

The Influence of Talent Management and Knowledge Management on Employee Performance with Employee Engagement as a Mediating Variable at PT. Bank Mandiri Branch, University of North Sumatra

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This study aims to examine the influence of knowledge management and talent management on employee performance, with employee engagement as a mediating variable at PT. Bank Mandiri (Persero) Tbk, University of North Sumatra Branch. Using a quantitative approach, data were collected through questionnaires from 36 employees and analyzed using path analysis with statistical software. The results show that both talent management and knowledge management have significant and positive effects on employee engagement and performance. Furthermore, employee engagement significantly influences performance and mediates the relationship between knowledge and talent management on performance. These findings highlight the importance of effective knowledge and talent management strategies to enhance employee engagement and overall performance.

INTRODUCTION

Since human resources are now more frequently utilized for strategic than for administrative reasons, human resource management has changed from earlier times. Finding internal talent or human resources with the capacity and potential to boost staff productivity and, more crucially, employee happiness is one of the strategic roles of human resources in a company. Individual performance determines the performance of the organization; in other words, individual performance will give an overview of the performance of the organization (Afriyani et al., 2024).

In general, business and the environment are marked by ongoing change. The following are the primary changes: 2) new organizational forms that have supplanted old organizational structures to produce more dynamic and data-driven companies; and 3) macroenvironmental developments include globalization, information technology, knowledge-based skills, and a lack of political, economic, and social awareness; and 3) democratic changes that have changed educational institutions in ways that affect the employment of younger generations (Riswanto et al., 2023).

A key component of organizational success is employee performance, where organizations must be able to develop high employee performance in order to achieve high levels of success and a fulfilling life. The success of the organization in fostering employee engagement will be reflected in employee performance, (Febriana, 2023). According to Azizah (2021), a worker's performance is defined as their actual performance compared to their expected performance. Based on the results of interviews with the head of the Ofiicer section of PT Bank Mandiri, University of North Sumatra Branch regarding employee performance problems at PT Bank Mandiri, University of North Sumatra Branch, it was found that a number of employees were still unable to complete tasks according to predetermined targets. This is caused by non-optimal talent management where employee placement is not always in accordance with their expertise and interests, ineffective knowledge management so that the transfer of information and best practices between employees does not run smoothly, and low levels of employee engagement characterized by a lack of sense of belonging to the company and motivation to work. Apart from being based on data and interview results from the leadership of PT Bank Mandiri, University of North Sumatra Branch, researchers also obtained employee performance from pre-survey results as in the following table:

Table 1. Pre-Survey Results Regarding Employee Performance at PT. Bank Mandiri, University of North Sumatra Branch

No	Statement	Yes		No		Total	
		f	(%)	f	(%)	f	(%)
1	Employees are able to complete tasks in accordance with predetermined targets	9	45	11	55	20	100

No	Statement	Yes		No		Total	
		f	(%)	f	(%)	f	(%)
2	Employees always complete work efficiently and on time	10	50	10	50	20	100
3	Employees always comply with standard operating procedures in completing work	13	65	7	35	20	100
4	Employees always complete tasks without having to wait for repeat instructions from superiors	12	60	8	40	20	100

Source: Primary Results (processed), 2025

Based on Table 1, the phenomenon that emerges from the results of the pre-survey questionnaire shows that 55% of employees of PT Bank Mandiri, University of North Sumatra Branch feel unable to complete tasks according to predetermined targets. This reflects difficulties in achieving set goals, which can be caused by various factors, such as excessive workload, lack of resources, or lack of support from management in providing the necessary training or guidance. This problem occurs as well as employees who find it difficult to complete a large amount of work and must be completed in a limited time. Time constraints, lack of planning, or unexpected interruptions can make targets difficult to achieve, potentially lowering overall motivation and productivity. In this context, companies need to review workloads, training support, and more efficient ways of working to ensure employees can better achieve targets.

One of the elements that influences both good and poor performance is employee engagement. The degree of interest, dedication, and excitement that workers feel for their jobs and the company they work for is known as employee engagement. Employees who have high engagement tend to be more motivated, proactive, and willing to give extra effort in carrying out their duties, which ultimately has a positive impact on improving performance, (Irfania & Rini, 2025). They do not only work to fulfill obligations, but also feel a sense of purpose and emotional attachment to the company, so they are more productive, innovative, and able to contribute to achieving organizational targets. Therefore, increasing employee engagement through good communication, rewards, development opportunities, and a positive work environment is an important strategy for companies in encouraging optimal employee performance, (Iswahyudi et al., 2021).

Previous research conducted by Diwanti (2021), Napitupulu (2025), Firdausi and Wajdi (2024) and Aziz (2022) stated that employee engagement affects employee performance. Other research results conducted by Kadri et al (2023), Amalia (2022) and Aldira et al (2024) state that employee engagement has no effect on employee performance. The following are the results of a pre-survey

regarding employee engagement at PT Bank Mandiri, University of North Sumatra.

Table 2. Pre-Survey Results Regarding Employee Engagement at PT Bank Mandiri, University of North Sumatra Branch

No	Statement	Yes		No		Total	
		f	(%)	f	(%)	f	(%)
1	Employees feel they have a strong emotional bond with the company	12	60	8	40	20	100
2	Employees feel motivated to achieve their work targets and goals.	8	40	12	60	20	100
3	Employees feel that their job provides positive challenges for their career development.	11	55	9	45	20	100

Source: Primary Results (processed), 2025

Based on the results of the pre-survey questionnaire in Table 1.4 conducted at PT Bank Mandiri, University Branch, North Sumatra, it was found that 60% of employees answered "No" to the statement "Employees feel motivated to achieve work targets and goals." This indicates a problem in the level of employee engagement and motivation in their work. This indicates a problem in the level of employee involvement and motivation in their work. This phenomenon occurs because employees feel less motivated to achieve their goals. For example, employees who don't feel valued or don't see the direct benefits of the job tend to lose enthusiasm and interest in contributing more. This can be caused by a lack of effective communication between management and employees, the absence of adequate rewards or incentives, or excessive workload without a clear balance between work and personal life. In this case, looking at the problems that occur when an employee feels unappreciated in a particular activity or role, it leads to a decrease in their motivation and involvement in the task at hand.

One way that companies can improve employee performance within their organization is by using Talent Management and Knowledge Management. Businesses today are expected to have superior human resources, so it is necessary to manage the talents possessed by employees through talent management strategies. One method to identify, develop, and improve talented employees is through talent management, (Gunawan et al., 2023).

According to Dharmanegara (2022), talent management is a process to ensure that companies can fill vacancies for future leaders and positions that increase the internal competence of the organization. Talent management can be defined as a systematic strategic approach that companies use to implement

various human resource management practices, such as employee recruitment and evaluation, training and development, performance management, and compensation to inspire, encourage, and motivate employees. This research has previously been conducted by Fajriyah (2024), Diwanti (2021), Setyawan and Maharani (2024), Rahman et al (2023), Napitupulu (2025), Darvin and Setyawan (2024) which state that talent management affects employee performance. In addition, this research has also previously been conducted by Basuki and Marliyana (2021), Wang (2021), Rahardjo (2020), which states that talent management has no effect on employee performance.

At PT Bank Mandiri, University Branch of North Sumatra, talent management is used to address the importance of management in identifying employees who are able to receive promotions, rotations, and transfers without any problems, so that ultimately efficiency in the work process will be carried out effectively. The results of the survey regarding talent management at PT Bank Mandiri University of North Sumatra are as follows.

Table 3. Pre-Survey Results Regarding Talent Management at PT. Bank Mandiri, University of North Sumatra Branch

No	Statement	Yes		No		Total	
		f	(%)	f	(%)	f	(%)
1	The recruitment process at PT Bank Mandiri, University of North Sumatra Branch is transparent and fair.	10	50	10	50	20	100
2	PT Bank Mandiri Cabang Universitas Sumatera Utara provides adequate opportunities for employee career development.	9	45	11	55	20	100
3	The training and development programs provided help employees improve their skills and work competencies.	13	65	7	35	20	100

Source: Primary Results (processed), 2025

Based on Table 3, it can be seen that the results of the pre-survey questionnaire show that 55% of employees at PT Bank Mandiri Cabang Universitas Sumatera Utara answered "No" to the statement "PT Bank Mandiri Cabang Universitas Sumatera Utara provides adequate opportunities for employee career development," this reflects significant dissatisfaction with talent management at PT Bank Mandiri Cabang Universitas Sumatera Utara. This

phenomenon shows that many employees feel that they do not get enough opportunities to develop in their careers, both in the form of training, promotions, and increasing competence in accordance with the professional aspirations of employees. This problem often occurs because employees feel trapped in the same position without a clear career path, which can ultimately reduce their motivation and performance. Without serious attention to career development, this can lead to high turnover rates and loss of valuable talent for the company.

Knowledge Management plays an important role in improving employee performance by ensuring that the knowledge owned by individuals or organizations can be accessed, shared, and applied effectively. Through the process of acquiring, storing, distributing, and utilizing knowledge, employees can work more efficiently, increase innovation, and reduce errors in decision making, (Anwar et al., 2024). Knowledge Management also encourages a culture of continuous learning, where employees are encouraged to share insights and experiences, thereby increasing the productivity and competitiveness of the company. With a good knowledge management system, employees can more easily find solutions to work problems, accelerate adaptation to change, and increase collaboration between teams, which in turn has a positive impact on achieving organizational goals, (Adhari., 2021).

The results of previous research conducted by Fajriyah (2024), Diwanti (2021), Rahman et al (2023), Napitupulu (2025), Darvin and Setyawan (2024), Ramadhani et al (2020), Cahyani (2024) which state that knowledge management affects employee performance. In addition, the results of research conducted by Laila et al (2021) and Panuji et al (2024) explain that knowledge management has no effect on employee performance. The application of knowledge management that has been made by Bank Mandiri to its employees can be seen by conducting a pre-survey, which is as follows:

Table 4. Pre-Survey Results Regarding Knowledge Management at PT. Bank Mandiri, University of North Sumatra Branch

No	Statement	Yes		No		Total	
		f	(%)	f	(%)	f	(%)
1	PT Bank Mandiri Cabang Universitas Sumatera Utara has an effective system for sharing knowledge among employees.	10	50	10	50	20	100
2	Employees at the USU branch actively share knowledge and information related to job duties.	14	70	6	30	20	100
3	The bank provides platforms or tools that	11	55	9	45	20	100

No	Statement	Yes		No		Total	
		f	(%)	f	(%)	f	(%)
4	facilitate access to the knowledge needed by employees PT Bank Mandiri Cabang Universitas Sumatera Utara has a culture that encourages employees to continue learning and share knowledge openly.	8	40	12	60	20	100

Source: Primary Results (processed), 2025

The phenomenon of problems that arise based on the results of the pre-survey questionnaire, where 60% of employees answered "No" to the statement "PT Bank Mandiri Cabang Universitas Sumatera Utara has a culture that encourages employees to continue to learn and share knowledge openly," shows that there are obstacles in creating an organizational culture that supports collaboration and knowledge sharing. This can result in decreased effectiveness in knowledge transfer between employees, potentially affecting the quality of service to customers and operational efficiency. Employees feel less motivated to share their information or experience, given the lack of support or rewards for such initiatives. In addition, powerlessness in knowledge sharing can slow down faster problem solving and make it difficult to improve individual and team performance.

This research has previously been conducted by Diwanti (2021), Setyawan and Maharani (2024), Rahman et al (2023), Napitupulu (2025), Putri (2023) which state that talent management knowledge management affects employee performance through employee engagement. In addition, research conducted by Afrio (2023), Khatimah & Simanjorang (2023) explains that talent management and knowledge management have no effect on employee performance through employee engagement.

LITERATURE REVIEW

Performance

According to Fernandez (2022), performance in an organization refers to the quantity and results of work done by an individual or group to carry out tasks and functions based on established operational processes, criteria, and scope within the company. Based on Ondi et al (2023), performance is the result achieved by an individual and also a team in a particular company, based on their own will and perseverance, as a form of achieving company targets according to law, morals, and ethics.

Talent Management

Talent is also defined as someone who has been identified as having the potential to become a leader in their field within a company (company future leader) (Setyadi & Mulyaningrum, 2022). Talent management is a stage in explaining how an organization can develop internal competencies (attractive and valuable talent) and positions that can create future leaders (company future leaders) (Lailiyah et al., 2025).

Knowledge Management

All procedures or approaches that generate, collect, record, disseminate, and apply information to improve organizational learning and productivity are referred to as knowledge management as a whole (Ratsani & Pangestu, 2022). According to Anwar et al. (2024), knowledge management is the process of leveraging business knowledge to establish corporate strategies and gain a competitive advantage by simplifying the creation, dissemination, and application of all information required to achieve organizational objectives.

Employee Engagement

The concept of employee engagement is often defined as the willingness to do more, according to Setyaningrum (2023). Employee engagement refers to personal involvement that applies individuals to company membership in carrying out tasks. In this context, employees demonstrate themselves through their behavior and psychological state while working (Ellyana, 2023). Employee engagement, as defined by Faradiva (2024), is the first academic concept to consider employee engagement as the level of enthusiasm, dedication, and energy that people give to their work.

Based on the theoretical explanation that has been stated, the conceptual framework of this research is as follows:

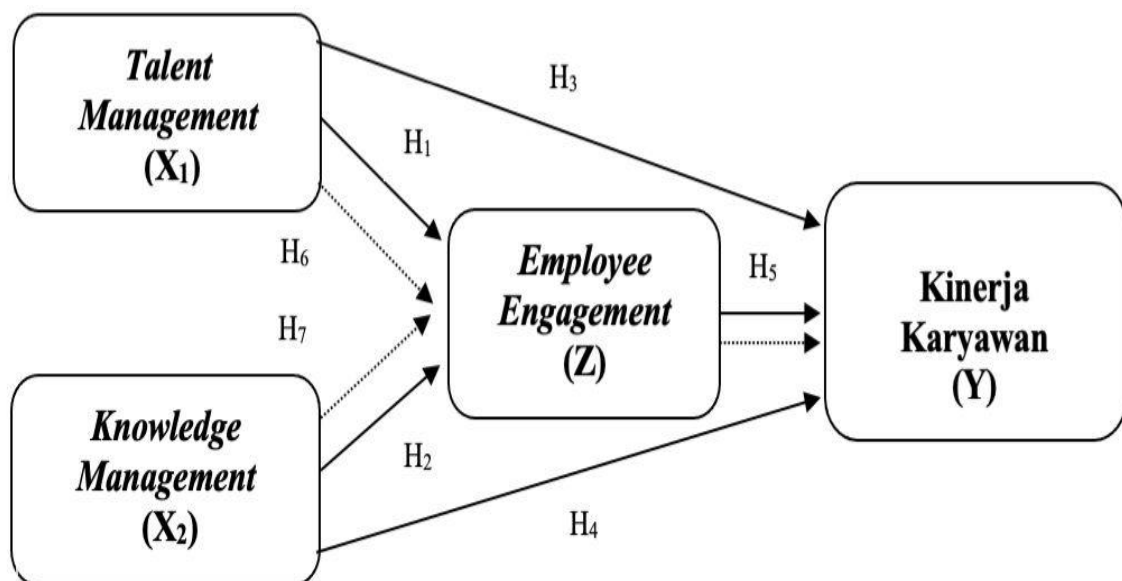


Figure 1. Conceptual Framework

METHODOLOGY

This study employs a quantitative methodology, gathering data using questionnaires distributed to 36 employees as research samples. Path analysis is the analysis technique employed, with statistical software's assistance.

RESEARCH RESULT

Convergent validity has a provision that must be measured through highly related constructs. Testing the validity of SMART PLS 3.0 by knowing the loading factor value, which is above 0.7 (Ghozali, 2018).

Table 5. Outer Loading Factors Test Results

	Employee Engagement (Z)	Employee Performance (Y)	Knowledge Management (X2)	Talent Management (X1)
X1.1				0.831
X1.2				0.818
X1.3				0.826
X1.4				0.784
X1.5				0.823
X1.6				0.783
X1.7				0.915
X1.8				0.866
X2.1			0.947	
X2.2			0.969	
X2.3			0.977	
X2.4			0.981	
X2.5			0.943	
X2.6			0.960	
X2.7			0.969	
X2.8			0.967	
Y.1		0.908		
Y.2		0.838		
Y.3		0.929		
Y.4		0.969		
Y.5		0.756		
Y.6		0.958		
Z.1	0.808			
Z.2	0.873			
Z.3	0.736			
Z.4	0.758			
Z.5	0.808			
Z.6	0.836			
Z.7	0.821			

Source: Primary Data (processed), 2025

Based on Table 5, it can be seen that most of the indicators of each research variable have an outer loading value greater than 0.7. This indicates that these indicators have a strong correlation with the constructs they measure.

Table 6. Construct Validity and Reliability Test Results

	Cronbach 's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Employee Engagement (Z)	0.912	0.939	0.929	0.651
Employee Performance (Y)	0.949	0.959	0.961	0.803
Knowledge Management (X2)	0.989	0.994	0.991	0.930
Talent Management (X1)	0.937	0.951	0.947	0.692

Source: Primary Data (processed), 2025

All of the variables in this study have values that satisfy the suggested standards, according to the results of tests of construct validity and reliability. Each variable's Cronbach's Alpha value is more than 0.7, suggesting that the instrument in use has outstanding internal reliability. All variables' Composite Reliability (CR) values are higher than the 0.7 threshold, indicating strong internal consistency amongst indicators. Convergent validity is further demonstrated by the fact that the Average variation Extracted (AVE) value for all variables is more than 0.5, indicating that each construct can account for over 50% of the variation of its indicators. Therefore, it can be said that this research tool is dependable and legitimate for use in additional analysis.

The R² (R-squared) value or coefficient of determination is a statistical measure used to explain how large a proportion of the variation in the dependent variable can be explained by the independent variables in a model. The results of the R² value on the variables according to the measurement results are shown in Table 7.

Table 7. Results of R Square Value

	R Square	Adjusted R Square
Employee Engagement (Z)	0.246	0.201
Employee Performance (Y)	0.738	0.713

Source: Primary Results (processed), 2025

The R² value for employee performance is 0.738. This value means that talent management and knowledge management can influence employee performance by 73.8%, with the remaining 26.2% determined by other factors. The R² value for employee engagement is 0.246. This value indicates that the variables of talent management and knowledge management can influence

employee engagement by 24.6%, with the remaining 75.4% determined by the influence of other factors.

Total effect is essentially the accumulation of all effects exerted by an independent variable on a dependent variable, both direct effects and indirect effects through one or more mediating variables. Thus, the total effect can describe the overall contribution of the independent variable in explaining changes in the dependent variable, taking into account the complex and interrelated pathways among the variables involved in the research model.

Table 8. Path Coefficients (Direct Effect)

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Employee Engagement (Z) -> Employee Performance (Y)	0.373	0.353	0.122	3.055	0.002
Knowledge Management (X2) -> Employee Engagement (Z)	0.347	0.362	0.093	3.725	0.000
Knowledge Management (X2) -> Employee Performance (Y)	0.183	0.182	0.087	2.105	0.036
Talent Management (X1) -> Employee Engagement (Z)	0.379	0.410	0.141	2.687	0.007
Talent Management (X1) -> Employee Performance (Y)	0.612	0.619	0.119	5.127	0.000
Knowledge Management (X2) ->	0.130	0.127	0.054	2.413	0.016

Employee Engagement (Z) -> Employee Performance (Y)					
Talent Management (X1) -> Employee Engagement (Z) -> Employee Performance (Y)	0.141	0.140	0.065	2.168	0.031

Source: Primary Data (processed), 2025

Based on Table 8, it can be explained that:

1. Employee Engagement has a significant and positive influence on Employee Performance with a coefficient value of 0.373 and a p-value of 0.002 (< 0.05). These results indicate that high employee engagement leads to high performance.
2. Knowledge Management has a significant and positive influence on Employee Engagement with a coefficient value of 0.347 and a p-value of 0.000, meaning that effective knowledge management can positively enhance employee engagement.
3. Knowledge Management has a significant and positive influence on Employee Performance with a coefficient of 0.183 and a p-value of 0.036. This indicates that effective knowledge management directly drives improvements in employee performance.
4. Talent Management has a significant and positive influence on Employee Engagement with a coefficient of 0.379 and a p-value of 0.007. This means that the better the talent management, the higher the employee engagement.
5. Talent Management has a significant and positive influence on Employee Performance with a coefficient value of 0.612 and a p-value of 0.000, making it the strongest factor in driving employee performance.
6. The indirect effect of Knowledge Management on Employee Performance through Employee Engagement is also positive and significant, with a coefficient value of 0.130 and a p-value of 0.016, indicating that employee engagement strengthens the positive impact of knowledge management on performance.
7. Talent Management also has a positive and significant indirect effect on Employee Performance through Employee Engagement, with a coefficient of 0.141 and a p-value of 0.031. These results demonstrate that talent management in work outcomes is driven by the level of employee engagement.

DISCUSSION

The Effect of Talent Management on Employee Engagement

The results showed that talent management has a positive and significant effect on employee engagement. This shows that the better the talent management in the company, the higher the level of employee engagement. Effective talent management includes the right selection process, competency development, and job placement in accordance with individual potential. When employees feel that the company pays attention to developing and utilizing their potential, they will be more motivated and emotionally and cognitively engaged at work.

This research has previously been conducted by Diwanti (2021), Rahman et al (2023), Napitupulu (2025), Putri (2023), Saputra et al (2025) which state that talent management affects employee engagement. In addition, this research has also previously been conducted by Sapriyanda (2022), Mende & Dewi (2021) explaining that talent management has no effect on employee performance.

The Effect of Knowledge Management on Employee Engagement

This study also found that knowledge management has a positive and significant effect on employee engagement. This means that the better the knowledge management in the work environment, the higher the employee engagement in organizational activities. The process of sharing knowledge, documenting work experience, and the availability of easily accessible information encourages employees to feel more confident and empowered in completing their work. The results of previous research conducted by Diwanti (2021), Rahman et al (2023), Napitupulu (2025), Putri (2023), Saputra et al (2025) state that knowledge management affects employee engagement. In addition, the results of research conducted by Nugrohoseno & Baharsyah (2020) explain that employee engagement has no effect on employee performance.

The Effect of Talent Management on Employee Performance

The results showed that talent management has a positive and significant effect on employee performance. This indicates that the better the talent management carried out by the organization, the higher the performance shown by the employees. Effective talent management helps employees to be placed according to their potential and given the opportunity to develop, which directly increases productivity and quality of work results. This research has previously been conducted by Fajriyah (2024), Diwanti (2021), Setyawan and Maharani (2024), Rahman et al (2023), Napitupulu (2025), Darvin and Setyawan (2024) which state that talent management affects employee performance. In addition, this research has also previously been conducted by Basuki and Marliyana (2021), Wang (2021), Rahardjo (2020) which states that talent management has no effect on employee performance.

The Effect of Knowledge Management on Employee Performance

This study also proves that knowledge management has a positive and significant effect on employee performance. This confirms that good knowledge

management, including the process of storing, distributing, and using information, has a direct contribution to increasing work effectiveness. Employees who have access to relevant information and experience can work more quickly, accurately, and efficiently. The results of previous research conducted by Fajriyah (2024), Diwanti (2021), Rahman et al (2023), Napitupulu (2025), Darvin and Setyawan (2024), Ramadhani et al (2020), Cahyani (2024) state that knowledge management affects employee performance. In addition, the results of research conducted by Laila et al (2021) and Panuji et al (2024) explain that knowledge management has no effect on employee performance.

The Effect of Employee Engagement on Employee Performance

The results showed that employee engagement has a positive and significant effect on employee performance. This means that the higher the level of employee engagement in the organization, the better the performance shown. Engaged employees tend to have positive energy, focus, and high enthusiasm in completing their tasks. Previous research conducted by Diwanti (2021), Napitupulu (2025), Firdausi and Wajdi (2024) and Aziz (2022) stated that employee engagement affects employee performance. The results of other studies conducted by Kadri et al (2023), Amalia (2022) and Aldira et al (2024) state that employee engagement has no effect on employee performance.

The Effect of Talent management on Employee Performance Through Employee Engagement

This study also found that employee engagement mediates the effect of talent management on employee performance. This means that talent management not only has a direct impact on performance, but also through increasing employee engagement. In other words, a good talent management strategy is able to increase employee engagement, which in turn drives performance improvement.

These results provide evidence that companies need to prioritize engagement as part of their talent management strategy. It is not enough to provide training or promotions, but it is also important to build emotional attachment and a sense of belonging to the organization. Employee engagement is a determining factor in the success of talent management implementation. This research has previously been conducted by Diwanti (2021), Setyawan and Maharani (2024), Rahman et al (2023), Napitupulu (2025), Putri (2023) which state that talent management affects employee performance through employee engagement. In addition, research conducted by Afrio (2023), Khatimah & Simanjorang (2023) explains that talent management has no effect on employee performance through employee engagement,

The Effect of Knowledge Management on Employee Performance Through Employee Engagement

Research findings also show that employee engagement mediates the effect of knowledge management on employee performance. This means that knowledge management not only has a direct effect on performance, but also has an indirect effect through employee engagement. When knowledge is well

managed and shared fairly, it can increase the sense of being engaged and valued by employees. This research has previously been conducted by Diwanti (2021), Rahman et al (2023), Napitupulu (2025), Putri (2023) which states that knowledge management affects employee performance through employee engagement. In addition, research conducted by Afrio (2023), Khatimah & Simanjorang (2023) explains that knowledge management has no effect on employee performance through employee engagement.

CONCLUSIONS AND RECOMMENDATIONS

1. Talent management has a positive and significant influence on employee engagement at PT. Bank Mandiri, North Sumatra University Branch.
2. Knowledge management has a positive and significant influence on employee engagement at PT. Bank Mandiri, North Sumatra University Branch.
3. Talent management has a positive and significant impact on employee performance at PT. Bank Mandiri Branch Universitas Sumatera Utara.
4. Knowledge management has a positive and significant impact on employee performance at PT. Bank Mandiri Branch Universitas Sumatera Utara.
5. Employee engagement has a positive and significant influence on employee performance at PT. Bank Mandiri Branch Universitas Sumatera Utara.
6. Talent management has a positive and significant influence on employee performance at PT. Bank Mandiri Branch Universitas Sumatera Utara through employee engagement as an intervening variable.
7. Knowledge management has a positive and significant influence on employee performance at PT. Bank Mandiri Branch Universitas Sumatera Utara through employee engagement as an intervening variable.

ADVANCED RESEARCH

1. PT Bank Mandiri Cabang Universitas Sumatera Utara is advised to further intensify talent management practices in terms of job placement based on individual competency assessments.
2. PT Bank Mandiri Cabang Universitas Sumatera Utara should encourage the creation of a collaborative and open work environment, for example through mentoring programs, regular discussions between departments, or internal digital platforms for sharing knowledge and experience.
3. PT Bank Mandiri Cabang Universitas Sumatera Utara must still be able to maintain and strengthen employee morale consistently. One way is to provide meaningful work challenges, recognition of achievements, and clear career development opportunities.
4. PT Bank Mandiri Cabang University of North Sumatra is advised to strengthen teamwork management and coordination training between employees, such as through team building activities, work efficiency workshops, and a clearer and more structured division of tasks.
5. For future researchers, it is recommended to expand the scope of research both in terms of the number of respondents and research locations so that the results obtained are more representative and can be generalized to a broader organizational context.

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REFERENCES

- Adhari, I. Z. (2021). *Optimalisasi Kinerja Karyawan Menggunakan Pendekatan Knowledge Management & Motivasi Kerja* (Vol. 1). CV. Penerbit Qiara Media.
- Afrio, G. (2023). *Pengaruh Talent Management Dan Knowledge Management Terhadap Kinerja Karyawan Dengan Employee Engagement Sebagai Variabel Pemediasi Pada Karyawan PT. Pegadaian Area Padang* (Doctoral dissertation, Unand).
- Afriyani, F., Hasan, L. D., Rokhmat, A., Wahyudin, Y., & Syarweny, N. (2024). *Manajemen Sumber Daya Manusia: Teori Komprehensif dalam MSDM*. PT. Sonpedia Publishing Indonesia.
- Aldira, Z. N., Andriana, I., Farla, W., & Santati, P. (2024). Pengaruh Employee Engagement terhadap Kinerja Karyawan pada Perusahaan SKK Migas. *Al-Kharaj: Jurnal Ekonomi, Keuangan & Bisnis Syariah*, 6(3), 1177-1187.
- Amalia, A. (2022). *Pengaruh Employee Engagement, Budaya Organisasi Dan Stress Kerja Terhadap Kinerja Karyawan Pada PT. Tiga Permata Ekspres* (Doctoral dissertation, Universitas Nahdlatul Ulama Sidoarjo).
- Anwar, H. M., Deni, H. A., Syamsulbahri, M., Ansyah, R. H. A., Yamin, M., & Amruddin, M. P. (2024). *Manajemen Pengetahuan*. Cendikia Mulia Mandiri.
- Aziz, I. A. (2022). *Peran Talent Management Terhadap Kinerja Karyawan Melalui Employee Engagement Pada PT. Reska Multi Usaha Daop 4 Semarang* (Doctoral dissertation, Universitas Islam Sultan Agung Semarang).
- Azizah, S. N. (2021). *Manajemen kinerja*. Penerbit NEM.
- Basuki, K., & Marliyana, D. (2021). Pengaruh Talent Management Dan Organizational Citizenship Behavior (Ocb) Terhadap Kinerja Pengelolaan

- Arsip Di Dinas Perpustakaan Dan Kearsipan Provinsi Dki Jakarta Dengan Kepuasan Kerja Sebagai Variable Moderating. *Media Manajemen Jasa*, 9(1).
- Cahyani, R. P. (2024). Pengaruh talent management, knowledge management, dan work-life balance terhadap employee performance yang dimediasi oleh job satisfaction pada karyawan perusahaan jasa maintenance peralatan gedung. *SKRIPSI-2023*.
- Darvin, D., & Setyawan, A. (2024). Pengaruh Talent Management, Knowledge Management, Pelatihan, Motivasi dan Kompensasi Terhadap Kinerja Karyawan di Kota Batam Pada Sektor Perbankan. *REVITALISASI: Jurnal Ilmu Manajemen*, 13(1), 202-210.
- Dharmanegara, B. A. (2022). Manajemen Talenta Pada Sektor Publik: Sebuah Studi Literatur Serta Arah Model Kajian Untuk Masa Depan
- Diwanti, S. A. (2021). *Talent Management, Knowledge Management Terhadap Kinerja Pegawai melalui Employee Engagement Sebagai Variabel Intervening (Studi Kasus Pegawai Kantor Wilayah DJP Banten)* (Doctoral dissertation, Universitas Mercu Buana Jakarta).
- Ellyana, E. (2023). *Pengaruh Kepemimpinan Inklusif, Leader Member Exchange Terhadap Kinerja Pegawai Melalui Keterlibatan Kerja Pada Puskesmas Banda Sakti Kota Lhokseumawe* (Doctoral dissertation, Universitas Malikussaleh).
- Fajriyah, A. (2024). Pengaruh Talent Management dan Knowledge Management Terhadap Kinerja Karyawan. *AGILITY: Lentera Manajemen Sumber Daya Manusia*, 2(01), 35-42.
- Febriana, A. (2023). *Manajemen Sumber Daya Manusia Strategis*. Penerbit Widina.
- Fernandez, W. (2022). Pengaruh Motivasi Kerja Disiplin Kerja dan Kompensasi terhadap Kinerja Karyawan PT. Pertamina Persero Pasir Angin. *Syntax Literate; Jurnal Ilmiah Indonesia*, 7(9), 13761-13765.
- Firdausi, J., & Wajdi, M. F. (2024). Pengaruh Talent Management Dan Employee Engagement Terhadap Kinerja Karyawan. *Jesya (Jurnal Ekonomi Dan Ekonomi Syariah)*, 7(1), 1080-1092.

- Ghozali, I. (2018). Aplikasi Analisis Multivariate dengan Program IBM SPSS 25. Edisi 9. Semarang : Universitas Diponegoro.
- Gunawan, A., Rivai, H. A., & Lukito, H. (2023). Pengaruh Manajemen Bakat dan Pengetahuan terhadap Kinerja dan Komitmen Karyawan dalam Perusahaan. *Jurnal Informatika Ekonomi Bisnis*, 1289-1296.
- Irfania, Y., & Rini, H. P. (2025). Analisis Employee Engagement, Komitmen Organisasi, Dan Rotasi Kerja Terhadap Kinerja. *JURNAL LENTERA BISNIS*, 14(1), 295-303.
- Iswahyudi, M. S., Munizu, M., Mukhtar, A., Badruddin, S., Suryani, L., Kustanti, R., & Kelana, R. P. (2023). *Kepemimpinan Organisasi: Teori Dan Praktik*. PT. Green Pustaka Indonesia.
- Kadri, A. F., Ibrahim, H. M. B. H., Irwanan, A., & Prasetianingrum, S. (2023). Peran Kepuasan Kerja dalam Memediasi Pengaruh antara Employee Engagement terhadap Kinerja Pegawai di Lingkungan Pemerintah Distrik Jayapura Utara. *Journal of Economics Review (JOER)*, 3(1), 65-72.
- Khatimah, S. S. H., & Simanjorang, F. (2023). The Influence of Talent Management, Knowledge Management, and Employee Engagement on Employee Performance (Study in the HR Operations Section of PT. Perkebunan Nusantara III Medan). *Jurnal Manajemen Bisnis, Akuntansi dan Keuangan*, 2(2).
- Laila, W., Handoko, B., & Nahrisah, E. (2021). Pengaruh implementasi knowledge management terhadap kinerja karyawan guna pencapaian keunggulan bersaing pada PTPN III Medan. *Insight Management Journal*, 1(3), 68-78.
- Lailiyah, R., Soifa, Z., Dimisqiyani, E., & Yuliawan, R. (2025). Implementasi Strategi Manajemen Talenta dalam Mempertahankan Pekerja Generasi Milenial. *IKRAITH-EKONOMIKA*, 8(1), 250-259.
- Mende, D., & Dewi, N. (2021). *The Influence of Talent Management on Employee Engagement and Organizational Performance in the Service Industry*. *Journal of Management and Business Knowledge*, 24(3), 245-257.

- Napitupulu, F. (2025). Pengaruh Manajemen Talenta Dan Manajemen Pengetahuan Terhadap Kinerja Karyawan Dengan Keterikatan Karyawan Sebagai Variabel Intervening Pada PT. Bank Sumut Kantor Pusat Medan (Doctoral dissertation, Universitas Sumatera Utara).
- Nugrohoseno, D. D., & Baharsyah, A. R. (2020). Pengaruh Employee Engagement terhadap Job Performance melalui Creativity sebagai Variabel Mediasi. *Jurnal Manajemen dan Kewirausahaan*, 20(2), 1288–1298.
- Ondi, A., Suryani, H., Priatna, D. K., & Yulianti, M. L. (2023). Pengaruh Disiplin Kerja Terhadap Kinerja Pegawai Non Asn Pada Dinas Pendidikan Provinsi Jawa Barat. *Jurnal Pengabdian Masyarakat dan Penelitian Terapan*, 1(1), 8-15.
- Panuji, A. V. A., Ernawati, M. T., & Poerwanto, G. H. (2024). Pengaruh Lingkungan Eksternal, Kompetensi Sumber Daya Manusia Dan Knowledge Management Terhadap Kinerja Organisasi Dengan Inovasi Sebagai Variabel Mediasi (Studi Pada UMKM di Kelurahan Pagerharjo, Kabupaten Kulon Progo). *EXERO: Journal of Research in Business and Economics*, 7(2), 166-189.
- Putri, S. A. (2023). Pengaruh Talent Management dan Knowledge Management Terhadap Employee Retention pada Millennials Workforce yang di Moderasi oleh Employee Engagement. *Jurnal EMT KITA*, 7(4), 974-984.
- Rahardjo, A. P. (2022). *Pengaruh Kompetensi, Motivasi Dan Talent Management Terhadap Kinerja Karyawan Rumah Sakit Budi Kemuliaan* (Doctoral dissertation, Universitas Mercu Buana Jakarta).
- Rahman, R. A., Pasaribu, F., Khair, H., & Tirtayasa, S. (2023). The Influence Of Talent Management And Knowledge Management On Employee Performance With Employee Engagement As The Intervening Variable On PT Kereta Api Indonesia (Persero) Division Regional I Sumut. *Jurnal Ekonomi*, 12(04), 2385-2395.
- Ramadhani, F. E., Harsono, H., & Sunardi, S. (2020). Talent Management dan Knowledge Management terhadap Kinerja Karyawan Dengan Employee

- Retention Sebagai Variabel Moderator. *Jurnal Bisnis dan Manajemen*, 7(2), 126-132.
- Ratsani, A. G., & Pangestu, E. R. (2022). *Pengaruh Manajemen Talenta (Talent Management) Dan Manajemen Pengetahuan (Knowledge Management) Terhadap Kinerja Pegawai Di Koperasi Peternak Sapi Bandung Utara Provinsi Jawa Barat* (Doctoral dissertation, Universitas Pasundan Bandung).
- Riswanto, A., Zafar, T. S., Sunijati, E., Harto, B., Boari, Y., Astaman, P., & Hikmah, A. N. (2023). *EKONOMI KREATIF: Inovasi, Peluang, dan Tantangan Ekonomi Kreatif di Indonesia*. PT. Sonpedia Publishing Indonesia.
- Sapriyanda, M. (2022). *Pengaruh Manajemen Talenta terhadap Kinerja Karyawan melalui Employee Engagement di Perusahaan XYZ*. *Jurnal Manajemen Sumber Daya Manusia*, 18(2), 105-118.
- Setyadi, A. R., & Mulyaningrum, S. E. (2022). *Pengaruh Manajemen Talenta Dan Keterlibatan Karyawan Terhadap Kinerja Karyawan Pada PT. Soon Poh Technologies Jakarta* (Doctoral dissertation, Perpustakaan Fakultas Ekonomi dan Bisnis Unpas).
- Setyaningrum, N. A. (2023). *Pengaruh employee engagement, talent management, quality work life, komitmen organisasi dan kepemimpinan transformasional terhadap kinerja karyawan dengan etika kerja Islami sebagai variabel moderating (studi kasus di PT. Herba emas Wahidatama Purbalingga)* (Master's thesis, Universitas Islam Negeri Saifuddin Zuhri (Indonesia)).
- Setyawan, A., & Maharani, T. (2024). *Pengaruh Talent Management Terhadap Employee Performance Dengan Knowledge Management Sebagai Variabel Intervening*. *Jurnal Riset Ekonomi dan Manajemen*, 15(3).
- Wang, K. (2021). *Pengaruh Talent Management dan Employee Engagement terhadap Kinerja Karyawan Akademis*. id/Kevin Wang/22170213/Pembimbing: Ponco Priyantono.