

Human Resource Performance Model Based on Knowledge Sharing and Employee Engagement with Digital Capability as a Moderating Variable

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Abstract. *This study aims to analyze the effect of Knowledge Sharing and Employee Engagement on human resource performance with Digital Capability as a moderating variable among employees of KPPBC TMP A Semarang. The background of this study is based on the importance of improving human resource performance in the era of digital transformation, particularly within public sector organizations that are required to work effectively, collaboratively, and adaptively in response to the rapid development of information technology. Knowledge Sharing is viewed as an important mechanism in supporting knowledge dissemination and enhancing employee competencies, while Employee Engagement serves as a psychological factor that encourages employees' attachment and dedication to their work. Digital Capability is positioned as a strategic capability that can strengthen the effectiveness of technology-based work behavior. This study employed a quantitative approach using explanatory research methods. The research population consisted of employees of KPPBC TMP A Semarang, with a sample of 100 respondents selected using purposive sampling techniques. Data were collected through questionnaires and analyzed using Structural Equation Modeling (SEM) based on Partial Least Square (PLS). The results indicate that Knowledge Sharing has a positive and significant effect on human resource performance. Employee Engagement also has a positive and significant effect on human resource performance. In addition, Digital Capability is proven to moderate the effect of Knowledge Sharing on human resource performance and strengthen the influence of Employee Engagement on human resource performance. The findings demonstrate that the better the employees' Digital Capability, the more optimal the knowledge-sharing process and work engagement in improving human resource performance. This study implies that organizations need to strengthen the culture of Knowledge Sharing, enhance Employee Engagement, and continuously develop employees' digital capabilities to support organizational performance improvement in the digital era.*

Keywords: *Capabilities; Digital; Engagement; Knowledge; Sharing.*

1. Introduction

Human resources are a key factor in an organization's success, both in terms of performance, innovation, and competitiveness. They play a crucial role in driving the growth and progress of an organization (Nanle et al., 2024). In today's highly dynamic and competitive era, the function of Human Resources (HR) has evolved from being primarily administrative to a more important and strategic role (Piwovar-Sulej et al., 2023). Therefore, every organization needs to implement sound HR management to maximize the potential of its human resources in order to achieve its desired organizational goals.

The Covid-19 pandemic has changed the way people work and collaborate. Work that was initially done face-to-face has now shifted to *remote* or *hybrid work* (a combination of remote and face-to-face interaction). Meetings, discussions, and gatherings, for example, are now conducted online using applications like *Zoom Meetings*, *Microsoft Teams*, and *Google Meet*. Meanwhile, *platforms like... cloud computing* like *Microsoft OneDrive* and *Google Drive* are increasingly used as online storage media. Information technology is also implemented in HR development activities, *training*, *e-learning*, and so on, with the aim of improving organizational and HR performance (Alshammary & Ali, 2024). Therefore, with the increasing use of technology today, further research is needed to determine whether *Digital Capability* in utilizing information technology can improve or conversely reduce HR performance.

KPPBC TMP A Semarang is one of the work units within the Ministry of Finance and is also part of the vertical agency at DJBC. Based on the Regulation of the Minister of Finance number 183 / PMK.01 / 2020 concerning Amendments to PMK Number 188 / PMK.01 / 2016 concerning the Organization and Work Procedures of Vertical Agencies of the Directorate General of Customs and Excise, KPPBC TMP A Semarang carries out technical service functions in the field of customs and excise, including the provision of permits and facilities in accordance with applicable provisions. Related to state revenue, KPPBC TMP A Semarang collects and manages the administration of import duties, excise, and other state levies that are the authority of the Directorate General. In addition, this office also carries out intelligence, patrol, enforcement, and investigation functions to enforce customs and excise laws and regulations.

KPPBC TMP A Semarang also manages customs and excise documents, which include the process of receiving, storing, distributing, and processing data. In addition, the information obtained is also compiled in the form of periodic reports. Management and maintenance of operational facilities, communication facilities, and firearms are also important parts to ensure the security and effectiveness of task implementation. All of these processes are monitored through supervision of task implementation and performance evaluations that are routinely carried out every month. The working area of KPPBC TMP A Semarang covers 6 regencies/cities in Central Java Province, namely Semarang City, Semarang Regency, Kendal Regency, Demak Regency, Grobogan Regency, and Salatiga City.

One of the duties and functions of the Semarang City Office of Public Works and Public Housing (KPPBC) is to conduct performance evaluations. The performance of KPPBC TMP A Semarang is measured by achieving targets in the performance contract set at the beginning of each year. The legal basis for this measurement is the Decree of the Minister of Finance Number 300/KMK.01/2022 concerning Performance Management at the Ministry of Finance. The success of organizational performance is measured by the achievement of the Individual Performance Indicators (IKI) of each HR. The IKI of each HR will then become a representative IKI for strategic achievements within the Head of Office's IKI.

Based on the Head of Office's overall IKI achievement against performance targets, the Office's Organizational Performance Score (NKO) or Key Performance Indicator (KPI) achievement is derived. Therefore, HR performance is a crucial key to achieving organizational performance targets. Organizational performance is also continuously monitored and evaluated through monthly Organizational Performance Dialogue meetings.

The Semarang City Office of Customs and Excise (KPPBC) of Semarang has endeavored to develop human resource competencies through the Human Resource Knowledge and Competency Improvement (P2KP) program. The results of this program can be seen in the following table:

Employees at the Directorate General of Customs and Excise (DJBC) face complex tasks that include interpreting international trade regulations, detecting smuggling risks, managing digital documents, and coordinating across work units. These work characteristics demand high accuracy, consistent decision-making, and a rapid response to operational dynamics. *Knowledge sharing* serves as a crucial mechanism for transferring *tacit knowledge* in the form of case-handling experience, harmonizing regulatory interpretations, and accelerating the decision-making process (Yeka Isdiani & Ditha Tania, 2025).

Without effective knowledge sharing processes, organizations are prone to information silos, inconsistent decision-making, and increased operational errors, which can impact service quality and oversight. Therefore, *knowledge sharing* conceptually contributes to increased work accuracy, service acceleration, and oversight quality, which are important indicators of customs human resource performance.

Knowledge is a fundamental requirement of every organization, requiring human resources to solve various problems. Knowledge is an asset that drives innovation and continuous improvement within an organization (Yeka Isdiani & Ditha Tania, 2025). Knowledge management is essential for organizations to excel in today's highly competitive era (An et al., 2014; Mahmud et al., 2024; Putra et al., 2024). Knowledge management is key for any organization to survive, thrive, and excel in increasingly fierce global competition (Ugrinov et al., 2024).

One of the important determinants in improving HR performance is knowledge management (Nazim & Mukherjee, 2016). Knowledge is a strategic organizational asset that drives

innovation, continuous learning, and effective problem-solving (Chatzifoti et al., 2024). One dimension of knowledge management, *Knowledge Sharing* is seen as a key dimension that enables the transfer of experiences, ideas, and best practices between HR (Leksono, 2024). Through the process of knowledge sharing, organizations not only accumulate collective knowledge but also accelerate the improvement of competence and the quality of decision-making (Dhaniswara et al., 2024).

Several studies have shown that *knowledge sharing* has the potential to improve human resource performance by increasing creativity, collaboration, and work effectiveness (Leksono, 2024). However, previous empirical research has been inconsistent, with some finding a positive and significant effect, while others show insignificant results. Armansyah et al (2024) In his research, he stated that *knowledge sharing* had no significant effect on human resource performance. A study conducted by also found no significant impact on human resource performance (Saragih & Harisno, 2015). Meanwhile, (Laksono, 2023) a different finding was obtained, namely that *knowledge sharing* had a positive and significant impact on human resource performance. Similar to this study, *knowledge sharing* also has a positive and significant impact on HR performance as research conducted by (Sanosra et al., 2022).

The Ministry of Finance also launched a learning portal and knowledge *database center*, including the *Knowledge Management System* (KMS) and the *Kemenkeu Learning Center* (KLC), accessible online at <https://klc2.kemenkeu.go.id/>. These *platforms* provide a wealth of useful information and knowledge for human resources in assisting with work completion. Access to these *platforms* is provided to all human resources at the Ministry of Finance, including those working at the Semarang City Tax Office (KPPBC) TMP A.

Through the Decree of the Minister of Finance Number 283/KMK.011/2021 concerning the Implementation of Learning Organizations *and* the Circular Letter of the Director General of Customs and Excise Number SE-14/BC/2021 concerning the Implementation of Learning Organizations within the Directorate General of Customs and Excise, each office is required to disseminate intellectual assets or knowledge to internal and external parties. One of the activities carried out is *Employee Improvement*. This program aims to share knowledge and discuss recently issued provisions and regulations. This activity is then broadcast online using *tools* such as *Microsoft Teams* and *video- sharing platforms* like *YouTube*. Furthermore, to improve the competence of Customs and Excise HR throughout Indonesia, each office is required to carry out knowledge management and documentation activities in order to produce intellectual assets that are disseminated through *platforms*. *Ministry of Finance Learning Center* (KLC).

Besides knowledge sharing, *employee engagement* is also a crucial factor influencing performance (Adawiyah et al., 2023; Baquero, 2023; Lukić-Nikolić, 2023; Rizky et al., 2023). Employees who are emotionally and cognitively engaged with their work tend to demonstrate higher levels of dedication, energy, and commitment (Novindra & Poerwita Sary, 2023). This

engagement encourages employees to contribute voluntarily and sustainably to achieving organizational goals.

Employee Engagement reflects the emotional and cognitive attachment of human resources to their work as a whole, which is reflected in increased energy, enthusiasm, and sincerity in carrying out tasks (Baquero, 2023). A high *level of engagement* encourages the emergence of commitment and intrinsic motivation to produce more optimal performance (Albrecht & Marty, 2020). Human resources who feel appreciated, recognized, and have meaning in the organization tend to show stronger productivity, creativity, and loyalty. Conversely, a decrease in engagement characterized by a weakening of enthusiasm and involvement in work can have a negative impact on performance, both in the short and long term (Uddin et al., 2019). The findings (Fidyah & Setiawati, 2020) confirm that *engagement* is a crucial determinant that needs to be maintained continuously so that the contribution and performance of human resources remain at a maximum level.

Theoretically, *engaged employees* will work with greater focus and productivity, and demonstrate stronger loyalty (Bakker, 2022). However, as with *the Knowledge Sharing variable*, empirical findings regarding the effect of *Employee Engagement* on performance also show mixed results, with both significant and insignificant results. Emilia et al (2024) In his research, he stated that *employee engagement* had a positive but insignificant effect on HR performance. However, in other studies, (Fidyah & Setiawati, 2020a) the effect was also positive but significant.

Based on the inconsistency of previous research results and the dynamics of digital transformation in the DJBC environment, this study examines the influence of *Knowledge Sharing* and *Employee Engagement* on HR performance by including *Digital Capability* as a moderating variable. The placement of this moderating variable is based on the theoretical assumption that information technology can strengthen the effectiveness of social processes in organizations, while also explaining the variation in the results of previous studies conducted by (Boussenna & El Kharraz, 2021) that there is a positive influence between *Knowledge Management* and *Organizational Performance* where *Knowledge Sharing* in the study is part of *Knowledge Management*.

Information technology (IT) is key to an organization's success by changing the pattern of communication, coordination, and collaboration between human resources (Chege et al., 2019). For example, these activities are now carried out through collaborative *platforms*, knowledge management systems, and digital communication media. Rapid and extensive technological developments such as *Big Data*, *Real-time Analysis*, *Internet of Things (IoT)*, *5G*, *Mobile Technology*, *ChatGPT*, *Blockchain*, *Cloud Technology*, *Virtual Reality*, *Machine Learning*, *Artificial Intelligence (AI)*, robotics and so on, have changed the world of work significantly (Balakrishnan & Foroudi, 2020). Human resources then use the technology available in their workplace to do things related to their work and outside of their work (Jiang

et al., 2023). So the impact of technology use on performance depends on how they use the technology.

In its efforts to disseminate information and knowledge to external parties, the Ministry of Finance also launched the *Employee Advocacy program*, a program that requires human resources to participate in amplifying knowledge content published by the Ministry of Finance or DJBC itself. The activities include liking, *sharing*, or commenting on uploaded content to increase publicity and *engagement* with the public and *stakeholders* in need. The entire series of programs from both the Ministry of Finance and DJBC are a form of knowledge sharing effort by utilizing the increasingly rapid development of information technology.

The success of information technology implementation is seen from the optimal combination of social and technical aspects, not one at the expense of the other (Kaminski, 2022). The importance of digital capabilities plays a crucial role in preparing human resources to be able to face the changes in the existing system. digitalized.

Digital Capability can be defined as an individual's ability to access, understand, use, and integrate digital technology to improve work effectiveness, decision-making, and value creation within an organization (Khin & Ho, 2019). This concept encompasses not only the technical aspects of using devices or applications, but also cognitive and adaptive abilities in the face of dynamic technological changes (Chatterjee et al., 2023a). In other words, *Digital Capability* reflects the readiness of human resources for digital transformation, both in terms of skills, knowledge, and attitudes towards technology.

2. Research Methods

This study used an explanatory method with a quantitative approach as the basis for data collection and analysis. This research method aims to examine the influence of one variable on another and the position of the variables studied (Sugiyono, 2017). Furthermore, a quantitative approach was used to examine the selected sample or population and the data collected using research variables (Sugiyono, 2017). These variables include *Knowledge Sharing*, *Employee Engagement*, *Digital Capability* and HR Performance.

3. Results and Discussion

3.1. Respondent Description

100 employees of the Semarang Type Medium Customs and Excise Supervision and Service Office (KPPBC TMP) A. The research data was collected using a questionnaire via *Google Form* distributed from April 28 to May 11, 2026. From the results of the questionnaire distribution, it was found that all questionnaires had been completed completely and were suitable for further analysis. An overview of the demographic characteristics of the respondents can be presented in the following table:

Table Description Characteristics Respondents

No	Characteristics	Total Sample n = 100	
		Amount	Percentage (%)
1.	Gender		
	Man	82	82.0
	Woman	18	18.0
2.	Age		
	18 - 30 years old	40	40.0
	31 - 40 years old	40	40.0
	41 - 50 years old	15	15.0
	>50 years	5	5.0
3.	Last education		
	High School/Vocational School	8	8.0
	Diploma	39	39.0
	Bachelor	53	53.0
4.	Years of service		
	<5 years	33	33.0
	5 - 10 years	51	51.0
	11 - 20 years	12	12.0
	> 20 years	4	4.0

Source: Results of research data processing (2026).

Based on characteristics type gender, majority respondents in study This is man as many as 82 (82.0%), while respondents Woman totaling 18 (18.0%). Composition This show that The employees of KPPBC TMP A Semarang are dominated by men. Conditions the can understood remember characteristics work at an agency customs and excise often related with function supervision, service field, inspection, and enforcement rules that require mobility, assertiveness, and readiness operational. Dominance respondent man this can influence dynamics work, pattern communication, and the process of sharing knowledge in the environment organization. In relation to with variables research, composition the potential give description that practice *Knowledge Sharing*, engagement employees, digital capabilities, and more *Digital Capability* Lots represent perception employee men. However Thus, involvement respondents Woman still show existence diversity perspective in assess work processes and performance organization.

Based on characteristics age, respondents most be in range age 18–30 years as many as 40 (40.0%) and 31–40 years as many as 40 (40.0%). Meanwhile that, respondents aged 41–50 years amounted to 15 (15.0%), and respondents aged >50 years totaling 5 (5.0%). Findings This show that part big employee be in a group age productive beginning until middle class, namely 18–40 years, with a total of 80 (80.0%) respondents. Composition age the indicates that organization own source Power relative human young, adaptive, and potential in follow change system work, especially related with digital transformation. Dominance age productive can support height reception to technology, will For learning, and involvement in activity *Knowledge Sharing*. Employees in groups age This generally own energy good job, more open to innovation, as well as more responsive to use digital devices in support performance. However, the existence of respondents aged more senior is also important

Because they potential become source experience, knowledge tasit, and mentor in the process of knowledge transfer between employees.

Based on characteristics education lastly, the majority respondents own education Lastly, there were 53 (53.0%) Bachelor Degrees, followed by 39 (39.0%) Diplomas, and 8 (8.0%) High School/Vocational Schools. This data show that part big employee own background behind education high, namely Diploma and Bachelor, with a total of 92 (92.0%) respondents. Conditions the reflect that KPPBC TMP A Semarang employees have capacity academic and competency relative basis adequate for understand tasks administrative, technical, and digital in environment Work customs and excise. Relatively low level of education tall can strengthen ability employee in absorb information, sharing knowledge, using digital technology, as well as increase quality settlement job. A good education can also contribute to *Employee Engagement*, because employee with capacity adequate intellectual tend more capable understand objective organization, responsibility answer work, and its importance contribution individual to *Digital Capability*.

Based on characteristics of work period, respondents most is employee with a service period of 5–10 years as many as 51 (51.0%), followed by employees with a work period of <5 years as many as 33 (33.0%). Furthermore, employees with a service period of 11–20 years numbered 12 (12.0%), and employees with a working period of >20 years totaling 4 (4.0%). Findings This show that profile respondents dominated by human resources who are still is in phase strengthening experience work, formation competence professional, and adaptation to dynamics organization. Conditions the own meaning important in context *Digital Capability*. Employees with a working period of less than 10 years generally own opportunity more big For adapt with system Work digital- based, both in use application service, system supervision customs and excise, data integration, as well as utilization technology information in support taking Decision-making. Good digital skills will help employees work more quickly, accurately, transparently, and responsively, particularly in the implementation of service, supervision, administration, and risk analysis functions in the customs and excise sector.

In this section, a descriptive analysis is conducted to obtain an overview of respondents' responses to the research variables. This analysis is conducted to obtain perceptions about respondents' tendencies to respond to the indicator items used to measure these variables and to determine the status of the variables

Reliability measurement in quantitative research, especially in measurement models based on *Structural Equation Modeling* (SEM), can be done using three main methods, namely (Ghozali & Latan, 2015) :

a. *Cronbach's Alpha*

Cronbach's Alpha is used to assess the internal consistency of a construct or latent variable. This value indicates the extent to which the indicators used are able to consistently measure

the same concept. Generally, a Cronbach's Alpha value ≥ 0.70 is considered to indicate good reliability, although in exploratory research, a value ≥ 0.60 is still acceptable.

b. *Composite Reliability (CR)*

Composite Reliability measure internal reliability by considering the weight (*loading*) of each indicator on the construct. Unlike Cronbach's Alpha, which assumes all indicators have the same contribution, CR provides a more accurate assessment of SEM models because it takes into account the relative contribution of each indicator. A CR value ≥ 0.70 generally indicates that the construct has adequate internal consistency.

c. *Average Variance Extracted (AVE)*

AVE is used to measure convergent validity and to indicate the proportion of indicator variance that is successfully explained by the latent construct. An AVE value ≥ 0.50 indicates that more than half of the indicator variance can be explained by the construct, thus indicating an adequate level of consistency.

Composite reliability results, *Cronbach's Alpha* and *AVE* between constructs and their indicators can be seen in the following table:

Table Reliability Test Results

	<i>Cronbach's alpha</i>	<i>Composite reliability</i>	<i>Average variance extracted (AVE)</i>
Digital Capability	0.935	0.950	0.792
Employee Engagement	0.896	0.934	0.826
HR Performance	0.901	0.926	0.716
Knowledge Sharing	0.902	0.929	0.765

Source: Processed primary data (2026)

Based on the table above, the reliability test results for each construct show that the Cronbach's Alpha value is above 0.7, the composite reliability value also exceeds 0.7, and the AVE value for each construct exceeds 0.5. Thus, it can be concluded that this research instrument has a good level of reliability.

Based on the results of the evaluation of *convergent validity* and *discriminant validity* as well as variable reliability, it can be concluded that the indicators as measures of each variable are valid and reliable measures.

Multicollinearity is a condition in which there is a correlation between independent variables or between independent variables that are not mutually independent. Before conducting a hypothesis test, a multicollinearity test is necessary. The multicollinearity test can be performed by looking at the *Collinearity Statistics* (VIF) values in the inner VIF Values. If the inner VIF < 5 indicates no multicollinearity (Hair et al., 2019).

Table Multicollinearity Test Results

	VIF
<i>Digital Capability</i> -> HR Performance	1,026
<i>Digital Capability</i> x <i>Employee Engagement</i> -> HR Performance	1,137
<i>Digital Capability</i> x <i>Knowledge Sharing</i> -> HR Performance	1,148
<i>Employee Engagement</i> -> HR Performance	1,021
<i>Knowledge Sharing</i> -> HR Performance	1,017

Based on the results above, it can be seen that the VIF values of all variables are below 5. This means that there is no multicollinearity problem in the model formed.

Structural model testing (inner model) involves examining the relationships between latent constructs by estimating the path parameter coefficients and their significance levels (Ghozali, 2011). In this case, data processing was performed using *Smart PLS v4.1.1* software. The results of this data processing are shown in the following figure:

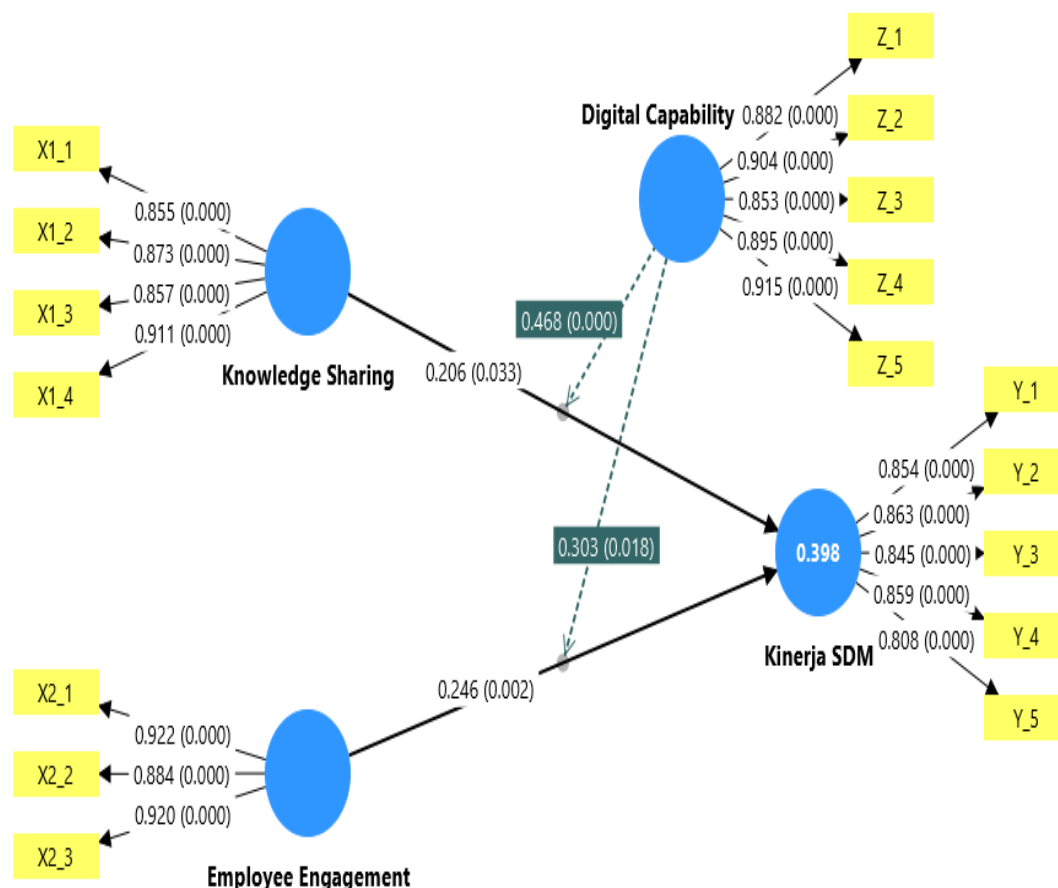


Figure Inner Model SEM-PLS Moderation

Source: Results of research data processing with *Smart PLS 4.1.1* (2026)

This procedure was carried out as a step in testing the proposed research hypothesis. The test yielded output from a structural model of *the loading factor construct* that would explain the influence of *the Knowledge Sharing* and *Employee Engagement constructs* on HR Performance through the moderation of *Digital Capability*.

Research hypothesis testing is carried out to determine whether a hypothesis is accepted or not by comparing the $t_{\text{calculated}}$ with the t_{table} with the condition that if the $t_{\text{calculated}} > t_{\text{table}}$, then the hypothesis is accepted. The critical value used when the sample size is greater than 30 and two-tailed testing is 1.65 for a significance level of 10%, 1.96 for a significance level of 5% and 2.57 for a significance level of 1% (Marliana, 2019). In this case, to test the hypothesis, a significance level of 5% is used where the t_{table} value is 1.96 (Ghozali & Latan, 2015). The results of testing the influence of each variable in this study can be presented in the following table:

Table Hypothesis Test Results

Influence	Original sample (O)	T statistics (O/STDEV)	P values	Information
<i>Knowledge Sharing</i> -> HR Performance	0.206	2,129	0.033	Accepted
<i>Employee Engagement</i> -> HR Performance	0.246	3,080	0.002	Accepted
<i>Digital Capability</i> x <i>Knowledge Sharing</i> -> HR Performance	0.468	4,332	0.000	Accepted
<i>Digital Capability</i> x <i>Employee Engagement</i> -> HR Performance	0.303	2,360	0.018	Accepted

Source: Primary data processing with *Smart PLS 4.1.1* (2026)

Decisions are made based on the calculated statistical test values and predetermined significance levels. Hypothesis testing is performed by comparing the predetermined t-table with the calculated t-value generated from the PLS calculation. Based on the data processing results table above, the results of each proposed hypothesis test can be identified as follows:

1) Testing Hypothesis 1 (H1)

In testing hypothesis 1, the original sample estimate value of the influence of *Knowledge Sharing* on HR Performance was 0.206. This value indicates that *Knowledge Sharing* has a positive effect on HR Performance. This result is supported by the calculated t value of 2.129 > t_{table} (1.96) and the p value of 0.033 < 0.05. Thus, it can be said that *Knowledge Sharing* has a positive and significant effect on HR Performance. Therefore, the first hypothesis which states that "*Knowledge Sharing has a positive effect on HR Performance*" can be accepted.

2) Testing Hypothesis 2 (H2)

In testing hypothesis 2, the original sample estimate value of the influence of Co-worker Support on HR Performance was obtained at 0.246. This value indicates that *Employee*

Engagement has a positive influence on HR Performance. These results are also supported by the calculated t value of $3,080 > t$ table (1.96) and a p value of $0.002 < 0.05$. This means that *Employee Engagement* has been proven to provide a significant contribution in improving HR Performance. Thus, the second hypothesis which states that " *Employee Engagement has a positive influence on HR Performance* " can be accepted.

3) Testing Hypothesis 3 (H3)

Based on the results of hypothesis 3 testing, the original sample estimate value of the effect of the interaction variable (*Digital Capability x Knowledge Sharing*) was obtained at 0.468. This value indicates a positive direction of influence. The test results are also strengthened by the calculated t value of $2.332 > t$ table (1.96) and a p value of $0.000 < 0.05$. This proves that *Digital Capability* significantly moderates the effect of *Knowledge Sharing* on HR Performance. This means that *Digital Capability* can strengthen the effect of *Knowledge Sharing* on HR Performance. Thus, the third hypothesis which states that " *The positive effect of Knowledge Sharing on HR Performance will be stronger if HR has good digital capabilities* " can be accepted.

4) Testing Hypothesis 4 (H4)

In testing hypothesis 4, the original sample estimate value of the effect of the interaction variable (*Digital Capability x Employee Engagement*) was obtained at 0.303. However, the calculated t value was only $2.360 < t$ table (1.96) and the p value was $0.018 < 0.05$. This proves that *Digital Capability* significantly moderates the effect of *Knowledge Sharing* on HR Performance. This means that *Digital Capability* can strengthen the effect of *Employee Engagement* on HR Performance. Thus, the fourth hypothesis which states that " *The positive effect of Employee Engagement on HR Performance will be stronger if HR has good digital capabilities* " can be accepted.

3.2. Discussion

1) The Influence of *Knowledge Sharing* on HR Performance

This study proves that *knowledge sharing* has a positive and significant effect on HR performance. This result is supported by research that shows that *knowledge sharing* has a significant effect on HR performance. HR performance (Goh et al., 2020; Setyo Nugroho et al., 2022).

Knowledge Sharing This study measured the reflection of four indicators: information sharing, knowledge/skills transfer, knowledge acquisition, and knowledge integration. These four aspects have been shown to improve HR performance. which in this study is measured from the reflection of five indicators namely indicators Effectiveness, Efficiency, Quality, Timeliness, and Ability to work together.

The Knowledge Sharing variable showed the highest outer loading value for the knowledge integration indicator, while the HR performance variable had the highest outer loading value for the efficiency indicator. These results indicate that employee willingness to combine, process, and utilize knowledge from various sources is the most dominant factor in shaping knowledge sharing behavior in the organization. On the other hand, efficiency is a key aspect reflecting the success of HR performance in optimally carrying out work with more effective use of time, energy, and resources.

These findings indicate that the better employees' willingness to integrate knowledge, the higher their work efficiency. This means that the process of exchanging and managing knowledge can help employees complete work more quickly, accurately, and with fewer errors because they can leverage the experience, information, and solutions held by their colleagues and the organization. This encourages more systematic work processes, more accurate decision-making, and reduced duplication of work, resulting in more efficient and productive human resource performance.

The Knowledge Sharing variable has the lowest *outer loading value* for the information sharing indicator, while the HR performance variable has the lowest *outer loading value* for the ability to work together indicator. These findings indicate that employees' willingness to convey, discuss, and distribute information to colleagues remains an aspect that needs to be strengthened to support increased collaboration between employees within the organization. The greater employees' willingness to share information, knowledge, experience, and work solutions, the better their ability to build coordination, communication, and teamwork collaboration. This means that the knowledge sharing process not only plays a role in improving individual understanding but also creates more effective work synergy between employees. When information is accessible and understood together, employees will more easily unify perceptions, help colleague complete tasks, and build cooperative working relationships.

2) The Influence of *Employee Engagement* on HR Performance

This study proves that *Employee Engagement* has a positive and significant effect on HR Performance. These results are also supported by (Emilia et al., 2024) the statement that *Employee Engagement* also has a positive effect on HR Performance. In this study it was measured from four indicators, namely the indicator Vigor, dedication, and absorption. These four aspects have been proven to improve HR performance. which in this study is measured from the reflection of five indicators namely indicators Effectiveness, Efficiency, Quality, Timeliness, and Ability to work together.

The Employee Engagement variable showed the highest outer loading value for the work spirit indicator (vigor), while the HR performance variable had the highest outer loading value for the efficiency indicator. These results indicate that the higher the employee's work spirit, the higher the level of work efficiency. This means that employees with high energy, enthusiasm for work, resilience in facing work pressure, and strong motivation tend to be able to

complete work more quickly, accurately, and optimally with more effective use of resources. This condition indicates that work spirit is a crucial factor in driving productivity and effectiveness in task implementation.

Employee Engagement variable has the lowest outer loading value for the dedication indicator, while the HR performance variable has the lowest outer loading value for the ability to work together indicator. This finding suggests that increased employee dedication will contribute to increased ability to work together in the workplace. This means that when employees have strong emotional involvement, pride in their work, enthusiasm in carrying out their duties, and a high commitment to the organization, they will find it easier to build communication, coordination, and collaboration with their colleagues. High dedication also encourages employees to focus not only on individual achievements, but also to contribute to the success of the team and the organization as a whole.

3) Moderation of *Digital Capability* in the Influence of *Knowledge Sharing* on HR Performance

This study shows that *digital capability* significantly moderates the influence of *knowledge sharing* on human resource performance. This means that *digital capability* can strengthen the influence of *knowledge sharing* on human resource performance. For human resources with low levels of *digital capability*, the presence of technology does not provide significant added value (Motamedimoghadam et al., 2025). Limited understanding of systems or applications can hinder the process of knowledge sharing, slow the flow of information, and increase the potential for errors in work (Van Hoang et al., 2025).

Knowledge Sharing In this study, it was measured based on the reflection of four indicators, namely information sharing, knowledge/skills transfer, knowledge acquisition, and knowledge integration. Then, HR performance was measured. which in this study is measured from the reflection of five indicators namely indicators Effectiveness, Efficiency, Quality, Timeliness, and Collaboration Skills. *Digital Capability* is measured using the following indicators: information literacy, digital communication, content creation, security, and *problem-solving skills*.

The Digital Capability variable shows that the indicator with the highest outer loading value is *problem solving*, which describes the employee's ability to identify, analyze, and resolve various digital-based work problems quickly and accurately. Furthermore, in *the Knowledge Sharing variable*, the indicator with the highest outer loading value is the ability to integrate knowledge, which reflects the employee's ability to combine information, experience, and knowledge from various sources to support work implementation. Meanwhile, in the HR Performance variable, the efficiency indicator is the indicator with the most dominant contribution in reflecting employee performance.

These results indicate that the better an employee's *problem-solving skills*, the stronger their knowledge integration skills will be in improving their work efficiency. This means that employees' adaptive, technology-based problem-solving skills can drive more effective

knowledge sharing and integration, enabling faster, more precise, resource-efficient, and error-free work. This also indicates that *digital capability* not only represents the technical ability to utilize technology but also serves as a strategic factor that strengthens the organization's collective knowledge utilization in creating more efficient and productive human resource performance.

The measurement results show that in the *Digital Capability variable*, the indicator with the lowest outer loading value is the ability to create content. In the *Knowledge Sharing variable*, the lowest indicator is the willingness to share information, while in the HR performance variable, the lowest indicator is the ability to collaborate. These findings indicate that improving employees' ability to create, manage, and present digital content effectively will strengthen the information sharing process between employees, thereby improving the quality of collaboration in carrying out work. This means that the better the employee's ability to create digital content, the easier it is to understand, access more quickly, and be more relevant to the team's work needs. This condition encourages the creation of more effective work collaboration, better coordination, and increased synergy between employees in completing organizational tasks.

4) Digital Capability Moderation in the Influence of Employee Engagement on HR Performance

This study shows that *Digital Capability* significantly moderates the influence of *Employee Engagement* on HR Performance. This means that *Digital Capability* can strengthen the influence of *Employee Engagement* on Human Resources Performance. Human resources with good digital skills will find their work easier, reduce administrative burdens, and increase flexibility and control over their work (Gyamerah et al., 2025).

Digital Capability Measured by the indicators of information literacy skills, digital communication skills, content creation skills, security skills, and *problem-solving skills*. Then *Employee Engagement* In this study, it was measured using four indicators, namely vigor, dedication, and absorption. Meanwhile, HR performance... which in this study is measured from the reflection of five indicators namely indicators Effectiveness, Efficiency, Quality, Timeliness, and Ability to work together.

The indicator in the *Digital Capability variable* that has the highest outer loading value is *problem solving*, while in the *Employee Engagement variable*, the highest indicator is work spirit (*vigor*). In the HR performance variable, the indicator with the most dominant contribution is efficiency. These findings indicate that employees' ability to solve problems quickly, accurately, and adaptively can strengthen the influence of work spirit on increasing HR performance efficiency. This means that employees who have high enthusiasm, work energy, and engagement will be able to work more effectively and efficiently when supported by digital capabilities in solving various work problems. This condition makes employees more responsive in facing changes, able to utilize technology to accelerate task completion, reduce work errors, and optimize the use of time and organizational resources. Thus, the

combination of digital-based *problem-solving capabilities* and high work spirit is an important factor in creating efficient and productive HR performance.

The indicator with the lowest outer loading value in the *Digital Capability variable* is content creation, while in the *Employee Engagement variable* it is the dedication indicator, and in the HR Performance variable it is the collaboration indicator. These findings indicate that improving employees' ability to create, manage, and deliver digital content effectively can strengthen their dedication to their work, which ultimately has an impact on improving their collaboration ability within the organization. This means that when employees have good digital content creation skills, they tend to be more active in contributing, have an emotional attachment to their work, and more easily build communication and collaboration with colleagues. These conditions encourage the creation of more effective work synergy so that the organization's HR performance can be optimally improved.

4. Conclusion

Based on the results of the discussion of the hypothesis proof, the answers to the research questions are as follows: This study proves that *Knowledge Sharing* has a positive and significant effect on HR Performance. This study proves that *Employee Engagement* has a positive and significant effect on HR Performance. This study shows that *Digital Capability* significantly moderates the effect of *Knowledge Sharing* on HR Performance. This study shows that *Digital Capability* significantly moderates the effect of *Employee Engagement* on HR Performance. The theoretical implications of this study indicate that *Digital Capability* plays a significant role in strengthening the relationship between *Employee Engagement* and HR performance. The findings of this study reinforce the view that employee engagement is not only influenced by psychological factors such as passion, dedication, and immersion in work, but also by organizational support in improving employee *Digital Capability*.

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