

THE INFLUENCE OF DIGITAL LEADERSHIP ON ORGANIZATIONAL PERFORMANCE THROUGH DIGITAL CULTURE AND EMPLOYEES DIGITAL CAPABILITIES DISPENDUKCAPIL MAGETAN

Yolanda Cecilia Rahmawati

Faculty of Economics and Business, Universitas PGRI Madiun

email: cyola651@gmail.com

Abstract

This study aims to analyze the effect of digital leadership on organizational performance and examine the mediating roles of digital culture and employees digital capabilities among employees of the Department of Population and Civil Registration of Magetan Regency. This explanatory quantitative study surveyed all 62 employees using saturated sampling. Data were collected through a Likert-scale questionnaire and analyzed using Structural Equation Modeling-Partial Least Squares (SEM-PLS) with SmartPLS 4.0. The results show that digital leadership has a positive and significant effect on organizational performance, digital culture, and employees digital capabilities. Digital culture and employees digital capabilities also have positive and significant effects on organizational performance. Furthermore, both variables partially mediate the effect of digital leadership on organizational performance, with the mediation path through employees digital capabilities being stronger than the path through digital culture. These findings indicate that organizational performance can be improved through stronger digital leadership, a supportive digital work culture, and continuous development of employees digital capabilities. Therefore, the organization is encouraged to strengthen digital leadership, develop an adaptive digital work culture, and improve employees digital capabilities through continuous training and mentoring.

Keywords: digital leadership, digital culture, employees digital capabilities, organizational performance, SEM-PLS

A. INTRODUCTION

Digital transformation has changed the way organizations conduct work processes, provide services, and manage resources. In public organizations, digitalization is not only related to technology adoption but also requires changes in processes, organizational culture, work structures, and human resource capabilities. Mergel et al. (2019) explain that digital transformation in the public sector encompasses organizational and work-process changes

resulting from the use of digital technology, while Vial (2019) emphasizes that digital transformation is an organizational change process integrated with technology utilization to generate improvements and new value. In the context of public services, the success of digitalization is influenced by leaders' ability to direct change. Digital leadership is important because leaders are responsible for developing a digital vision, encouraging technology adoption, providing support, and creating a work environment that promotes learning and innovation. Shin et al. (2023) found that digital leadership has a positive effect on organizational performance and is associated with the development of digital culture and employees digital capabilities.

The Department of Population and Civil Registration of Magetan Regency is a relevant public organization for examining these relationships because its population administration services have utilized various digital technologies. The performance data show that the Community Satisfaction Index reached 90.92 in 2022, increased to 97.92 in 2023, reached 95.90 in 2024, 98.60 in 2025, and 98.70 in 2026. The percentage of residents possessing electronic identity cards was 99.5% in 2022, 99.7% in 2023, 99.30% in 2024, 99.85% in 2025, and 99.90% in 2026. Meanwhile, the SAKIP score was 87.03 in 2022, 94.60 in 2024, 94.65 in 2025, and 94.70 in 2026. Although these indicators show good performance achievement, variations across periods indicate the need for continuous evaluation and improvement. In this context, organizational performance is not only determined by technological availability but also by internal organizational factors. Employees digital capabilities, which include knowledge, skills, and adaptability in using digital technology, are important for enabling employees to respond to changes in work systems and improve work-process effectiveness (Verhoef et al., 2021). Digital culture also plays an important role by shaping organizational values, mindsets, and behaviors toward technology adoption, collaboration, innovation, and adaptation to change (Proksch et al., 2021).

Despite the importance of digital leadership, digital culture, and employees digital capabilities in supporting organizational performance, limited empirical studies have examined these relationships in Indonesian public-service organizations. Shin et al. (2023) found that digital leadership positively influences organizational performance and that digital culture and

employees digital capabilities mediate this relationship. However, differences in organizational context, public-sector characteristics, and digital transformation conditions in Indonesia provide an opportunity to re-examine these relationships in the Department of Population and Civil Registration of Magetan Regency. Therefore, this study aims to analyze the effect of digital leadership on organizational performance, digital culture, and employees digital capabilities, as well as the effects of digital culture and employees digital capabilities on organizational performance and their mediating roles. The findings are expected to contribute theoretically to the development of literature on digital leadership and organizational performance in the context of public organizations, while practically providing input for strengthening digital leadership, developing an adaptive digital culture, and improving employees digital capabilities through continuous training and mentoring.

Based on the theoretial review and previous empirical findings, the following hypotheses are proposed:

H₁: Digital leadership has a positive and significant effect on organizational performance.

H₂: Digital leadership has a positive and significant effect on digital culture.

H₃: Digital leadership has a positive and significant effect on employees digital capabilities.

H₄: Digital culture has a positive and significant effect on organizational performance.

H₅: Employees digital capabilities have a positive and significant effect on organizational performance.

H₆: Digital culture mediates the effect of digital leadership on organizational performance.

H₇: Employees digital capabilities mediate the effect of digital leadership on organizational performance.

B. METHOD

Research Design and Object

This study uses a quantitative approach with an explanatory design. The research object is the Department of Population and Civil Registration of Magetan Regency. Digital leadership is the independent variable, organizational performance is the dependent variable, while digital culture and employees digital capabilities are mediating variables.

Population and Sample

The population consists of all employees of the Department of Population and Civil Registration of Magetan Regency, totaling 62 employees. Saturated sampling was used because all population members could be reached. Therefore, all 62 employees became respondents. Primary data were collected using a Likert-scale questionnaire.

Instrument and Measurement

Digital leadership was measured using indicators related to digital literacy, digital communication, and digital participation. Digital culture was measured through openness, collaboration, and innovation orientation. Employees digital capabilities were measured through understanding digital technology, utilizing digital technology, and adapting to digital transformation. Organizational performance was measured through financial performance, service-user perspective, and internal business processes, adjusted to the public-organization context.

Data Analysis Technique

Data were analyzed using Structural Equation Modeling-Partial Least Squares (SEM-PLS) with SmartPLS 4.0. The outer model was evaluated through outer loading, Average Variance Extracted (AVE), Cronbach's Alpha, Composite Reliability, Fornell-Larcker criteria, and cross loading. The inner model was evaluated through multicollinearity, R-square, f-square, Q-square, and hypothesis testing using path coefficients, t-statistics, and p-values. Hair et al. (2022) was used as the main reference for PLS-SEM evaluation.

C. RESULTS AND DISCUSSIONS

Respondent Profile

The research involved 62 employees of Dinas Kependudukan dan Pencatatan Sipil Kabupaten Magetan. The respondents were employees who were directly involved in the implementation of administrative and digital-based public services. The characteristics of respondents were classified based on age, gender, educational level, and length of employment. The respondent profile was used to provide an overview of the characteristics of employees involved in the study. The research questionnaire used a four-point Likert scale and was

distributed to all 62 employees through a census sampling technique. The research variables consisted of digital leadership, digital culture, employees digital capabilities, and organizational performance.

Table 1. Respondent Profile (n=62)

Category	Group	n	%
Age	Based on research classification	62	100
Gender	Male/Female	62	100
Education	SMA/D3/D4/S1/S2	62	100
Length of Employment	Based on research classification	62	100

Source: Primary data processed (2026).

Descriptive Analysis

The descriptive analysis shows that the four research variables received relatively high assessments from respondents. Digital leadership was measured using 14 statements covering digital literacy, digital communication, and digital participation. The respondents' assessments indicate that leaders were perceived as capable of utilizing digital technology, communicating through digital media, and encouraging employee participation in digital-based activities.

Digital culture was measured using 12 statements related to openness to technology, digital collaboration, and continuous learning. The variable obtained an overall average score of 35.43, indicating that employees generally perceived the organization's digital culture positively. This condition reflects the existence of digital-based collaboration, communication, and employee readiness to adapt to technological changes.

Employees digital capabilities were measured using 12 statements concerning employees understanding, utilization, and adaptability to digital technology. The responses indicate that employees generally have adequate capabilities in understanding digital technology, utilizing digital applications, and adapting to new digital systems.

Organizational performance also received a high assessment from respondents. This indicates that the organization has been able to carry out work effectively and efficiently, achieve organizational targets, provide services, and adapt to changes associated with digital transformation.

Measurement Model Testing

The measurement model was evaluated using validity and reliability tests through SmartPLS 4.0. The evaluation included convergent validity, construct reliability, discriminant validity, and model fit. The results indicate that the research instruments met the required validity and reliability criteria, allowing the analysis to proceed to the structural model.

The model fit evaluation produced a Chi-Square value of 2430.401, SRMR of 0.129, NFI of 0.528, d_ULS of 22.143, and d_G of 13.970. Based on the criteria used in the research, the model was considered acceptable for further analysis.

Structural Model and Hypothesis Testing

The inner model was evaluated through the multicollinearity test, direct effect, indirect effect, R-square, f-square, and Q-square. The inner VIF values ranged from 1.000 to 2.519, which were below the threshold of 5.00. Therefore, no significant multicollinearity problem was identified among the constructs in the structural model.

Table 2. Direct Effect and Hypothesis Testing

Relationship	Original Sample	t-statistics	p-value	Decision
Digital Leadership → Organizational Performance	0.363	2.994	0.003	H1 Accepted
Digital Leadership → Digital Culture	0.589	7.250	0.000	H2 Accepted
Digital Leadership → Employees Digital Capabilities	0.503	4.108	0.000	H3 Accepted
Digital Culture → Organizational Performance	0.242	2.117	0.034	H4 Accepted
Employees Digital Capabilities → Organizational Performance	0.394	3.108	0.002	H5 Accepted

Source: SmartPLS 4.0 output (2026).

The results show that all five direct relationships are positive and statistically significant. Digital leadership had the strongest direct effect on digital culture, with a path coefficient of 0.589, followed by its effect on employees digital capabilities of 0.503 and organizational performance of 0.363. Digital culture also positively affected organizational performance with a coefficient of 0.242, while employees digital capabilities had a coefficient of 0.394.

Mediation Testing

Table 3. Indirect Effect and Mediation Testing

Indirect Relationship	Original Sample	t-statistics	p-value	Decision
Digital Leadership → Digital Culture → Organizational Performance	0.143	2.081	0.037	H6 Accepted
Digital Leadership → Employees Digital Capabilities → Organizational Performance	0.198	1.995	0.046	H7 Accepted

Source: SmartPLS 4.0 output (2026).

The mediation results show that digital culture significantly mediates the relationship between digital leadership and organizational performance, with an indirect effect of 0.143 and p-value of 0.037. Employees digital capabilities also significantly mediate the relationship, with an indirect effect of 0.198 and p-value of 0.046. Since the direct effect of digital leadership on organizational performance remains significant, both mediation relationships are categorized as partial mediation.

Coefficient of Determination and Predictive Relevance

The R-square value for organizational performance was 0.734, indicating that digital leadership, digital culture, and employees digital capabilities jointly explained 73.4% of the variance in organizational performance, while the remaining 26.6% was explained by other factors outside the research model. The R-square values for digital culture and employees digital capabilities were 0.347 and 0.253, respectively.

The f-square analysis showed that the largest effect occurred in the relationship between digital leadership and digital culture (0.531), followed by digital leadership and employees digital capabilities (0.339), and digital leadership and organizational performance (0.319). Employees digital capabilities had an effect of 0.265 on organizational performance, while digital culture had an effect of 0.088.

The Q-square values were 0.316 for digital culture, 0.201 for employees digital capabilities, and 0.474 for organizational performance. Because all Q-square values were greater than zero, the model demonstrated predictive relevance.

Discussion

The Effect of Digital Leadership on Organizational Performance

Digital leadership had a positive and significant effect on organizational performance, so H₁ was accepted. This finding indicates that leaders who are able to utilize digital technology, provide clear direction, communicate effectively, and support employees in adapting to digital changes can contribute to improved organizational performance. Digital leadership is increasingly important in Dinas Kependudukan dan Pencatatan Sipil Kabupaten Magetan because the organization has implemented various digital-based population administration services that require active leadership support.

This finding is consistent with Shin et al. (2023), Yusuf et al. (2023), and Gunawan et al. (2023), which found that digital leadership positively contributes to organizational performance. It also supports Vial (2019), who explained that successful digital transformation requires organizational capabilities to manage technological changes effectively. From the RBV perspective, digital leadership represents an important internal resource that can support the achievement of organizational goals and sustainable performance.

The Effect of Digital Leadership on Digital Culture

Digital leadership had a positive and significant effect on digital culture, so H₂ was accepted. The finding indicates that leaders have an important role in creating a digital-oriented work culture through direction, communication, role modeling, and encouragement to utilize digital technology. Leaders who actively support digitalization can influence employees to become more open to technological changes and develop digital-based work habits.

This finding is consistent with Shin et al. (2023) and Wang et al. (2022), which found that digital leadership contributes to the development of digital culture and organizational innovation. In Dinas Kependudukan dan Pencatatan Sipil Kabupaten Magetan, the use of digital population administration services and digital communication reflects the growing role of technology in organizational activities. Therefore, digital leadership can strengthen a culture that supports technology utilization, collaboration, and adaptation to digital transformation.

The Effect of Digital Leadership on Employees Digital Capabilities

Digital leadership had a positive and significant effect on employees digital capabilities, so H₃ was accepted. This finding shows that leaders can encourage employees to improve their ability to understand, use, and adapt to digital technology. Leadership support through

direction, motivation, learning opportunities, and assistance in using digital systems can help employees become more confident and capable in performing digital-based tasks.

This finding is in line with Vial (2019), who emphasized that digital transformation requires human resources with adequate capabilities to utilize technology effectively. In Dinas Kependudukan dan Pencatatan Sipil Kabupaten Magetan, employees are required to operate various digital systems in population administration services. Therefore, digital leadership support is important for developing employees' digital capabilities and ensuring that technology can be utilized effectively in daily work.

The Effect of Digital Culture on Organizational Performance

Digital culture had a positive and significant effect on organizational performance, so H₄ was accepted. The finding indicates that a work culture characterized by openness to technology, digital collaboration, communication, and continuous learning can improve employees' ability to adapt to technological changes. A supportive digital culture also encourages employees to utilize digital systems in completing their work more effectively.

This finding is consistent with Muchsinati and Mea (2022), Ho Dai and Huynh Tan (2023), and Wiese et al. (2024), which found that organizational culture contributes to organizational performance. It also supports Shin et al. (2023) and Cardoso et al. (2024), who emphasized the importance of digital culture in supporting collaboration, knowledge sharing, adaptation, and technology utilization. Thus, a strong digital culture can become an important organizational resource in improving performance.

The Effect of Employees Digital Capabilities on Organizational Performance

Employees digital capabilities had a positive and significant effect on organizational performance, so H₅ was accepted. This finding indicates that employees who are able to understand, utilize, and adapt to digital technology can complete their tasks more effectively and efficiently. Digital capabilities are particularly important in population administration services because employees need to operate digital applications and information systems accurately in supporting organizational activities.

The finding is consistent with Retnowati and Santosa (2023), who found that employees digital capabilities positively affect organizational performance. It also supports Atobishi et al.

(2024), which showed that digital capabilities can improve public sector performance through effective technology utilization, digital communication, and operational efficiency. From the RBV perspective, employees digital capabilities represent a strategic human resource because technology cannot provide optimal organizational value without employees who are capable of utilizing it effectively.

The Mediating Role of Digital Culture in the Effect of Digital Leadership on Organizational Performance

Digital culture significantly mediated the relationship between digital leadership and organizational performance, so H₆ was accepted. This finding indicates that digital leadership can improve organizational performance not only directly but also through the development of a supportive digital culture. Leaders who encourage collaboration, openness to technology, digital communication, and adaptation can create a work environment that supports better organizational performance.

The finding is consistent with Shin et al. (2023), which showed that digital leadership can influence organizational performance through digital culture. This relationship demonstrates that leadership and organizational culture work together in supporting digital transformation. Therefore, strengthening digital leadership followed by the development of a supportive digital culture can help Dinas Kependudukan dan Pencatatan Sipil Kabupaten Magetan improve organizational effectiveness.

The Mediating Role of Employees Digital Capabilities in the Effect of Digital Leadership on Organizational Performance

Employees digital capabilities significantly mediated the relationship between digital leadership and organizational performance, so H₇ was accepted. This finding indicates that digital leadership can improve organizational performance by strengthening employees' ability to understand and utilize digital technology. Leaders who provide direction, motivation, and opportunities for digital learning can help employees develop capabilities that support the completion of their work.

The mediation effect through employees digital capabilities was stronger than the mediation effect through digital culture. This indicates that employees' ability to directly

operate and utilize digital systems has an important role in supporting organizational performance. This condition is relevant to the characteristics of population administration services, where employees' digital capabilities are required to ensure that digital-based services and administrative processes can run effectively.

Overall, the findings demonstrate that digital leadership, digital culture, and employees digital capabilities are interconnected resources that contribute to organizational performance. Digital leadership provides direction and support for digital transformation, digital culture creates a work environment that encourages technology utilization and adaptation, while employees digital capabilities enable technology to be applied effectively in daily work. Therefore, strengthening these three aspects simultaneously is important for supporting the improvement of organizational performance at Dinas Kependudukan dan Pencatatan Sipil Kabupaten Magetan.

D. CONCLUSIONS

This study concludes that digital leadership, digital culture, and employees digital capabilities contribute to improving organizational performance at Dinas Kependudukan dan Pencatatan Sipil Kabupaten Magetan. Digital leadership supports performance by providing direction, digital support, and encouraging employees to adapt to technological changes. Digital culture strengthens performance through openness to technology, collaboration, communication, and readiness for digital transformation, while employees digital capabilities enable employees to utilize digital technology effectively and efficiently. The findings also show that digital culture and employees digital capabilities strengthen the role of digital leadership in improving organizational performance. These findings support the Resource-Based View perspective, which emphasizes the importance of organizational resources and capabilities in achieving better performance. This study is limited to one public service organization and three main variables; therefore, future research is encouraged to examine broader public organizations and consider other factors such as digital readiness, employee engagement, organizational innovation, and digital training.

E. SUGGESTIONS

Future researchers are encouraged to examine other public service organizations and regions and include additional variables such as digital readiness, employee engagement, digital training, and organizational innovation. For Dinas Kependudukan dan Pencatatan Sipil Kabupaten Magetan, it is recommended to strengthen digital leadership, maintain a supportive digital culture, and continuously develop employees digital capabilities through training and adaptation to new technologies. Employees are also encouraged to improve their digital capabilities and utilize digital systems effectively to support sustainable digital transformation and organizational performance.

REFERENCES

- Atobishi, T., et al. (2024). [Artikel mengenai digital capabilities dan organizational performance pada sektor publik].
- Budianto, S., Salim, U., Moko, W., & Indrawati, N. K. (2024). Digital leadership mediated by dynamic capabilities influences organizational performance. *International Journal of Organizational Analysis*.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2022). *Partial least squares structural equation modeling (PLS-SEM) using R: A workbook*. Springer.
- Ho Dai, D., & Huynh Tan, K. (2023). The influence of organizational culture and shared leadership on digital transformation and organizational performance. *Cogent Business & Management*.
- Klein, M. (2020). Leadership characteristics in the era of digital transformation. *Business & Management Studies: An International Journal*.
- Muchsinati, E. S., & Mea, Y. L. (2022). Pengaruh kepemimpinan etik dan budaya organisasi dengan komitmen sebagai variabel mediasi terhadap kinerja organisasi. *Jurnal Manajemen dan Kewirausahaan*.
- Retnowati, C. N., & Santosa, B. (2023). Digital leadership, culture & employee capabilities: Sustainable organizational performance in education—A case study. *Enrichment: Journal of Multidisciplinary Research and Development*, 1(6). <https://doi.org/10.55324/enrichment.v1i5.36>
- Richard, P. J., Devinney, T. M., Yip, G. S., & Johnson, G. (2009). Measuring organizational performance: Toward methodological best practice. *Journal of Management*, 35(3), 718–804. <https://doi.org/10.1177/0149206308330560>

- Saddique, F., Ramzan, B., Sanyal, S., & Alamari, J. (2023). Role of digital leadership towards sustainable business performance: A parallel mediation model. *Journal of Infrastructure, Policy and Development*, 7(3).
- Sandro, S., & Sá, M. J. (2022). Digital organizational culture: Contributions to a definition and future challenges. *Academic Journal of Interdisciplinary Studies*, 11(4), 22–33.
- Sarstedt, M., Ringle, C. M., & Hair, J. F. (2017). Partial least squares structural equation modeling. In *Handbook of market research* (pp. 1–40). Springer.
- Shin, J., Mollah, M. A., & Choi, J. (2023). Sustainability and organizational performance in South Korea: The effect of digital leadership on digital culture and employees' digital capabilities. *Sustainability*, 15(3), 2027. <https://doi.org/10.3390/su15032027>
- Sugiyono. (2023). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.
- Tajulariffin, M. Z. M., & Makhbul, Z. K. (2025). Exploring the interplay of digital leadership, digital workplace and employees dynamic digital capabilities in Malaysian public universities. *International Journal of Educational Management*.
- van Laar, E., van Deursen, A. J. A. M., van Dijk, J. A. G. M., & de Haan, J. (2017). The relation between 21st-century skills and digital skills: A systematic literature review. *Computers in Human Behavior*, 72, 577–588. <https://doi.org/10.1016/j.chb.2017.03.010>
- Verhoef, P. C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Dong, J. Q., Fabian, N., & Haenlein, M. (2021). Digital transformation: A multidisciplinary reflection and research agenda. *Journal of Business Research*, 122, 889–901. <https://doi.org/10.1016/j.jbusres.2019.09.022>
- Vial, G. (2019). Understanding digital transformation: A review and a research agenda. *The Journal of Strategic Information Systems*, 28(2), 118–144.
- Wang, T., Lin, X., & Sheng, F. (2022). Digital leadership and exploratory innovation: From the dual perspectives of strategic orientation and organizational culture. *Frontiers in Psychology*, 13.
- Waty, L. (2024). Pengaruh digital culture terhadap kinerja pegawai. *Jurnal Terapan Ilmu Manajemen dan Bisnis*, 7(2), 136–165.
- Yusuf, M., Satia, H. M. R., Bernardianto, R. B., Nurhasanah, N., Irwani, I., & Setyoko, P. I. (2023). Exploring the role of digital leadership and digital transformation on the performance of the public sector organizations. *International Journal of Data and Network Science*, 7(4), 1983–1990. <https://doi.org/10.5267/j.ijdns.2023.6.014>
- Zeike, S., Bradbury, K., Lindert, L., & Pfaff, H. (2019). Digital leadership skills and associations with psychological well-being. *International Journal of Environmental Research and Public Health*, 16(14), 2628. <https://doi.org/10.3390/ijerph16142628>