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The Effects of Knowledge Management, Digital Leadership and Organizational Culture on Employee Performance

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Abstract: This research article is titled *"The Effects of Knowledge Management, Digital Leadership, and Organizational Culture on Employee Performance."* The purpose of the study was to explore the implementation of knowledge management, digital leadership, organizational culture, and their impact on employee performance. Additionally, the research aimed to determine the influence of the independent variables—knowledge management, digital leadership, and organizational culture—on the dependent variable, which is employee performance. A quantitative research method was employed, with a sample of 138 employees from State Vocational School Number 5 Banjarmasin, selected through simple random sampling. The data analysis was done using SEM PLS version 4. The results show that neither knowledge management nor digital leadership do not have a significant effect on employee performance. Organizational culture, however, has a positive and significant relationship with employee performance. Therefore, it is crucial for school leaders to encourage the teachers and employees to apply the core values, create and open and transparent communication among them, work as a team, innovate and provide space for teachers and employees to adapt to change so as to improve the performance of employees and teachers such as increase efficiency and productivity, innovative work behavior, high sense of responsibility and adapt to change.

Keywords: Knowledge Management, Digital Leadership, Organizational Culture, employee performance, State Vocational Schools.

INTRODUCTION

In today's dynamic and digitally-driven organizational environment, performance management has become a key focus area for both public and private institutions, including educational organizations. Employee performance is a critical determinant of institutional success, particularly in vocational schools that are tasked with preparing students to meet industry demands. The increasing integration of technology, evolving leadership models, and the centrality of organizational culture have compelled institutions to reassess the factors that influence employee effectiveness.

Knowledge management, digital leadership, and organizational culture are three strategic elements that are often cited as influential in shaping employee performance. Knowledge management enables organizations to capture, distribute, and effectively use knowledge to enhance decision-making and innovation. Digital leadership refers to a leader's capability to utilize digital technologies effectively, encourage digital competence, and drive change within educational environments. On the other hand, organizational culture—comprising shared values, beliefs, and norms—plays a crucial role in shaping employee interactions, problem-solving approaches, and adaptability to change.

Despite extensive research on these variables in corporate and higher education contexts, there is limited empirical evidence on how these factors affect employee performance in vocational high schools, particularly in the Indonesian context. State Vocational School Number 5 Banjarmasin serves as a representative case to explore these dynamics due to its strategic role in regional workforce development and its ongoing digital transformation efforts.

This research aims to address the existing gap by investigating how knowledge management, digital leadership, and organizational culture influence employee performance at State Vocational School Number 5 Banjarmasin. Using a quantitative approach and Structural Equation Modelling with Partial Least Squares (SEM PLS), this research investigates the direct and indirect relationships between these strategic variables and employee outcomes. The results provide valuable guidance for school leaders, policymakers, and educators seeking to improve organizational performance and respond effectively to the challenges of a fast-changing educational environment.

Although the relationship between organizational factors and employee performance has been widely discussed in various sectors, limited empirical studies have specifically examined how knowledge management, digital leadership, and organizational culture concurrently affect employee performance within vocational education institutions in Indonesia. Most previous studies tend to focus on higher education or corporate settings, often neglecting the unique characteristics and operational dynamics of state vocational schools.

The uniqueness of this study stems from its comprehensive approach, which simultaneously examines three key organizational factors—knowledge management, digital leadership, and organizational culture—in connection with employee performance, specifically within the context of State Vocational School Number 5 Banjarmasin. Unlike prior research that often treats these variables in isolation, this study provides a comprehensive examination of how they interact and influence performance outcomes.

The originality of this research is demonstrated by its application of SEM PLS version 4 as an analytical tool to explore the structural relationships among the variables using data collected from 138 employees through simple random sampling. Moreover, the findings question widely held beliefs by showing that knowledge management and digital leadership have no significant impact on employee performance, whereas organizational culture stands out as the primary influencing factor.

The research gap addressed in this study concerns the lack of empirical evidence and contextual understanding regarding the influence of organizational factors on performance in vocational education settings, particularly within the Indonesian public school system. By focusing on a state vocational school, this research highlights sector-specific insights that are often overlooked in broader organizational studies. The study contributes to filling this gap by offering practical recommendations for school leaders to strengthen organizational culture as a strategic lever for enhancing performance.

This study contributes to existing literature by providing empirical evidence on how knowledge management, digital leadership, and organizational culture interact to affect employee performance at Banjarmasin State Vocational High School Number 5. Drawing on data from 138 employees, the research highlights the important role of leadership in fostering a culture of innovation. The results provide actionable suggestions for school leaders, and employees to improve employee performance via knowledge management, digital leadership and organizational culture.

The primary aim of this study is to investigate how knowledge management, digital leadership, and organizational culture affect employee performance at Banjarmasin State Vocational School Number 5. Specifically, it seeks to evaluate the extent to which these three organizational elements contribute to enhancing employee performance.

By analysing these relationships, the study provides deeper insights into the key factors that impact the effectiveness of vocational schools. The results offer valuable implications for policymakers, educators, and school administrators, highlighting the need to cultivate an innovative culture and implement strategic management practices to strengthen knowledge management, digital leadership, and organizational culture, ultimately improving employee performance.

The challenges addressed in this study are likely linked to the interplay between the independent variables—knowledge management, digital leadership, and organizational culture—and the dependent variable, employee performance.

Knowledge Management involves the development and maintenance of processes and systems by SMEs to facilitate various knowledge activities—such as creation, sharing, and preservation. These efforts are aimed at helping the firms better navigate current and future internal and external challenges. (Durst, S., Foli, S., & Edvardsson, 2024). It is a system that includes the steps of acquisition, creation, sharing and transfer of information (Van Tonder, F., & Rwelamila, 2024) and is essential to acquire, convert, apply and protect knowledge assets, which play a vital role in value creation (Kusa, R., Suder, M., Duda, J., Czakon, W., & Juárez-Varón, 2024). It can be concluded that Knowledge Management is a system of acquiring, creating, sharing, transferring, and protecting knowledge assets through processes and structures that support knowledge retention and application, enabling organizations to create value and address internal and external challenges effectively.

There are multiple factors to evaluate knowledge management. The components consist of Internal knowledge management, External knowledge management, and Hybrid Knowledge Management (Durst, S., Foli, S., & Edvardsson, 2024), knowledge acquisition, knowledge dissemination, and knowledge utilization (Khoa, B. T., & Huynh, 2023), knowledge acquisition, knowledge sharing, knowledge storage, and knowledge use/utilization (Ştefan, S. C., Popa, I., Olariu, A. A., Popa, Ş. C., & Popa, 2024).

Multiple indicators exist to assess knowledge management. These are the agreements that school creates new knowledge to be applied cross-functionally in our school governance activities, creates an operating system to be applied cross-functionally in our school governance, Our school has a standardized reward system for sharing knowledge between teachers and staff, and facilitates the process of integrating different knowledge sources cross-functionally

Digital leadership is seen as a comprehensive framework for exploring the knowledge, skills, competencies, and viewpoints of school leaders in promoting the effective integration of digital technologies within education, school management, and student learning processes. (Karakose, T., Polat, H., Tülübaş, T., & Demirkol, 2024). Digital leadership is a crucial strategic

behavior for achieving sustainable performance in a business environment with growing institutional pressures (He, Y., Liu, Z., & Lee, 2024). Digital leadership, a concept that has gained prominence in the digital era, plays a vital role in enabling organizations to be managed efficiently and adaptively in a fast-changing environment (Senadjki, A., Yong, H. N. A., Ganapathy, T., & Ogbeibu, 2023). In conclusion, Digital leadership is a comprehensive concept that encompasses the knowledge, skills, competencies, and strategic behaviors required to effectively integrate digital technologies, facilitate organizational management, and drive sustainable performance in education, business, and other dynamic environments shaped by the digital age.

There are various aspects to assess digital leadership. The processes include awareness risks of information technologies, awareness of the technologies to improve organizational processes, ethical behaviors, reduce resistance to innovations, experiences about technological possibilities, and technological tools (Khan, A. Y., Akhtar, M., & Khan, 2024), Communication Usability , Socialization, Virtual teamwork, Adaptation to change, Technical skills, and The trust of coworkers and superiors (Khaira, N., Triyonggo, Y., & Sukmawati, 2023), digital leadership; capabilities, experience, predictability, and vision (Senadjki, A., Yong, H. N. A., Ganapathy, T., & Ogbeibu, 2023).

There are several indicators for evaluating digital leadership. These include the leaders in our school consistently generating innovative ideas for technology use in our work, motivating employees and lecturers to incorporate digital tools into their tasks, maintaining continuous communication with staff through the available information and communication technology resources, developing effective digital strategies, and creating an innovative vision for the effective use of technology in the school's management processes.

Organizational culture is a nuanced concept influenced by various factors and is open to interpretation (Tadesse Bogale, A., & Debela, 2024), Organizational culture is only one of many elements that impact the performance of family-owned businesses, especially given the ever-evolving dynamics of family relationships (Stasa Ouzký, M., & Machek, 2024). Organizational culture is essential for enhancing both individual and group commitment to achieving business excellence, with an emphasis on consistency and meeting stakeholder expectations (Palumbo, R., & Douglas, 2024). Organizational culture is a multifaceted concept shaped by various factors, including the dynamic nature of relationships, and plays a crucial role in driving performance by fostering individual and collective commitment to business excellence, reliability, and stakeholders' satisfaction.

There are various aspects to assess organizational culture. The processes include pro-action, authenticity, openness, collaboration, experimentation, trust, confrontation, and autonomy (Kareem, J., Patrick, H. A., & Prabakaran, 2024), innovation, teamwork, result orientation, masculinity, involvement, and power distance (Tadesse Bogale, A., & Debela, 2024), mission, adaptability, consistency, and involvement (Abawa, A., & Obse, 2024).

Multiple indicators exist to assess organizational culture. These are the agreements that the respondents understand and apply the core values adopted by our school in everyday work, that communication between leaders and employees is open and transparent, that the respondents feel like to work in a team that supports each other and collaborates to achieve organizational goals, that the school encourages innovation and provides space for teachers and employees to adapt to change, and that there is openness in communication in our school, both between colleagues and with leaders.

Employee performance refers to the actions carried out and the outcomes achieved by employees as they carry out their duties in alignment with the organization's policies, guidelines, and expectations (Tjimuku, M., & Atiku, 2024). Employee performance is the result of work or output that can be produced by an employee in carrying out work activities at a certain time (Martini, I. A. O., Gorda, A. E. S., Gorda, A. O. S., Sari, D. M. F. P., & Antara, 2025). Employee performance is also described as an employee's achievement or success at work, in terms of realizing the set target by the company's management which needs to be accounted for before the leadership (Sodiq, A., Tri Ratnasari, R., & Mawardi, 2024). Employee performance pertains to the tasks, accomplishments, and outcomes produced by employees as they fulfill their duties within a designated timeframe, while complying with the organization's policies, standards, and expectations. It signifies their effectiveness in meeting the goals established by management, which must be reported to the leadership.

There are some dimensions to measure Employee Performance. They are employees' motivation, commitment, satisfaction, and well-being (Ravhudzulo, H., & Eresia-Eke, 2024), quantity of work, quality of work, initiative, adaptability, and corporation, (Martini, I. A. O., Gorda, A. E. S., Gorda, A. O. S., Sari, D. M. F. P., & Antara, 2025), compensation and benefits, organizational culture and working environment, leadership and management, job satisfaction and motivation, and work-life bal-ance and flexibility (Ng, C., Wider, W., Yang, C., Jiang, L., Vasudevan, A., Bhandari, P., & Lee, 2024).

There are several indicators for assessing employee performance. These include employees completing their tasks and responsibilities efficiently and on time, consistently maintaining work quality according to the school's standards, actively seeking ways to enhance work effectiveness and efficiency, demonstrating a strong sense of responsibility toward their work, contributing positively to the school, and adapting to changes in the work environment while collaborating with colleagues to achieve the school's objectives.

Building on previous research, this study aims to explore the effects of knowledge management, digital leadership, and organizational performance on employee performance. The findings are expected to contribute both theoretically and practically to the field of management science, particularly in strategic management. Practically, the insights gained could help school leaders improve their leadership and managerial skills.

This research aims to make two primary contributions to the literature. First, by using survey data collected from 138 employees at State Vocational School Number 5 in Banjarmasin, South Kalimantan, the study investigates the implementation of knowledge management, digital leadership, organizational culture, and organizational performance. Second, the study aims to confirm the relationships between the independent and dependent variables.

The researchers believe that integrating knowledge management, digital leadership, and organizational culture leads to enhanced employee performance. Based on this, the proposed conceptual model (shown in Figure 1) gives rise to the following hypotheses.

H1: Knowledge management has effects on employee performance
H2: Digital leadership has effects on employee performance
H3: Organizational culture has effects on employee performance

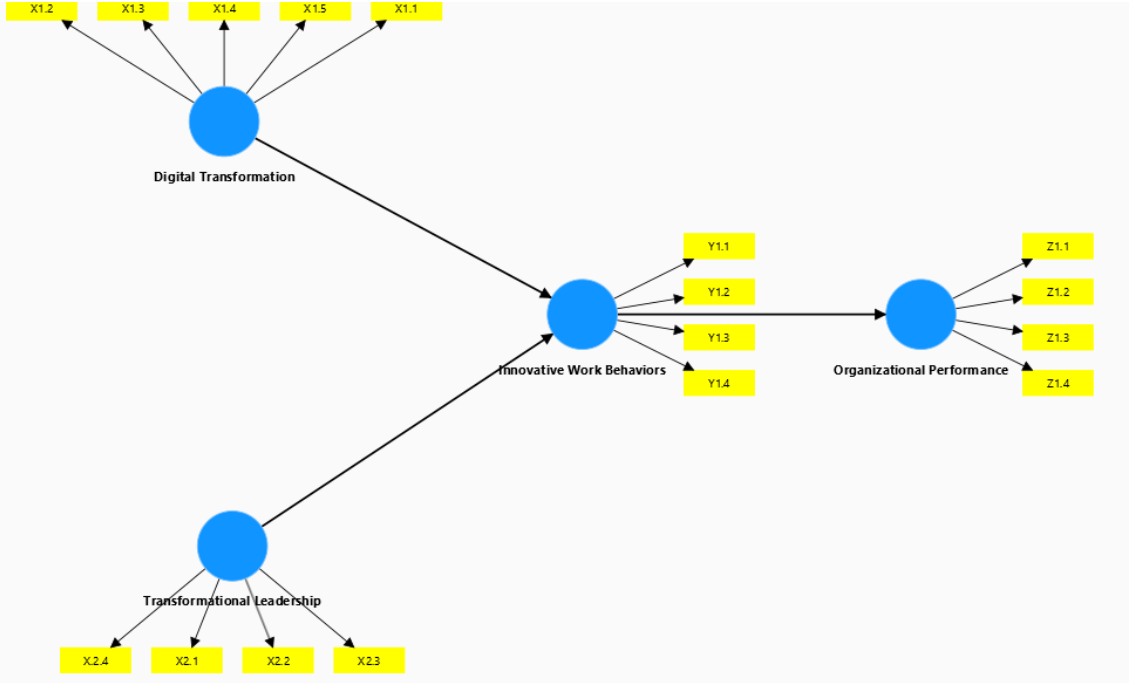

Figure 1 Structural Research Model
Source: Author

METHODS

This study employs a quantitative research approach, utilizing both primary and secondary data. The secondary data, which support the primary data, include literature reviews, academic journals, and other relevant sources. Primary data are collected through questionnaires completed by respondents. The study population comprises 200 employees from State Vocational School Number 5 in Banjarmasin, South Kalimantan, Indonesia, with 138 respondents participating in the research. A simple random sampling technique is used, and questionnaires are distributed online.

Data analysis is conducted using the Partial Least Squares (PLS) method with Smart PLS Version 4 software. The analysis explores the relationships between digital transformation, digital leadership, and organizational performance, with innovative work methods serving as a mediating variable in vocational schools in South Kalimantan. The independent variables in this study include knowledge management, digital leadership, and organizational culture, while the dependent variable is employee performance. All variables are measured using specific indicators detailed in Table 2.

Table 2 Indicators to Measure Variables

Symbol	Indicators
	Knowledge Management
$X_{1.1}$	Our school creates new knowledge to be applied cross-functionally in our school governance activities
$X_{1.2}$	Our school creates an operating system to be applied cross-functionally in our school governance
$X_{1.3}$	Our school has a standardized reward system for sharing knowledge between teachers and staff
$X_{1.4}$	Our school facilitates the process of integrating different knowledge sources cross-functionally
	Digital Leadership
$X_{2.1}$	The leaders in our school always have innovative ideas about the use of technology in our work.
$X_{2.2}$	The leaders in our school always motivate employees and lecturers to use digital technology in their work
$X_{2.3}$	The leaders in our school always communicate continuously with employees and teachers by using the information and communication technology facilities available in our school
$X_{2.4}$	The leaders in our school can develop a good digitalization strategy
$X_{2.5}$	The leaders in our school are able to create an innovative vision in using technology effectively in

	the managerial process in the school
	Organizational Culture
$X_{3.1}$	I understand and apply the core values adopted by our school in everyday work
$X_{3.2}$	In our school, communication between leaders and employees is open and transparent
$X_{3.3}$	I feel like I work in a team that supports each other and collaborates to achieve organizational goals
$X_{3.4}$	Our school encourages innovation and provides space for teachers and employees to adapt to change
$X_{3.5}$	I feel that there is openness in communication in our school, both between colleagues and with leaders
	Employee Performance
$Y_{1.1}$	I complete my work tasks and responsibilities in a timely and efficient manner
$Y_{1.2}$	I always try to maintain the quality of work results according to the standards set by the school
$Y_{1.3}$	I actively seek new ways to improve the effectiveness and efficiency of my work
$Y_{1.4}$	I have a high sense of responsibility for my work and try to make the best contribution to the school
$Y_{1.5}$	I am able to adapt to changes in the work environment and work together with colleagues to achieve school goals.

(Source: Researchers' Data Collection)

RESULTS AND DISCUSSIONS

Respondents' opinions on each item within the dimensions of the measured variables are evaluated using a 1 to 5 Likert scale, indicating their level of agreement with the provided statements. The minimum score is 1, and the maximum score is 5, giving a range of 4 (5 – 1 = 4). The range level is 0.8 (4/5 = 0.8). Based on this calculation, the interpretation levels are categorized as follows: very good (4.21–5.00), good (3.41–4.20), fair (2.61–3.40), poor (1.81–2.60), and very poor (<1.81). The scores of All Variables are shown in the following Table 3:

Table 3 The Scores of All Variables

No	Variable	Score	Remark
1	Knowledge Management	4.27	Very Good
2	Digital Leadership	4.53	Very Good
3	Organizational Culture	4.41	Very Good
4	Employee Performance	4.45	Very Good

(Source: Researchers' Data Collection)

Table 3 shows that digital leadership is in a very good category with an average score of 4.53. It has the highest score of all variables. Similarly, organizational culture, knowledge management and employee performance are also in a very good category with an average score of 4.42, 4.27, and 4.45, respectively. All independent variables are in a very good category. Employee performance as a dependent variable is also in the very good category with an average score of 4.27.

Table 4 The Score s of Indicators of Knowledge Management

Symbol	Indicator	Score	Remark
$X_{1.1}$	Our school creates new knowledge to be applied cross-functionally in our school governance activities	4,35	Very Good
$X_{1.2}$	Our school creates an operating system to be applied cross-functionally in our school governance	4,28	Very Good
$X_{1.3}$	Our school has a standardized reward system for sharing knowledge between teachers and staff	4,23	Very Good
$X_{1.4}$	Our school facilitates the process of integrating different knowledge sources cross-functionally	4,22	Very Good

(Source: Researchers' Data Collection)

The highest score in knowledge management is that the school creates new knowledge to be applied cross-functionally in our school governance activities. It is in a very good

category with an average score of 4.35. The other indicators are also in Very Good categories. They are the school creates an operating system to be applied cross-functionally in school governance (4.28), the school has a standardized reward system for sharing knowledge between teachers and staff (3.23), and the school has a standardized reward system for sharing knowledge between teachers and staff (4.23). The lowest score is in the indicator that the school facilitates the process of integrating different knowledge sources cross-functionally with an average score of 4,22. The results can be seen in Table 4.

Table 5 shows the scores of Transformational Leadership as follows:

Table 5 The Score s of Indicators of Digital Leadership

Symbol	Indicator	Score	Remark
$X_{2.1}$	The leaders in our school always have innovative ideas about the use of technology in our work.	4,52	Very Good
$X_{2.2}$	The leaders in our school always motivate employees and lecturers to use digital technology in their work.	4,59	Very Good
$X_{2.3}$	The leaders in our school always communicate continuously with employees and teachers by using the information and communication technology facilities available in our school.	4,51	Very Good
$X_{2.4}$	The leaders in our school can develop a good digitalization strategy.	4,54	Very Good
$X_{2.5}$	The leaders in our school are able to create an innovative vision in using technology effectively in the managerial process in the school	4,49	Very Good

(Source: Researchers' Data Collection)

In Table 5, all indicators are in a Very Good category with an average score above 4.45. The indicators show that the leaders in the school always have innovative ideas about the use of technology in our work, always motivate employees and lecturers to use digital technology in their work., always communicate continuously with employees and teachers by using the information and communication technology facilities available in our school, can develop a good digitalization strategy., and create an innovative vision in using technology effectively in the managerial process in the school.

Table 6 shows the scores of Innovative Work Behaviors as follows:

Table 6 The Scores of Indicators of Organizational Culture

Symbol	Indicator	Score	Remark
$X_{3.1}$	I understand and apply the core values adopted by our school in everyday work	4,38	Very Good
$X_{3.2}$	In our school, communication between leaders and employees is open and transparent	4,37	Very Good
$X_{3.3}$	I feel like I work in a team that supports each other and collaborates to achieve organizational goals	4,47	Very Good
$X_{3.4}$	Our school encourages innovation and provides space for teachers and employees to adapt to change	4,45	Very Good
$X_{3.5}$	I feel that there is openness in communication in our school, both between colleagues and with leaders	4,36	Very Good

(Source: Researchers' Data Collection)

Table 6 shows that the indicator with the highest score is the I feel like I work in a team that supports each other and collaborates to achieve organizational goals. It is in a very good category, and the average score is 4.47. The rest indicators are also in Very Good categories. They are Our school encourages innovation and provides space for teachers and employees to adapt to change, I understand and apply the core values adopted by our school in everyday work, and In our school, communication between leaders and employees is open and

transparent. Meanwhile, the lowest score indicator is that I feel that there is openness in communication in our school, both between colleagues and with leaders. It is in the very good category with an average score of 4.36.

Table 7 shows the scores of indicators of Employee Performance as follows:

Table 7 The Scores of Indicators of Employee Performance

Symbol	Indicator	Score	Remark
$Y_{1.1}$	I complete my work tasks and responsibilities in a timely and efficient manner	4,43	Very Good
$Y_{1.2}$	I always try to maintain the quality of work results according to the standards set by the school	4,49	Very Good
$Y_{1.3}$	I actively seek new ways to improve the effectiveness and efficiency of my work	4,34	Very Good
$Y_{1.4}$	I have a high sense of responsibility for my work and try to make the best contribution to the school	4,53	Very Good
$Y_{1.5}$	I am able to adapt to changes in the work environment and work together with colleagues to achieve school goals.	4,47	Very Good

(Source: Researchers' Data Collection)

Table 7 shows that the indicator with the highest score is that I have a high sense of responsibility for my work and try to make the best contribution to the school. It is in a very good category, and the average score is 4.53. The rest indicators are also in Very Good categories such as I always try to maintain the quality of work results according to the standards set by the school, that I am able to adapt to changes in the work environment and work together with colleagues to achieve school goals, and that I complete my work tasks and responsibilities in a timely and efficient manner. Meanwhile, the lowest score indicator is that I actively seek new ways to improve the effectiveness and efficiency of my work. It is also in the Very Good category with an average score of 4.34.

Next, the evaluation of the outer model measurement is carried out, which includes tests for validity, reliability, and the structural model. For the validity test, an indicator is deemed valid if its loading factor exceeds 0.5.(Hair, J. F., Astrachan, C. B., Moisescu, O. I., Radomir, L., Sarstedt, M., Vaithilingam, S., & Ringle, 2021b). The SmartPLS output for loading factors, generated using the PLS algorithm, is presented in Table 8. The lowest loading factor recorded is 0.719, indicating that all indicators satisfy the criteria for convergent validity. The diagram displaying the loading factors for each indicator is illustrated in the structural research model in Figure 2.

Table 8 Outer Loadings, Construct Validity and Reliability

Variables	Indicators	Outer Loading	Cronbach's Alpha	Average Variance Extract (AVE)	Composite Reliability (rho_ a)	Composite Reliability (rho_ c)
Knowledge Management	$X_{1.1}$	0.922	0.916	0.799	0.930	0.941
	$X_{1.2}$	0.908				
	$X_{1.3}$	0.847				
	$X_{1.4}$	0.896				
Digital Leadership	$X_{2.1}$	0.881	0.941	0.810	0.946	0.955
	$X_{2.2}$	0.859				
	$X_{2.3}$	0.915				
	$X_{2.4}$	0.915				
	$X_{2.5}$	0.927				
Organizational Culture	$X_{1.1}$	0.685	0.898	0.717	0.899	0.926
	$X_{1.2}$	0.882				
	$X_{1.3}$	0.859				

	$X_{1.4}$	0.923				
	$X_{1.5}$	0.865				
Employee Performance	$Y_{1.1}$	0.685	0.941	0.779	0.932	0.946
	$Y_{1.2}$	0.897				
	$Y_{1.3}$	0.925				
	$Y_{1.4}$	0.817				

(Source: Processed Primary Data)

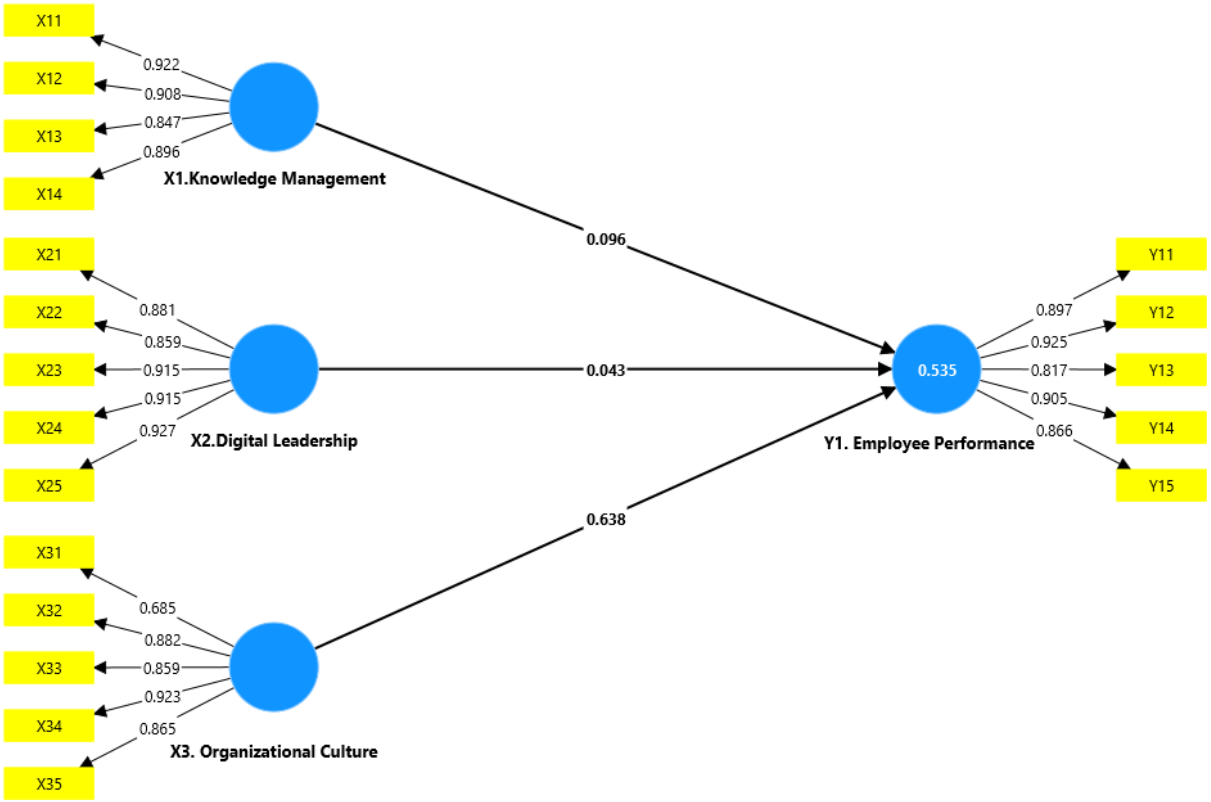

Figure 2 Loading Factor Value
Source: Processed Primary Data

Outer loadings represent the correlation between each indicator and its corresponding latent variable. A higher outer loading (≥ 0.70) indicates a strong contribution of the indicators to construct. The results in the table show that all indicators in Knowledge Management ($X_{1.1}$ = 0.922, $X_{1.2}$ = 0.908, $X_{1.3}$ = 0.847, $X_{1.4}$ = 0.896) have loadings above 0.70, indicating strong factor contribution. The other indicators in Digital Leadership ($X_{2.1}$ = 0.881, $X_{2.2}$ = 0.859, $X_{2.3}$ = 0.915, $X_{2.4}$ = 0.915, $X_{2.5}$ = 0.927), also show acceptable values (>0.70), confirming good construct measurement. The indicators in Organizational Culture such as $X_{3.1}$ (0.685), $X_{3.2}$ (0.897), $X_{3.3}$ (0.925), and $X_{3.4}$ (0.817) have high ≥ 0.70 outer loadings, confirming that they are strong indicators of the construct. The other indicators in Employee Performance are $Y_{1.1}$ (0.685), $Y_{1.2}$ (0.879), $Y_{1.3}$ (0.925) and $Y_{1.4}$ (0.817), exceeding 0.70, demonstrating strong relationships with the construct. Since all outer loadings are above 0.70, the indicators adequately measure their respective latent variables.

Construct validity assesses whether a set of indicators accurately represents a latent variable. The key metric here is Average Variance Extracted (AVE). AVE values should be ≥ 0.50 to confirm convergent validity (i.e., the indicators well represent their constructs) (Hair et al, 2021). The results show that Knowledge Management: 0.799 (Valid), Digital Leadership: 0.810 (Valid), Organizational Culture: 0.717 (Valid), and Employee Performance: 0.932 (Valid). Since all AVE values are above 0.50, the constructs demonstrate strong convergent validity (Hair et al, 2021).

Reliability measures the consistency of a construct. The key metrics are Cronbach's Alpha (CA) and Composite Reliability (CR - rho_a and rho_c).

Cronbach's Alpha is a measure of internal consistency; values ≥ 0.70 indicate good reliability (Hair et al, 2021). The results show that Knowledge Management scores 0.916 (Strong), Digital Leadership 0.941 (Strong), Organizational Culture 0.898 (Strong), Employee Performance 0.929 (Strong).

Composite Reliability (CR - rho_a and rho_c) is a more accurate reliability measure than Cronbach's Alpha. Values ≥ 0.70 are acceptable, while values ≥ 0.80 indicate strong reliability (Hair et al, 2021). The results show that Knowledge Management scores 0.930 and 0.941 (Strong), Digital Leadership: 0.946 and 0.955 (Strong), Organizational Culture: 0.899 and 0.926 (Strong), and Employee Performance: 0.932 and 0.946 (Strong). Since all constructs have Composite Reliability above 0.70, they demonstrate strong internal consistency.

Constructs are valid as the AVE values exceed 0.50 (Hair et al, 2021). The reliability is strong, with Composite Reliability values all above 0.70. All outer loading values are above 0.70, confirming that the indicators effectively measure their respective constructs.

Discriminant validity assesses whether constructs in a research model are truly distinct from each other. In SmartPLS, discriminant validity is usually evaluated using three key criteria: Fornell-Larcker Criterion and Cross Loadings as shown in Table 9 and Table 10 as follows:

Table 9 Discriminant Validity-Fornel Lacker

	Knowledge Management	**Digital Leadership**	**Organizational Culture**	**Employee Performance**
Knowledge Management	0.894			
Digital Leadership	0.636	0.900		
Organizational Culture	0.564	0.769	0.847	
Employee Performance	0.483	0.595	0.725	0.883

(Source: Processed Primary Data)

According to the Fornell-Larcker Criterion, the square root of the Average Variance Extracted (AVE) for each construct must be greater than the correlations between that construct and all other constructs within the model. The diagonal values represent the square root of AVE (e.g., 0.894 for Knowledge Management, 0.900 for Digital Leadership, 0.847 for Organizational Performance and 0.883 for Employee Engagement).The off-diagonal values represent the correlations between constructs. Since each diagonal value is higher than the corresponding correlation values in the same row/column, this suggests good discriminant validity.

Table 10 Cross Loadings

	Knowledge Management	Digital Leadership	Organizational Culture	Employee Performance
$\mathbf{X_{1.1}}$	0.924	0.588	0.536	0.492
$\mathbf{X_{1.2}}$	0.910	0.530	0.490	0.455
$\mathbf{X_{1.3}}$	0.844	0.583	0.513	0.388
$\mathbf{X_{1.4}}$	0.894	0.578	0.477	0.334
$\mathbf{X_{2.1}}$	0.630	0.880	0.604	0.435
$\mathbf{X_{2.2}}$	0.528	0.860	0.617	0.509
$\mathbf{X_{2.3}}$	0.563	0.915	0.702	0.565
$\mathbf{X_{2.4}}$	0.543	0.916	0.737	0.548
$\mathbf{X_{2.5}}$	0.608	0.926	0.779	0.556

$X_{3.1}$	0.439	0.510	0.694	0.648
$X_{3.2}$	0.483	0.662	0.879	0.483
$X_{3.3}$	0.411	0.671	0.855	0.576
$X_{3.4}$	0.524	0.719	0.921	0.608
$X_{3.5}$	0.516	0.678	0.864	0.559
$Y_{1.1}$	0.466	0.574	0.637	0.916
$Y_{1.2}$	0.413	0.525	0.637	0.926
$Y_{1.3}$	0.422	0.500	0.556	0.845
$Y_{1.4}$	0.408	0.500	0.651	0.903
$Y_{1.5}$	0.722	0.588	0.536	0.921

(Source: Processed Primary Data)

Cross-loadings help verify whether each indicator loads higher on its respective construct than on other constructs. Ideally, each item's loading on its assigned construct should be higher than its loadings on other constructs. All indicators generally load highest on their respective constructs, supporting discriminant validity.

Table 11 shows the R-squared value and adjusted R-Squared in the constructs. According to Hair et al. (2021), R^2 values can be interpreted as: 0.75 (Substantial), 0.50 (Moderate), and 0.25 (Weak).

Table 11 R-Squared and Adjusted R-Squared

	R-Squared	Adjusted R-Squared
Employee Performance	0.535	0.524

(Source: Processed Primary Data)

The model moderately explains Employee Performance (R^2 = 0.535) suggesting the need to incorpora te additional influencing factors. The Adjusted R^2 values confirm that the model is well-specified.

Table 11 shows model fit. According to Hair, J. F., Astrachan, C. B., Moisescu, O. I., Radomir, L., Sarstedt, M., Vaithilingam, S., & Ringle (2021), Standardized Root Mean Square Residual (SRMR) measures the difference between the observed and predicted correlation matrices. SRMR ≤ 0.10 is considered acceptable fit. Normed Fit Index (NFI) compares the model to a null model (baseline model). NFI ≥ 0.90 is considered Good Fit. Exact Model Fit (d_ULS and d_G1 / d_G2) tests whether the model fits exactly in population terms. Lower values indicate better fit.

Table 11 Model Fit

	Saturated Model	**Estimated Model**
SRMR	0.062	0.062
d_ULS	0.721	0.721
d_G	0.515	0.515
Chi-square	389.498	389.498
NFI	0.852	0.852

(Source: Processed Primary Data)

The saturated model exhibits a better fit than the estimated model, with SRMR within the acceptable range, but other indices suggest moderate fit quality.

Table 12 The Results of Hypothesis Test

	Original Sample (O)	**Sample Mean (M)**	**Standard Deviation (STDV)**	**T statistic**	**p Value**
Knowledge Management → Employee Performance	0.096	0.073	0.142	0.675	0.500

Digital Leadership → Employee Performance	0.043	0.050	0.116	0.369	0.712
Organizational Culture → Employee Performance	0.638	0.655	0.106	6.0049	0.000

Source: Processed Primary Data

The hypothesis test in SmartPLS shows original sample, sample mean. standard deviation, T statistic and p values as shown in Table 12. Firstly, in the relationship between Knowledge Management and Employee Performance p value score is 0.500. It is not significant because the p value is more than 0.05. Thus, H1 that Knowledge Management has effects on Employee Performance is rejected. This research result contradicts with previous research conducted by Yumhi, Y., Dharmawan, D., Febrian, W. D., & Sutisna (2024), Almuayad, K. M., & Chen (2024), Patwary, A. K., Azam, N. R. A. N., Ashraf, M. U., Muhamed Yusoff, A., Mehmood, W., & Rabiul (2025) and Palupiningtyas, D., Maria, A. D., Wijoyo, T. A., Alyka, A. P., & Brawarso (2024).

Secondly, in the relationship between Digital Leadership and Employee Performance p value score is 0.712. It is also not significant because it is more than 0.05. Thus, H1 that Digital leadership has an effect on Employee Performance is rejected. This research result contradicts with previous research conducted by Qiao, G., Li, Y., & Hong (2024) and Riski, A., & Rino (2024) but supports the previous research conducted by Wang, G., Saher, L., Hao, T., Ali, A., & Amin, (2024).

Thirdly, in the relationship between Organizational Culture and Employee Performance p value is 0.000 below 0.05, the original sample 0.096 and a T-statistic of 6.0049 < t table (1.66). Thus, the H3 hypothesis in this study stating that Organizational Culture affects Employee Performance is accepted. It indicate that the relationship between Organizational Culture and Employee Performance is positive and significant. It means that strong organizational culture will improve the employee performance. This research result confirms previous research conducted by Rojak, J. A., Sanaji, S., Witjaksono, A. D., & Kistyanto (2024), Hadi, S., Hakim, S., Setyawati, K., Wahdiniawati, S. A., & Syafri (2024), Putra (2024), and Abdelwahed, N. A. A., Al Doghan, M. A., Saraih, U. N., & Soomro (2025).

This study contributes to the existing body of literature by offering a nuanced understanding of how knowledge management, digital leadership, and organizational culture relate to employee performance in the context of vocational education. Theoretically, the research provides evidence that organizational culture plays a more dominant and significant role than knowledge management or digital leadership in influencing employee performance within public vocational schools in Indonesia. These findings contribute to organizational behavior and educational management theories by emphasizing the importance of cultural factors in driving individual and institutional outcomes. The results also challenge widely held assumptions that digital leadership and knowledge management are universally impactful, suggesting that their influence may be context-dependent.

The findings of this study offer valuable implications for school leaders, policymakers, and education administrators. Since organizational culture has been proven to significantly influence employee performance, school management should prioritize the development of a strong, cohesive culture that fosters collaboration, innovation, open communication, and adaptability. Strategies may include regular team-building activities, transparent leadership practices, and the inclusion of teachers and staff in decision-making processes. Additionally, while digital leadership and knowledge management were not found to have a significant direct impact, efforts should still be made to improve digital competencies and establish systems that support knowledge sharing, as these elements may have indirect or long-term effects on performance.

Future studies could explore the mediating or moderating roles of variables such as employee motivation, job satisfaction, or technological readiness to better understand the dynamics between digital leadership, knowledge management, and employee performance. Longitudinal studies are also recommended to assess how changes in organizational culture over time influence employee outcomes. Moreover, expanding the research scope to include multiple vocational schools across different regions would enhance generalizability and allow for comparative analysis. Qualitative approaches, such as interviews and focus groups, could also provide deeper insights into the underlying reasons why certain organizational factors exert more influence than others in specific institutional contexts.

CONCLUSION

This study investigated the effects of knowledge management, digital leadership, and organizational culture on employee performance at state vocational school number 5 Banjarmasin using a quantitative approach and SEM PLS analysis. The findings reveal that organizational culture has a positive and significant influence on employee performance, while knowledge management and digital leadership do not show a significant effect in this context.

These results underscore the pivotal role that a strong organizational culture plays in shaping employee behavior and enhancing performance outcomes. In contrast, the insignificant influence of knowledge management and digital leadership suggests that their impact may be limited or indirect in vocational education settings, or that other mediating factors are at play.

For school leaders and administrators, the findings highlight the need to prioritize cultural development by fostering shared values, promoting teamwork, ensuring open communication, and encouraging adaptability and innovation. These cultural elements are essential for driving positive performance outcomes such as increased efficiency, productivity, and a proactive work ethic.

Overall, this study contributes to the theoretical understanding of performance management in vocational education while offering practical guidance for institutional improvement. Future research is encouraged to explore additional factors and broader contexts to deepen insights into the organizational drivers of employee performance.

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REFERENCES

Abawa, A., & Obse, H. (2024). Organizational culture and organizational performance: does job satisfaction mediate the relationship? *Cogent Business & Management*, *11*(1), 2324127.

Abdelwahed, N. A. A., Al Doghan, M. A., Saraih, U. N., & Soomro, B. A. (2025). Unleashing potential: Islamic leadership's influence on employee performance via Islamic organizational values, organizational culture and work motivation. *International Journal of Law and Management*, *67*(2), 165–190.

Almuayad, K. M., & Chen, Y. (2024). Effect of Knowledge Management on Employee Job Performance in Yemeni Banking Sector: the mediating role of job satisfaction. *Journal of the Knowledge Economy*, 1–30.

Durst, S., Foli, S., & Edvardsson, I. R. (2024). A systematic literature review on knowledge management in SMEs: current trends and future directions. *Management Review Quarterly*, *74*(1), 263–288.

Hadi, S., Hakim, S., Setyawati, K., Wahdiniawati, S. A., & Syafri, M. (2024). Analysis of The Influence of Job Satisfaction, Work Discipline And Organizational Culture on Performance of State Civil Apparatus In Ministry Offices. *JEMSI (Jurnal Ekonomi, Manajemen, Dan Akuntansi)*, *10*(1), 599–605.

Hair, J. F., Astrachan, C. B., Moisescu, O. I., Radomir, L., Sarstedt, M., Vaithilingam, S., & Ringle, C. M. (2021a). Executing and interpreting applications of PLS-SEM: Updates for family business researchers. Journal of Family Business Strategy. *Journal of Family Business Strategy*, *12*(3), 100392.

He, Y., Liu, Z., & Lee, M. J. (2024). Navigating Sustainable Value Creation Through Digital Leadership Under Institutional Pressures: The Moderating Role of Environmental Turbulence. *Sustainability*, *16*(21), 9169.

Karakose, T., Polat, H., Tülübaş, T., & Demirkol, M. (2024). A review of the conceptual structure and evolution of digital leadership research in education. *Education Sciences*, *14*(11), 1166.

Kareem, J., Patrick, H. A., & Prabakaran, N. (2024). Exploring the factors of learning organization in school education: the role of leadership styles, personal commitment, and organizational culture. *Central European Management Journal*.

Khaira, N., Triyonggo, Y., & Sukmawati, A. (2023). Examining The Mediating Role Of Digital Culture on Digital Talent in The Telecommunication Sector. *Jurnal Aplikasi Manajemen*, *21*(2), 439–454.

Khan, A. Y., Akhtar, M., & Khan, A. Y. (2024). Digitalization for a Sustainable Performance: Dual-Study Analysis of Digital Leadership, Circular Economy, and Technological Innovation. *Sustainability*, *16*(23), 10465.

Khoa, B. T., & Huynh, T. T. (2023). The effectiveness of knowledge management systems in motivation and satisfaction in higher education Institutions: Data from Vietnam. *Data in Brief*, *49*, 109454.

Kusa, R., Suder, M., Duda, J., Czakon, W., & Juárez-Varón, D. (2024). Does knowledge management mediate the relationship between entrepreneurial orientation and firm performance? *Journal of Knowledge Management*, *28*(11), 33–61.

Martini, I. A. O., Gorda, A. E. S., Gorda, A. O. S., Sari, D. M. F. P., & Antara, M. E. Y. (2025). Impact of competence development, on work creativity, employee performance, and competitiveness of woven products. *Cogent Business & Management*, *11*(1), 2353136.

Ng, C., Wider, W., Yang, C., Jiang, L., Vasudevan, A., Bhandari, P., & Lee, H. P. T. (2024). Keys factor affecting employee performance in the banking sector: a Delphi study. *Cogent Business & Management*, *11*(1), 2409942.

Palumbo, R., & Douglas, A. (2024). The secret ingredient? Uncovering the effect of organizational culture on quality management: a literature review. *International Journal of Quality & Reliability Management*, *4*(1), 195–268.

Palupiningtyas, D., Maria, A. D., Wijoyo, T. A., Alyka, A. P., & Brawarso, K. Z. P. (2024). Application of rapid application development method in designing knowledge management system to improve employee knowledge and performance at ministry of agriculture. *Jurnal Informasi Dan Teknologi*, 29–35.

Patwary, A. K., Azam, N. R. A. N., Ashraf, M. U., Muhamed Yusoff, A., Mehmood, W., & Rabiul, M. K. (2025). Examining employee performance through knowledge management practices, organisational commitment and capacity building in the Malaysian hotel industry. *Global Knowledge, Memory and Communication*, *74*(3/4),

733–752.

Putra, D. M. (2024). The role of organizational culture on employee performance through job satisfaction and work motivation. *Journal of Entrepreneurship and Business*, *5*(1), 55–68.

Qiao, G., Li, Y., & Hong, A. (2024). The strategic role of digital transformation: Leveraging digital leadership to enhance employee performance and organizational commitment in the digital era. *Systems*, *12*(11), 457.

Ravhudzulo, H., & Eresia-Eke, C. (2024). Employee engagement, telecommuting propensity, and employee performance in the virtual workplace. *Cogent Business & Management*, *11*(1), 2422559.

Riski, A., & Rino, R. (2024). The Effect of Digital Leadership Style, Motivation, and Work Ability on Employee Performance After the Covid-19 Pandemic. *Edunesia: Jurnal Ilmiah Pendidikan*, *5*(1), 424–441.

Rojak, J. A., Sanaji, S., Witjaksono, A. D., & Kistyanto, A. (2024). The influence of transformational leadership and organizational culture on employee performance. *EDUKASIA: Jurnal Pendidikan Dan Pembelajaran*, *5*(1), 977–990.

Senadjki, A., Yong, H. N. A., Ganapathy, T., & Ogbeibu, S. (2023). Unlocking the potential: the impact of digital leadership on firms' performance through digital transformation. *Journal of Business and Socio-Economic Development*, *4*(2), 161–177.

Sodiq, A., Tri Ratnasari, R., & Mawardi, I. (2024). Analysis of the effect of Islamic Leadership and Job Satisfaction on sharia engagement and employee performance of Islamic Banks in Indonesia. *Cogent Business & Management*, *11*(1), 2362772.

Stasa Ouzký, M., & Machek, O. (2024). Family firm performance: the effects of organizational culture and organizational social capital. *Journal of Family Business Management*, *14*(2), 353–373.

Ştefan, S. C., Popa, I., Olariu, A. A., Popa, Ş. C., & Popa, C. F. (2024). Knowledge management–performance nexus: Mediating effect of motivation and innovation. *Business Process Management Journal*, *30*(8), 27–48.

Tadesse Bogale, A., & Debela, K. L. (2024). Organizational culture: a systematic review. *Cogent Business & Management*, *11*(1), 2340129.

Tjimuku, M., & Atiku, S. O. (2024). Addressing workplace diversity to improve employee performance: implications for SOEs in Namibia. *Cogent Business & Management*, *11*(1), 2315643.

Van Tonder, F., & Rwelamila, P. D. (2024). A comparison of low-cost housing units for varying climatic regions in South Africa: a knowledge management approach. *Smart and Sustainable Built Environment*, *13*(5), 1310–1329.

Wang, G., Saher, L., Hao, T., Ali, A., & Amin, M. W. (2024). Unlocking employee innovative behavior: the role of humble leadership, core self-evaluation, and leader-member exchange. *BMC Psychology*, *12*(1), 175.

Yumhi, Y., Dharmawan, D., Febrian, W. D., & Sutisna, A. J. (2024). Application of Rapid Application Development Method in Designing a Knowledge Management System to Improve Employee Performance in National Construction Company. *Jurnal Informasi Dan Teknologi*, 155-160.