent strategies not only contribute more substantially to productivity but also foster innovation, improved service quality, and higher customer satisfaction (Khairina et al., 2022). For example, companies that manage engagement and talent effectively, such as Google or Unilever, are able to create healthy work cultures, retain top talent, and maintain superior performance in the global market. In contrast, organizations that fail to integrate these two aspects tend to face persistent challenges, including declining productivity, high turnover rates, and substantial costs associated with recruitment and retraining (Firmansyah & Napitupulu, 2024).

In the context of modern organizations, talent management plays a crucial role as an intervening variable that bridges the influence of knowledge management and employee engagement on performance. Studies addressing this issue remain relatively limited in the existing literature. Therefore, this research is necessary to provide scientific contributions and enrich the literature regarding the role of talent management in enhancing organizational

performance. Effective knowledge management enables organizations to identify, store, and disseminate strategic information that forms the basis for talent development (Abadi et al., 2025; Ekhsan et al., 2023; Mohaghegh et al., 2024; Sinisterra et al., 2024; Tahir, 2023). Well-managed knowledge not only enhances individual competencies but also facilitates the creation of a talent pipeline aligned with long-term organizational needs (Moghli, 2025; Suparwadi et al., 2024; Syunikitta et al., 2025). At the same time, employee engagement strengthens the effectiveness of talent management, as engaged employees are more receptive to learning processes, career development, and active participation in talent management programs (Alharbi & Aloud, 2024; Dubey, 2025; Fierro & Benalil, 2024; Sobaih et al., 2025). Consequently, the influence of knowledge management and employee engagement on performance is not purely direct but is reinforced through the presence of talent management, which ensures that individual potential is transformed into tangible organizational performance outcomes (Mohaghegh et al., 2024; Rehman et al., 2024; Sudarnice et al., 2025).

2. Literature Review

2.1 Employee Performance

Employee performance refers to the work outcomes achieved by individuals or groups within an organization in accordance with their responsibilities in order to accomplish predetermined objectives (Adu et al., 2024; Siahaan, 2020a, 2020b). In the context of human resource management, employee performance is influenced not only by technical competencies but also by psychological and strategic factors that shape employee behavior toward making optimal contributions. Previous studies have demonstrated that employee engagement has a significant positive relationship with employee performance, as engagement fosters intrinsic motivation, commitment, and discretionary effort at work (Sumarno & M. Ali Iqbal, 2022). However, engagement alone is insufficient to fully maximize performance if it is not supported by effective talent management strategies.

Talent management serves as a strategic mechanism that links employee engagement to performance improvement through processes of identifying, developing, retaining, and utilizing employees' best potential (Marpaung et al., 2023). A well-designed talent management system enables emotionally engaged employees to access self-development opportunities, enhance their competencies, and contribute more substantially to organizational goals (Wijayanti et al., 2022). Therefore, talent management can act as a critical mediator that transforms employee engagement into sustained performance improvement.

Furthermore, in dynamic work environments, employee performance also depends on effective knowledge management, in which employees' knowledge can be integrated with talent management strategies. Consequently, the mediating role of talent management becomes crucial in ensuring that high levels of employee engagement and the effective utilization of organizational knowledge synergistically enhance employee performance (Mantow & Nilasari, 2022; Masduki & Sopiyan, 2021). These findings indicate that appropriate talent management not only plays a direct role in improving performance but also serves as a strategic bridge connecting psychological factors (employee engagement) and structural factors (knowledge management) in achieving sustainable competitive advantage (Cappelli, 2008; Han et al., 2019; Savitri & Suherman, 2018; Teguh Sutanto, 2019).

2.2 Talent Management

Talent management is a strategic approach to managing human resources that focuses on identifying, developing, retaining, and optimizing employees' potential to achieve organizational objectives (Sari et al., 2020). In the context of the relationship between knowledge management, employee engagement, and performance, talent management acts as a bridge that ensures

employee knowledge and engagement are effectively integrated into human resource management practices. Organizations with well-developed talent management strategies are able to allocate individuals with the most suitable competencies to appropriate positions, develop relevant skills, and create a work environment that supports innovation (Teguh Sutanto, 2019).

Research indicates that high levels of employee engagement enhance the effectiveness of talent management, as engaged employees are more willing to contribute optimally to competency development and the achievement of organizational targets (Hamdani, 2014; Syunikitta et al., 2025). Furthermore, effective talent management strategies have been shown to improve employee performance by increasing motivation, skill mastery, and commitment to the organization's vision (Huda, 2021; Mantow & Nilasari, 2022; Zulfikar, 2024). Therefore, within the framework of this study, talent management is positioned as a mediating variable that facilitates the transfer of positive effects from knowledge management and employee engagement toward improved employee performance.

2.4 Knowledge Management

Knowledge management is a strategic process that involves the creation, storage, dissemination, and utilization of knowledge within organizations to enhance performance and achieve competitive advantage (Carmeli et al., 2023; Cesário & Chambel, 2017). In the context of employee performance, knowledge management plays a crucial role by ensuring that information, experience, and best practices are accessible and effectively utilized by employees (Abadi et al., 2025; Sonafa, 2018). Empirical studies indicate that organizations that systematically implement knowledge management practices are able to enhance innovation, work efficiency, and timely decision-making, which in turn positively affect individual and organizational performance (Harmen, 2018; Sobaih et al., 2025).

Knowledge management also strengthens employee engagement with the organization, as access to information and learning opportunities fosters a sense of belonging, increases motivation, and encourages active participation in work processes (Dubey, 2025). Furthermore, the integration of knowledge management with talent management enables organizations to channel the potential of knowledgeable and highly engaged employees into strategic positions, thereby supporting the achievement of optimal performance (Boyne et al., 2014). Thus, knowledge management serves as a critical foundation that supports the positive relationship between employee engagement, talent management, and improved employee performance (Masduki & Sopiyan, 2021; Zamir, 2019).

2.4 Employee Engagement

Employee engagement is a psychological state characterized by employees' energy, dedication, and full involvement in their work, which motivates them to make maximum contributions toward organizational objectives (Firmansyah & Napitupulu, 2024; Rasool et al., 2021). Employees with high levels of engagement tend to exhibit intrinsic motivation, loyalty, and proactive behaviors, which positively affect both individual and organizational performance (Siswanti et al., 2024). Recent empirical studies demonstrate that employee engagement enhances productivity, service quality, and customer satisfaction, particularly in service and banking sectors where direct interaction with customers is a critical determinant of organizational success (Cesário & Chambel, 2017; Ekhsan et al., 2023; Saragih et al., 2024; Sathish & Nallawar, 2024). Furthermore, employee engagement has been shown to be an important antecedent in the development of talent management, as engaged employees are more likely to participate in development programs, share knowledge, and take advantage of growth opportunities provided by the organization (Layek & Koodamara, 2024; Sumarsono et al., 2023). Consequently, employee engagement not only has a direct influence on performance but also

serves as a foundation that enables talent management to function as a strategic mediator in enhancing the effectiveness and sustainability of organizational performance (Davis & Southey, 2024).

3. Method

This study employs a descriptive quantitative research design. The research population consists of all employees working across 18 divisions at PT Bank Sumut Head Office in Medan, totaling 473 employees. A non-probability purposive sampling technique was applied, with the sampling criterion requiring employees to have a minimum tenure of one year. Based on Slovin’s formula with a 10% margin of error, a sample of 83 respondents was obtained and proportionally distributed across all divisions. The research data comprise primary data collected through questionnaires and interviews, as well as secondary data obtained from books, academic journals, organizational documents, and online sources. Data collection techniques included documentation review, distribution of printed questionnaires, and supplementary interviews with staff from the Human Resources Division. Data analysis was conducted using the Partial Least Squares Structural Equation Modeling (PLS-SEM) method.

4. Results And Discussion

This section presents the findings of the study conducted to examine the effect of knowledge management and employee engagement on employee performance, with talent management serving as a mediating variable. Using the Structural Equation Modeling (SEM) approach, the analysis results illustrate the strength of the relationships among variables, both partially and simultaneously. All testing results serve as the basis for answering the research questions and for providing evidence-based recommendations for human resource management at PT Bank Sumut Head Office in Medan.

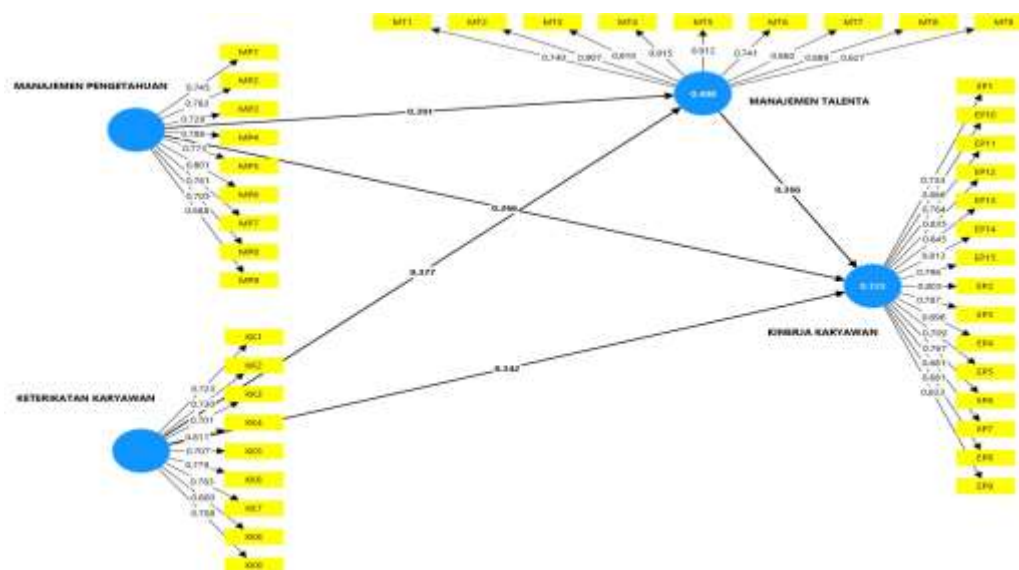


Figure 1. Loading Factor Full Model

Figure 1 presents the full loading factor model of this study, illustrating the relationships between latent variables and their respective indicators. The model consists of four main latent variables: Knowledge Management (X1), Employee Engagement (X2), Talent Management (Z), and Employee Performance (Y), each of which is measured by several indicators.

4.1 Validity and Reliability Test Results

Indicators	Variable	Outer Loading	AVE	Cronbach's alpha	Composite reliability (rho_a)
X1.1	Knowledge Management (X1)	0.745	0.567	0.905	0.909
X1.2		0.783			
X1.3		0.729			
X1.4		0.786			
X1.5		0.773			
X1.6		0.801			
X1.7		0.761			
X1.8		0.705			
X1.9		0.688			
X2.1	Employee Engagement (X2)	0.723	0.563	0.902	0.904
X2.2		0.730			
X2.3		0.701			
X2.4		0.811			
X2.5		0.707			
X2.6		0.779			
X2.7		0.783			
X2.8		0.800			
X2.9		0.708			
Z.1	Talent Management (Z)	0.740	0.704	0.945	0.947
Z.3		0.907			
Z.4		0.910			
Z.5		0.915			
Z.6		0.912			
Z.7		0.741			
Z.8		0.860			
Z.9		0.889			
Z2		0.627			
Y.1	Employee Performance (Y)	0.803	0.602	0.952	0.954
Y.2		0.787			
Y.3		0.696			
Y.4		0.709			
Y.5		0.767			
Y.6		0.681			
Y.7		0.681			
Y.8		0.823			
Y.9		0.803			

The results of the validity and reliability tests presented in Table 4.1 indicate that the measurement model in this study demonstrates excellent psychometric quality. All indicators exhibit outer loading values above the threshold of 0.70, indicating strong convergent validity and a significant contribution of each indicator in representing its respective latent construct. The Average Variance Extracted (AVE) values for Knowledge Management (X1 = 0.567), Employee Engagement (X2 = 0.563), Talent Management (Z = 0.704), and Employee Performance (Y = 0.602) all exceed the recommended cutoff value of 0.50. This finding suggests that more than 50% of the variance in the indicators is explained by their corresponding latent constructs, thereby confirming the convergent validity of the measurement model.

From a reliability perspective, the Cronbach’s alpha values of 0.905 (X1), 0.902 (X2), 0.945 (Z), and 0.952 (Y) indicate very high internal consistency, as all values surpass the minimum acceptable threshold of 0.70. Furthermore, the composite reliability values for each construct 0.909 (X1), 0.904 (X2), 0.947 (Z), and 0.954 (Y) further reinforce the strong reliability and internal consistency of the constructs employed in this study.

Table 4.2 Discriminant validity - Heterotrait-monotrait ratio (HTMT)

	Employee Engagement	Employee Performance	Knowledge Management	Talent Management
Employee Engagement				
Employee Performance	0.804			
Knowledge Management	0.720	0.772		
Talent Management	0.680	0.789	0.682	

Based on Table 4.2, the results of the discriminant validity assessment using the Heterotrait–Monotrait Ratio (HTMT) method indicate that all construct pairs in this study exhibit HTMT values below the recommended threshold of 0.85, thereby satisfying the criteria for discriminant validity. The HTMT value between Employee Engagement and Employee Performance is 0.804, indicating a strong relationship while remaining within acceptable limits to distinguish between the two constructs. The relationship between Employee Engagement and Knowledge Management yields an HTMT value of 0.720, while the HTMT value between Employee Engagement and Talent Management is 0.680.

Furthermore, the HTMT value between Employee Performance and Knowledge Management is 0.772, and between Employee Performance and Talent Management is 0.789. Finally, the relationship between Knowledge Management and Talent Management shows an HTMT value of 0.682. Collectively, these values confirm that each construct in this study is uniquely measured and does not exhibit excessive conceptual overlap. Therefore, the constructs are suitable for further structural analysis to examine the mediating role of talent management in the relationship between knowledge management, employee engagement, and employee performance.

Table 4.3 Multikolinieritas Testing

	VIF
Employee Engagement → Employee Performance	2.021
Employee Engagement → Talent Management	1.743
Knowledge Management → Employee Performance	2.042
Knowledge Management → Talent Management	1.743
Talent Management → Employee Performance	1.953

Based on the multicollinearity test results presented in Table 4.3, all Variance Inflation Factor (VIF) values range from 1.743 to 2.042, which are well below the commonly accepted threshold of 5.0. This indicates that there are no multicollinearity issues among the independent variables in the research model. In other words, employee engagement, knowledge management, and talent management do not exhibit excessively high correlations with one another, allowing each variable to contribute uniquely to explaining the dependent variable. This condition ensures that the estimated regression coefficients are more stable, valid, and accurately interpretable for testing the causal relationships within the research model.

Table 4.4 R Square

	R-Square	R-Square Adjusted
Employee Performance	0.723	0.713
Talent Management	0.488	0.475

Based on Table 4.4, the R-square value for Employee Performance is 0.723, indicating that 72.3% of the variance in employee performance can be explained by the independent variables in this study, namely Knowledge Management, Employee Engagement, and Talent Management (as a mediating variable). Meanwhile, the adjusted R-square value of 0.713 reflects an adjustment for the number of predictor variables included in the model, thereby reducing the potential risk of overestimation. This value suggests that the model has strong predictive power in explaining variations in employee performance.

For the Talent Management variable, the R-square value of 0.488 indicates that 48.8% of the variance in talent management can be explained by Knowledge Management and Employee Engagement. The adjusted R-square value of 0.475 is slightly lower but still reflects a moderately substantial relationship. These results confirm that although a large proportion of the variance in employee performance is explained by the model, there remain other factors outside the model that also influence employee performance and talent management, thereby providing opportunities for future research.

Table 4.5 F Square

	F-Square
Employee Engagement → Employee Performance	0.210
Employee Engagement → Talent Management	0.160
Knowledge Management → Employee Performance	0.125
Knowledge Management → Talent Management	0.171
Talent Management → Employee Performance	0.248

Based on the f-square (f^2) results presented in Table 4.5, the strongest effect on employee performance comes from talent management, with an f^2 value of 0.248, indicating a moderate and the most substantial contribution compared to the other variables. Employee engagement also exerts a relatively strong effect on employee performance with an f^2 value of 0.210, and it further influences talent management with an f^2 value of 0.160, reflecting its important role in shaping the quality of talent management within the organization.

Knowledge management likewise contributes to employee performance with an f^2 value of 0.125 and affects talent management with an f^2 value of 0.171. Overall, these findings suggest that although all variables make meaningful contributions, talent management emerges as the most dominant factor in enhancing employee performance, reinforced by employee engagement and knowledge management as supporting variables.

Table 4.6 Path Coefficients

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Employee Engagement → Employee Performance	0.342	0.346	0.100	3.418	0.001
Employee Engagement → Talent Management	0.377	0.376	0.122	3.089	0.002

Knowledge Management → Employee Performance	0.266	0.267	0.110	2.420	0.016
Knowledge Management → Talent Management	0.391	0.388	0.099	3.931	0.000
Talent Management → Employee Performance	0.366	0.362	0.093	3.921	0.000

Based on the results presented in Table 4.6 on path coefficients, it can be concluded that all relationships among the variables in the research model exhibit positive and significant effects. Employee engagement has a direct effect on employee performance with a path coefficient of 0.342, a t-statistic of 3.418, and a p-value of 0.001, indicating significance at the 1% level. In addition, employee engagement also significantly influences talent management, as indicated by a path coefficient of 0.377, a t-statistic of 3.089, and a p-value of 0.002. Knowledge management has a positive effect on employee performance with a path coefficient of 0.266, a t-statistic of 2.418, and a p-value below 0.05, confirming statistical significance. Furthermore, the effect of knowledge management on talent management exhibits the highest coefficient among the relationships tested, with a value of 0.391 and a t-statistic of 3.939, indicating a strong and significant contribution. Finally, talent management has a positive influence on employee performance, as reflected by a path coefficient of 0.366, a t-statistic of 3.925, and a p-value below 0.001. Overall, these findings indicate that improvements in employee engagement and knowledge management not only have direct impacts on employee performance but also strengthen talent management, which in turn further enhances overall employee performance.

5. Discussion

The results of this study demonstrate that knowledge management has a positive and significant effect on employee performance. This finding indicates that the better knowledge management is implemented in daily work activities, the higher the level of employee performance achieved. This result is supported by previous studies (Akram & Hilman, 2018; Almuayad & Chen, 2024; Ofem & Bayode, 2025; Ştefan et al., 2024). At PT Bank Sumut Head Office in Medan, employees are able to manage, document, and optimally utilize their knowledge in every work process. Employees do not rely solely on personal experience but also make use of a structured shared knowledge base, enabling tasks to be completed more quickly, accurately, and efficiently. Moreover, effective knowledge management helps employees anticipate and resolve work-related problems more effectively, as they have access to relevant and accurate information. Well-documented knowledge also facilitates inter-employee learning processes, thereby continuously enhancing work competencies. Consequently, knowledge management not only improves the quality of work outputs but also fosters an adaptive, innovative, and results-oriented work culture.

The findings also indicate that employee engagement has a positive and significant effect on employee performance, meaning that higher levels of engagement lead to higher levels of performance (Bakker & Demerouti, 2017; Hanaysha, 2022; Purba et al., 2023). Highly engaged employees typically demonstrate vigor, dedication, and full absorption in their work. In the context of PT Bank Sumut Head Office in Medan, this engagement is reflected in employees' commitment to completing tasks on time, their willingness to exert extra effort, and their sense of ownership toward organizational success. Emotionally engaged employees also tend to possess strong intrinsic motivation, which helps maintain work quality and enhance productivity. In addition, high engagement promotes strong teamwork, more effective communication, and proactive attitudes in addressing work-related challenges. These conditions ultimately create a positive work environment that consistently supports the achievement of organizational targets.

Thus, employee engagement not only directly contributes to improved individual performance but also serves as a key factor in building organizational competitiveness.

This study further confirms that knowledge management has a positive and significant effect on talent management. This finding is consistent with previous research emphasizing that effective knowledge management practices—including knowledge creation, storage, sharing, and application—enhance an organization's capacity to identify, develop, and retain its best talents (Shujahat et al., 2017; Akram & Hilman, 2018; Almuayad & Chen, 2024). Well-managed knowledge enables organizations to provide relevant strategic information for talent development, accelerate learning processes, and facilitate innovation. Ultimately, this contributes to the establishment of a more adaptive talent management system oriented toward long-term competitive advantage (Chelliah et al., 2019; Shafique & Beh, 2021).

The results also show that employee engagement has a positive and significant effect on talent management. Employees with high levels of engagement tend to exhibit greater commitment, loyalty, and active participation in development programs, thereby facilitating organizational efforts to identify, develop, and retain top talent. High employee engagement creates a collaborative work environment, motivates individuals to contribute optimally, and strengthens the overall talent management process (Shuck et al., 2014). These findings are in line with studies by Akram et al. (2020), Siddiqui et al. (2022), and Almuayad and Chen (2024), which demonstrate that employee engagement enhances the effectiveness of talent management by improving workplace relationships, fostering innovation, and reducing turnover rates. Furthermore, according to Mensah (2015) and Eltayeb and Al-Mahdy (2023), employee engagement acts as a catalyst in talent management strategies, as engaged employees are more receptive to career development programs, training initiatives, and strategic placements, thereby generating significant added value for organizations.

The study also reveals that talent management has a positive and significant effect on employee performance, indicating that the better talent management is implemented within an organization, the higher the level of employee performance achieved. Effective talent management encompasses processes of identifying, developing, and retaining high-potential employees so that they can contribute optimally to organizational goals. This finding is consistent with the study by Prihantoro and Mulyanto (2020), which found a strong relationship between talent management and improved employee performance through competency-based placement and career development opportunities. Similarly, Anwar et al. (2022) emphasized that appropriate talent management strategies, such as continuous training programs and clear career paths, motivate employees to deliver superior performance. Mansoor et al. (2021) further highlighted that organizations that successfully manage talent tend to outperform competitors in terms of productivity, innovation, and competitiveness. Therefore, the implementation of structured and sustainable talent management practices is a key driver of significant improvements in employee performance.

Furthermore, numerous studies indicate that knowledge management has a significant effect on employee performance through the mediating role of talent management. Effective knowledge management enables organizations to systematically manage, store, and distribute information, transforming it into actionable knowledge for employee competency development (Nonaka & Takeuchi, 1995; Alaraj & Mohamed, 2017). When organizational knowledge is well managed, it provides a strong foundation for talent management processes, such as identifying high-potential individuals, developing skills, and placing employees in suitable positions (Collings, Mellahi, & Cascio, 2019; Sparrow & Makram, 2015). In this context, knowledge management enhances the quality of talent management programs, which in turn improves individual and team performance. Recent studies by Al-Tal and Emeagwali (2019) and Rasula et

al. (2012) confirm that talent management can function as a mediating variable that strengthens the relationship between knowledge management and employee performance, as well-managed talent is better able to apply knowledge effectively in achieving organizational objectives. Therefore, integrating knowledge management and talent management strategies is essential for organizations seeking to build sustainable superior performance.

Employee engagement is also proven to have a significant effect on employee performance through the mediating role of talent management. Highly engaged employees tend to demonstrate greater dedication, loyalty, and enthusiasm, making it easier for organizations to identify, develop, and retain top talent. According to Saks (2006), employee engagement enhances active participation in talent development programs, which subsequently strengthens individual and team capabilities. Research by Alqudah et al. (2022) further suggests that employee engagement fosters a work environment that supports learning and innovation, thereby enabling talent management practices to operate optimally. This mediation process occurs when employee engagement creates positive working conditions that facilitate the implementation of talent management strategies—such as training programs, coaching, and career development—which ultimately enhance productivity and performance quality (Collings et al., 2019). In other words, employee engagement acts as a catalyst that activates talent management mechanisms to generate superior performance at both individual and organizational levels.

Based on the findings of this study, it can be concluded that organizational success in improving employee performance is strongly influenced by the integration of knowledge management, employee engagement, and talent management. These three aspects complement and reinforce one another, with knowledge management providing a foundation of information and skills, employee engagement fostering motivation and commitment, and talent management ensuring that the best potential is optimized to achieve strategic organizational objectives. PT Bank Sumut Head Office in Medan serves as a practical example of how well-planned, structured, and sustainable human resource management can create a productive, innovative, and adaptive work environment. Therefore, organizations should continuously develop strategies that synergistically integrate these three factors to maintain competitive advantage and ensure sustained high performance in the future.

6. Conclusion

Based on the results of this study, it can be concluded that knowledge management, employee engagement, and talent management have positive and significant effects on employee performance, both directly and through mediating relationships. Effectively managed knowledge management enables employees to optimally utilize information and work-related experience, thereby supporting decision-making processes, accelerating task completion, and improving the quality of work outcomes. Employee engagement has been shown to enhance intrinsic motivation, loyalty, and active participation in achieving organizational objectives, which in turn strengthens the effectiveness of talent management. Talent management plays a crucial role in ensuring that individuals with the highest potential are developed, appropriately placed, and retained to deliver maximum contributions to the organization.

Furthermore, the findings indicate that talent management serves as a significant mediator in the relationship between knowledge management and employee engagement on employee performance. The integration of these three factors creates synergy that enhances productivity, innovation, and sustainable organizational competitiveness. Therefore, organizations, including PT Bank Sumut Head Office in Medan, should implement human resource management strategies that focus on optimizing knowledge management, strengthening employee engagement, and reinforcing talent management systems in a planned and continuous manner to sustain superior performance in an increasingly competitive environment.

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