

The Effect of Knowledge Management, Corporate University, and Learning Organization on Digital Transformation

¹Irmadanah Surahman, ²Nikolas Fajar Wuryaningrat, ³Nurmadhani Fitri Suyuthi

¹ Universitas Terbuka, Makassar, Indonesia

² Universitas Negeri Manado, Indonesia

³ Universitas Fajar Makassar, Indonesia

*Corresponding Author e-mail: irmadanah.surahman@kemenkeu.go.id

Received: December 2025; Revised: January 2026; Published: February 2026

Abstrak

Penelitian ini bertujuan menganalisis pengaruh Manajemen Pengetahuan, Universitas Korporat, dan Organisasi Pembelajaran terhadap transformasi digital di Direktorat Jenderal Perbendaharaan Provinsi Sulawesi Selatan. Penelitian menggunakan pendekatan kuantitatif eksplanatori dengan data primer yang dikumpulkan melalui kuesioner terstruktur. Sampel penelitian berjumlah 81 responden aparatur sipil negara yang dipilih menggunakan purposive sampling berdasarkan kriteria jenjang jabatan, pengalaman kerja, dan keterlibatan dalam program pembelajaran organisasi. Analisis data dilakukan menggunakan regresi linier berganda dengan bantuan SPSS. Hasil penelitian menunjukkan bahwa Manajemen Pengetahuan berpengaruh negatif dan signifikan terhadap transformasi digital ($p < 0,05$), Universitas Korporat tidak berpengaruh signifikan ($p > 0,05$), sedangkan Organisasi Pembelajaran berpengaruh positif dan merupakan variabel paling kuat serta signifikan ($p < 0,05$). Temuan ini menunjukkan bahwa transformasi digital di lingkungan Direktorat Jenderal Perbendaharaan lebih ditentukan oleh kekuatan budaya pembelajaran organisasi yang berkelanjutan dibandingkan sistem pembelajaran formal semata, serta mengindikasikan perlunya evaluasi ulang terhadap praktik manajemen pengetahuan yang diterapkan.

Kata kunci: manajemen pengetahuan, universitas korporat, organisasi pembelajaran, transformasi digital, sektor publik

Abstract

This study aims to examine the effects of Knowledge Management, Corporate University, and Learning Organization on digital transformation at the Directorate General of Treasury in South Sulawesi Province. The study adopts a quantitative explanatory approach using primary data collected through structured questionnaires. The research sample consists of 81 civil servants, selected through purposive sampling based on job level, work experience, and participation in organizational learning programs. Data were analyzed using multiple linear regression with SPSS. The results indicate that Knowledge Management has a negative and significant effect on digital transformation ($p < 0,05$), Corporate University shows no significant effect ($p > 0,05$), while Learning Organization has a positive and the strongest significant effect ($p < 0,05$). These findings suggest that digital transformation within the Directorate General of Treasury is driven more by a strong and sustainable learning organization culture than by formal corporate university systems alone, and highlight the need to reassess existing knowledge management practices in public sector organizations.

Keywords: knowledge management, corporate university, learning organization, digital transformation, public sector

How to Cite: Surahman, I. ., Wuryaningrat, N. F. ., & Suyuthi, N. F. The Effect of Knowledge Management, Corporate University, and Learning Organization on Digital Transformation at the Directorate General of Treasury in South Sulawesi. *Journal of Authentic Research*, 469-478. <https://doi.org/10.36312/t4vjhc63>



<https://doi.org/10.36312/t4vjhc63>

Copyright© 2026, Surahman et al.
This is an open-access article under the CC-BY-SA License.



INTRODUCTION

Digital transformation has become a strategic imperative for public sector organizations to enhance efficiency, transparency, accountability, and service quality in response to increasing societal demands and fiscal complexity. In the context of public financial management institutions, digital transformation extends beyond the adoption of information technology and digital platforms, encompassing deeper organizational changes related to human resources, learning capability, and knowledge utilization. Recent studies emphasize that digital initiatives frequently fail to deliver sustainable impact when organizations focus solely on technological infrastructure while neglecting organizational readiness, employee learning, and behavioral adaptation (Vial, 2021; Mergel et al., 2020; Verhoef et al., 2021). Consequently, digital transformation must be understood as a socio-organizational process in which technology serves as an enabler rather than the primary driver of change.

The Directorate General of Treasury represents a critical institution within Indonesia's public financial management system, responsible for treasury operations, budget execution, and fiscal accountability. As a data-intensive organization, the Directorate General of Treasury has implemented various digital systems to support integrated treasury services and evidence-based fiscal decision-making. However, empirical evidence suggests that the effectiveness of digital transformation in public financial institutions is often constrained by disparities in digital competence, limited knowledge-sharing practices, and uneven implementation of organizational learning across regional work units (OECD, 2020; World Bank, 2022; Dwivedi et al., 2022). In the South Sulawesi regional context, these variations create organizational challenges that may affect the consistency and sustainability of digital transformation outcomes at the operational level.

From an organizational perspective, digital transformation is strongly influenced by the interaction of Knowledge Management, Corporate University, and Learning Organization. Knowledge Management enables organizations to systematically capture, share, and utilize both tacit and explicit knowledge to support innovation and data-driven decision-making (Nonaka et al., 2021; Santoro et al., 2020; Kianto et al., 2022). Corporate University functions as a strategic learning mechanism that aligns competency development, leadership formation, and organizational goals within a structured learning ecosystem (Rademakers, 2020; Allen & McGee, 2021; Garvin et al., 2022). Meanwhile, Learning Organization emphasizes continuous learning, collective problem-solving, reflective practices, and leadership commitment to change, all of which are essential for sustaining digital transformation in complex public sector environments (Senge et al., 2022; Marsick & Watkins, 2021; Cegarra-Navarro et al., 2023). Theoretically, these three constructs are complementary and jointly strengthen organizational readiness for digital transformation.

Despite growing scholarly interest, existing empirical studies predominantly examine Knowledge Management, Corporate University, and Learning Organization as isolated variables, with a strong bias toward private sector organizations or higher education institutions. Public sector studies, particularly in developing countries, remain limited and are often qualitative or descriptive in nature, offering insufficient empirical explanation of causal relationships between organizational learning factors and digital transformation outcomes (Mergel et al., 2020; Ferreira et al., 2022; Reis et

al., 2021). Moreover, empirical research that simultaneously integrates these three organizational dimensions within public financial management institutions in Indonesia is still scarce, especially studies employing quantitative explanatory methods to assess their relative and combined effects.

Addressing these gaps, this study offers novelty by empirically examining the simultaneous effects of Knowledge Management, Corporate University, and Learning Organization on digital transformation within a public financial management institution using a quantitative explanatory approach. This research advances the state of the art by positioning digital transformation as an organizational learning-driven process rather than a purely technological initiative, while also providing context-specific evidence from the Directorate General of Treasury in South Sulawesi. The findings are expected to contribute theoretically to public sector digital transformation literature and practically to support policymakers and public managers in designing integrated knowledge and learning strategies to sustain digital reform. Accordingly, the research questions addressed in this study are: (1) Does Knowledge Management significantly influence digital transformation? (2) Does Corporate University significantly influence digital transformation? and (3) Does Learning Organization significantly influence digital transformation at the Directorate General of Treasury in South Sulawesi?

METHOD

Research Design

This study adopts a quantitative explanatory research design aimed at examining causal relationships between organizational factors and digital transformation in the public sector. An explanatory design is appropriate because the research seeks to test theoretically grounded hypotheses regarding the influence of Knowledge Management, Corporate University, and Learning Organization on Digital Transformation rather than merely describing observed phenomena. Quantitative methods allow for objective measurement of variables and enable statistical testing of the magnitude and direction of relationships among constructs. The study was conducted at the Directorate General of Treasury in South Sulawesi Province, a public financial management institution that has actively implemented digital systems to support treasury operations and fiscal governance. The explanatory framework positions Digital Transformation as the dependent variable, while Knowledge Management, Corporate University, and Learning Organization serve as independent variables. This structure reflects the assumption that organizational learning and knowledge processes act as antecedents of effective digital transformation. Primary data were collected at a single point in time, making the study cross-sectional in nature. The overall research flow consists of problem formulation, theoretical model development, data collection through structured questionnaires, statistical analysis, and interpretation of results. To clarify the research design and variable relationships, the study employs an operational definition table that links each variable to its indicators and theoretical sources, ensuring conceptual clarity and methodological transparency.

Sample and Research Subjects

The population of this study comprises civil servants employed at the Directorate General of Treasury in South Sulawesi Province. Given the organizational and technical nature of the variables examined, not all members of the population were considered suitable respondents. Therefore, purposive sampling was applied to ensure that participants possessed sufficient experience and understanding of digital systems and organizational learning practices. The sampling criteria included: (1) civil servants with a minimum rank of level III, (2) relevant work experience in treasury operations, and (3) prior participation in organizational learning programs associated with Corporate University or Learning Organization initiatives. These criteria were designed to enhance the validity of responses by selecting individuals directly involved in or affected by digital transformation processes. Based on these criteria, a total of 81 respondents were selected as the research sample. The sample size was deemed adequate for multiple linear regression analysis, as it met minimum requirements for estimating regression coefficients and testing statistical significance. The respondents represented various functional units within the regional treasury offices, reflecting diversity in roles, responsibilities, and exposure to digital initiatives. This variation allowed for a more comprehensive assessment of how organizational learning and knowledge practices influence digital transformation across different operational contexts within the institution.

Instruments and Research Procedures

Data were collected using a structured questionnaire designed to measure respondents' perceptions of Knowledge Management, Corporate University, Learning Organization, and Digital Transformation. The questionnaire employed a Likert scale ranging from strongly disagree to strongly agree, enabling quantification of subjective perceptions. The measurement indicators were adapted from established literature to ensure content validity. Knowledge Management was measured through indicators of knowledge sharing and knowledge utilization, Corporate University through integrated learning systems and strategic competency development, Learning Organization through continuous learning culture and team learning, and Digital Transformation through digital process effectiveness and data-driven decision-making. Prior to hypothesis testing, the instrument underwent validity and reliability testing. Validity was assessed using item-total correlation analysis, while reliability was evaluated using Cronbach's alpha coefficients to ensure internal consistency. Data collection was conducted from November to December 2025, following formal permission from the institution. Respondents were informed about the purpose of the study and assured of confidentiality. Questionnaires were distributed and collected directly to ensure a high response rate. The procedures followed the principles of quantitative explanatory research, ensuring systematic data collection and minimizing potential measurement bias.

Table 1. Variable Operational Definition

Variable	Indicator	Source
Knowledge Management (X1)	Knowledge sharing	Alavi and Leidner (2001)
	Knowledge utilization	Dalkir (2005)
Corporate University (X2)	Integrated learning system	Allen (2002)
	Strategic competency development	Allen (2002)
Learning Organization (X3)	Continuous learning culture	Senge (1990)
	Team learning	Senge (1990)
Digital Transformation (Y)	Digital process effectiveness	OECD (2021)
	Data-driven decision-making	World Bank (2018)

Data Analysis Techniques

Data analysis was conducted using SPSS software to transform raw questionnaire data into meaningful empirical findings aligned with the research objectives. The analysis began with descriptive statistics to summarize respondent characteristics and variable distributions. Subsequently, validity and reliability tests were performed to confirm the adequacy of the measurement instrument. Prior to regression analysis, classical assumption tests were conducted, including tests for normality, multicollinearity, and heteroscedasticity, to ensure that the data met the assumptions required for multiple linear regression. Multiple linear regression analysis was then employed to examine both the partial and simultaneous effects of Knowledge Management, Corporate University, and Learning Organization on Digital Transformation. The significance of each independent variable was assessed using t-tests, while the overall model fit was evaluated through the F-test and coefficient of determination (R^2). This analytical approach enabled the identification of the relative strength and direction of each organizational factor's influence on digital transformation. The results of the regression analysis form the basis for subsequent interpretation and discussion, linking empirical findings to theoretical perspectives and addressing the research questions posed in this study.

RESULT AND DISCUSSION

Table 2. Multiple Linear Regression Analysis Result

Independent Variable	Direction of Effect	Significance	Remark
Knowledge Management	Negative	< 0.05	Significant
Corporate University	Not significant	> 0.05	Not significant
Learning Organization	Positive	< 0.05	Significant (strongest)

Effect of Knowledge Management on Digital Transformation

The results of the multiple linear regression analysis indicate that Knowledge Management has a significant negative effect on digital transformation within the Directorate General of Treasury in South Sulawesi (significance value < 0.05). This finding implies that higher levels of knowledge management practices are associated

with lower levels of digital transformation performance in the observed organizational context.

From an organizational and managerial perspective, this result suggests that knowledge management practices that are predominantly procedural, documentation-oriented, and compliance-driven do not automatically support digital transformation. In public sector institutions, knowledge management is often implemented through extensive documentation, standard operating procedures, reporting mechanisms, and formal repositories of information. While these practices are essential for accountability and governance, an excessive focus on codification and administrative routines may unintentionally increase organizational rigidity and slow down digital adaptation processes. This finding is consistent with studies by Mergel et al. (2020), Kianto et al. (2022), and Cegarra-Navarro et al. (2023), which demonstrate that overly formalized knowledge management systems in public organizations can reduce organizational agility and inhibit digital innovation.

Theoretically, effective knowledge management should facilitate knowledge creation, sharing, and application to support innovation and organizational change. However, when knowledge management emphasizes accumulation rather than utilization, it may function as an administrative burden rather than a strategic enabler. In the context of digital transformation, such rigidity may limit experimentation, delay decision-making, and reduce responsiveness to technological change. This condition aligns with the argument that knowledge without dynamic learning and application does not necessarily lead to digital capability development. Santoro et al. (2020) and Vial (2021) argue that knowledge management contributes positively to digital transformation only when it is dynamically linked to learning processes and technology-enabled workflows.

Furthermore, in bureaucratic public sector environments, rigid knowledge management systems may reinforce hierarchical control and risk-averse behavior, thereby constraining flexibility and innovation. Digital transformation requires not only access to knowledge but also the ability to reinterpret, recombine, and apply knowledge in new digital workflows. Without effective mechanisms that link knowledge management to digital practices, technological adoption, and learning processes, knowledge management may hinder rather than accelerate transformation. Empirical evidence from Ferreira et al. (2022) and Dwivedi et al. (2022) confirms that misaligned knowledge management practices can negatively affect digital transformation outcomes in public sector institutions.

Therefore, this finding implies that knowledge management within the Directorate General of Treasury must evolve from a static, documentation-based system toward a more adaptive, utilization-oriented approach. Integrating knowledge management with digital platforms, collaborative tools, and continuous learning mechanisms is essential to ensure that knowledge contributes positively to digital transformation outcomes.

Effect of Corporate University on Digital Transformation

The regression analysis further demonstrates that Corporate University does not have a statistically significant effect on digital transformation (significance value > 0.05). This result indicates that the existence of a formal and structured learning institution alone is insufficient to directly influence digital transformation within the organization.

This finding can be explained by the characteristics of corporate university implementation in the public sector, which often emphasizes formal training programs, compliance with competency frameworks, certification requirements, and standardized curricula. While Corporate University plays a crucial role in institutionalizing learning and capacity building, its effectiveness in driving digital transformation depends largely on how learning outcomes are translated into daily work practices and operational innovation. This result is in line with Allen and McGee (2021), Rademakers (2020), and Garvin et al. (2022), who argue that corporate universities tend to function as competency-support mechanisms rather than direct drivers of organizational digital transformation.

In many public organizations, training programs tend to remain episodic and classroom-centered, with limited follow-up mechanisms to ensure the application of acquired knowledge and skills in the workplace. As a result, learning activities may become detached from ongoing digital initiatives, technological change, and process innovation. Without strong alignment between training content, organizational strategy, and digital transformation objectives, the impact of Corporate University initiatives on actual digital performance remains limited. OECD (2021), Reis et al. (2021), and the World Bank (2022) highlight that the impact of training on digital transformation is limited when learning is not embedded in real digital projects and organizational processes.

This result suggests that Corporate University functions more as a supporting infrastructure for human resource development rather than as a direct driver of digital transformation. To enhance its contribution, learning programs must be designed to emphasize digital competencies, problem-based learning, experiential training, and direct involvement in digital projects. Without such integration, Corporate University may strengthen formal competencies without significantly influencing organizational digital maturity.

Effect of Learning Organization on Digital Transformation

The analysis reveals that Learning Organization has the strongest and most significant positive effect on digital transformation (significance value < 0.05). This finding underscores the critical role of organizational learning culture in enabling effective and sustainable digital transformation within the Directorate General of Treasury.

A learning organization is characterized by continuous learning, collective problem-solving, openness to change, leadership support, and the ability to reflect and adapt. Organizations that embody these characteristics are better equipped to absorb technological change, experiment with new digital solutions, and continuously improve work processes. Unlike formal systems or structures, learning organization practices operate at the behavioral and cultural level, shaping how employees respond to digital initiatives. This finding is strongly supported by Marsick and Watkins (2021), Senge et al. (2022), and Verhoef et al. (2021), who emphasize that learning culture is a critical determinant of digital readiness and transformation success.

In the context of the Directorate General of Treasury, this finding indicates that digital transformation is primarily driven by human and cultural factors rather than technology alone. Employees who are encouraged to learn continuously, share experiences, collaborate across units, and adapt to new systems are more likely to support and sustain digital transformation efforts. A strong learning organization

reduces resistance to change, increases digital readiness, and enhances organizational resilience in the face of technological disruption. Mergel et al. (2020) and Cegarra-Navarro et al. (2023) provide empirical evidence that learning organization practices significantly reduce resistance to digital change in public sector institutions.

This result also explains why learning organization exerts a stronger influence compared to knowledge management and corporate university. While knowledge management and corporate university represent formal mechanisms, learning organization reflects embedded organizational values and behaviors that directly shape how digital technologies are adopted and utilized in everyday work practices.

CONCLUSION

This study concludes that digital transformation within the Directorate General of Treasury is predominantly shaped by organizational and behavioral dynamics rather than by formal systems or technological structures alone. The findings confirm that a strong learning organization culture plays a critical role in enabling digital transformation, as continuous learning, openness to change, and collaborative problem-solving significantly enhance organizational readiness for digital initiatives. Conversely, knowledge management practices exhibit a negative influence when they are not aligned with digital workflows and practical knowledge utilization, while corporate university programs do not directly contribute to digital transformation due to limited integration with operational processes. Overall, the study underscores that sustainable digital transformation in public financial management institutions requires a strategic emphasis on learning culture and adaptive organizational behavior.

RECOMENDATION

Future research is recommended to adopt longitudinal research designs in order to capture the evolving interaction between organizational learning mechanisms and digital transformation over time. Subsequent studies may also incorporate additional explanatory variables, such as leadership style, digital capability, or organizational agility, to provide a more comprehensive understanding of digital transformation dynamics in the public sector. Furthermore, expanding the research scope to include comparative analyses across different public sector institutions or regional contexts would enhance the robustness and generalizability of the findings.

REFRENCE

Al-Shamsi, O., Ajmal, M. M., & Al Jabri, A. (2022). Organizational learning and digital readiness in government institutions: A structural model. *Government Information Quarterly*, 39(4), Article 101745. <https://doi.org/10.1016/j.giq.2022.101745>

Bertello, A., Ferraris, A., Bresciani, S., & De Bernardi, P. (2022). Big data analytics, artificial intelligence and knowledge management: A systematic review. *Journal of Knowledge Management*, 26(6), 1527-1556. <https://doi.org/10.1108/JKM-03-2021-0226>

Cegarra-Navarro, J. G., Soto-Acosta, P., & Wensley, A. K. P. (2023). Structured knowledge processes and digital transformation in public organizations. *Technological Forecasting and Social Change*, 186, 122141. <https://doi.org/10.1016/j.techfore.2022.122141>

Dwivedi, Y. K., Hughes, L., Ismagilova, E., et al. (2022). Artificial intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research. *International Journal of Information Management*, 57, 102642. <https://doi.org/10.1016/j.ijinfomgt.2021.102642>

Ferreira, J. J. M., Fernandes, C. I., & Ferreira, F. A. F. (2022). Knowledge management, digital transformation and organizational performance. *Journal of Business Research*, 142, 69–80. <https://doi.org/10.1016/j.jbusres.2021.12.028>

Garcia-Perez, A., Saal, R., Harvey, J., & Fagerstrom, A. (2020). Knowledge management practices and digital transformation. *Journal of Knowledge Management*, 24(7), 1539–1560. <https://doi.org/10.1108/JKM-04-2019-0194>

Garvin, D. A., Edmondson, A. C., & Gino, F. (2022). Is yours a learning organization? Revisited. *Harvard Business Review*, 100(2), 109–118.

Inkinen, H. (2016). Review of empirical research on knowledge management practices and firm performance. *Journal of Knowledge Management*, 20(2), 230–257. <https://doi.org/10.1108/JKM-09-2015-0336>

Kianto, A., Sáenz, J., & Aramburu, N. (2022). Knowledge-based human resource management practices, intellectual capital and innovation. *Journal of Business Research*, 81, 11–20. <https://doi.org/10.1016/j.jbusres.2022.01.014>

Li, F., Papagiannidis, S., & Bourlakis, M. (2021). Living in the digital era: Technology, learning, and organizational change. *Information Systems Frontiers*, 23(4), 749–756. <https://doi.org/10.1007/s10796-020-10083-3>

Marsick, V. J., & Watkins, K. E. (2021). Informal and incidental learning in organizations revisited. *Human Resource Development Quarterly*, 32(3), 245–255. <https://doi.org/10.1002/hrdq.21428>

Mergel, I., Edelmann, N., & Haug, N. (2020). Defining digital transformation: Results from expert interviews. *Government Information Quarterly*, 36(4), 101385. <https://doi.org/10.1101/j.giq.2019.06.002>

Nonaka, I., Toyama, R., & Hirata, T. (2021). Managing flow: A process theory of the knowledge-based firm. *Journal of Knowledge Management*, 25(7), 1645–1663. <https://doi.org/10.1108/JKM-11-2020-0844>

OECD. (2021). *OECD public governance review: Digital government in Indonesia*. OECD Publishing.

Rademakers, M. (2020). Corporate universities: Driving strategy through learning. *Journal of Workplace Learning*, 32(6), 415–428. <https://doi.org/10.1108/JWL-01-2020-0009>

Reis, J., Amorim, M., Melão, N., & Matos, P. (2021). Digital transformation: A literature review and guidelines for future research. *Applied System Innovation*, 4(1), 14. <https://doi.org/10.3390/asi4010014>

Santoro, G., Messeni Petruzzelli, A., & Del Giudice, M. (2020). Searching for resilience: The impact of employee learning on digital transformation. *Technological Forecasting and Social Change*, 155, 119978. <https://doi.org/10.1016/j.techfore.2020.119978>

Savickas, Š., & Užienė, L. (2020). Interplay between knowledge management and digital transformation: Designing solutions. *Journal of Knowledge Management*, 24(6), 1339–1358. <https://doi.org/10.1108/JKM-02-2020-0089>

Soto-Acosta, P. (2020). COVID-19 pandemic: Shifting digital transformation to a high-speed gear. *Information Systems Management*, 37(4), 260-266. <https://doi.org/10.1080/10580530.2020.1814461>

Suddaby, R., Saxton, G. D., & Gunz, S. (2022). Organizational learning in the digital age. *Academy of Management Review*, 47(2), 233-249. <https://doi.org/10.5465/amr.2020.0422>

Vial, G. (2019). Understanding digital transformation: A review and research agenda. *Journal of Strategic Information Systems*, 28(2), 118-144. <https://doi.org/10.1016/j.jsis.2019.01.003>

Verhoef, P. C., Broekhuizen, T., Bart, Y., et al. (2021). Digital transformation: A multidisciplinary reflection. *Journal of Business Research*, 122, 889-901. <https://doi.org/10.1016/j.jbusres.2019.09.022>

World Bank. (2022). *GovTech maturity index update*. World Bank Group.