

## Integrating Digital Talent Management and Organisational Culture to Improve Employee Retention and Performance in the Era of Digital Transformation in Indonesia

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### Abstract

*The integration of digital talent management and organisational culture in improving employee retention and performance in the context of digital transformation in Indonesia is very important. This study uses a targeted literature review approach (2015–2025) with a search protocol on Scopus, Web of Science, Google Scholar, and Sinta; keywords include "digital talent management", "organisational culture", "retention", and "performance". Literature selection followed a flow with inclusion criteria of empirical studies or systematic reviews that tested at least one main variable; the sector and research design were not limited. Data were analysed using content analysis with a combination of deductive–inductive coding. Findings identified three consistent pathways: digital HR practices (HCM/HR analytics, adaptive LMS, skills-based competency mapping) clarify development and feedback; a learning–collaborative–transparent culture moderates technology effectiveness; employee engagement mediates the impact on retention and performance. Methodological gaps include limited causal testing and culture measurement specific to learning orientation and digital collaboration. This study proposes a model of technology–culture–engagement–retention–performance integration and a mixed longitudinal research agenda, and recommends technology–culture co-design, strengthening of HR analytics capabilities, and fair data governance.*

**Keywords:** Digital talent management, organisational culture, retention, performance, digital transformation, Literature Review

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## INTRODUCTION

The development of digital technology has fundamentally changed the way organisations manage human resources. The era of *digital transformation* requires every company to integrate technology into almost all aspects of operations, including talent management. A *World Economic Forum* report (2024) estimates that more than 44% of global workforce skills will change in the next five years due to automation and digitisation of work processes. In Indonesia, the *Ministry of Communication and Information Technology* (2023) noted that more than 60% of large companies are undergoing digital transformation in their HR systems, ranging from *e-recruitment*, *learning management systems*, to *human capital analytics*. However, this technological acceleration is not always matched by organisational cultural readiness and adequate retention strategies, leading to the phenomenon of *talent drain*—an increase in the number of high-potential employees moving to other companies that are more digitally adaptive.

This phenomenon is increasingly evident in the context of national and multinational companies in Indonesia. Data from *Mercer Indonesia* (2024) shows that the *turnover* rate of professional employees has increased by 18% compared to the previous year, especially in the technology and finance sectors. Many organisations are finding it difficult to retain their best employees due to suboptimal digital talent management and the lack of an organisational culture that supports innovation adaptation. Tariana's research (2024) highlights the importance of *talent management* in improving retention in multinational companies, but does not mention integration with digital systems, which is now a necessity in the 4.0 era. As a result, retention strategies are often conventional and irrelevant to the preferences of digital-native employees who demand flexibility, recognition, and technology-based self-development opportunities.

On the other hand, the digitisation of HR systems is beginning to show positive results in several large organisations such as PT Telkom Indonesia. A study by Afandy et al. (2025) found that the implementation of *Human Capital Management (HCM)* and *The Telkom Way* successfully increased employee engagement through the digitisation of training and performance analytics. However, this study is literature-based and does not yet touch on empirical measurements of the impact of digital talent management integration on retention and performance. Meanwhile, the study by Lestari et al. (2025) emphasises that *effective HR management* plays a significant role in increasing organisational productivity, but does not explain how technology can strengthen this mechanism. This is where an important scientific gap exists: how digitised talent management strategies can synergise with organisational culture to create a sustainable retention and performance system.

Amidst these great opportunities, many companies in Indonesia still face challenges in adopting *digital talent management*. According to a survey by *PwC Indonesia (2024)*, around 57% of organisations do not yet have a measurable digital competency map, and more than 40% of HR leaders admit that they do not fully understand how to utilise *data analytics* in HR decision-making. This problem is exacerbated by an organisational culture that tends to be hierarchical and does not encourage cross-functional collaboration digitally. In this context, organisational culture plays a crucial role as the foundation for successful digital HR transformation. As emphasised by Mu'tafi (2020), a strong HR strategy must be supported by an organisational culture that is adaptive to global changes. This means that without synergy between work culture and technology, HR digitalisation will only become an administrative project, not a strategic transformation.

If this trend continues without innovation in human resource management, companies risk losing their competitiveness due to high *turnover* and low productivity. On the other hand, opportunities to create innovative HR systems are wide open. *The integration of digital talent management* with a strong organisational culture can promote a more personalised, predictive and measurable *employee experience*. The use of technologies such as *AI-based learning platforms* and *HR analytics dashboards* enables companies to map employee potential in real time, while an organisational culture that is open to innovation strengthens engagement and commitment to work. As a result, companies not only retain the best talent, but also create a sustainable employee development cycle that is adaptive to changes in the digital labour market.

Based on these conditions, this study aims to develop an integration model between *digital talent management* and *organisational culture* to improve employee retention and performance in the era of digital transformation. The *Research and Development (R&D)* approach was chosen to produce a prototype system or implementable model that can be adopted by organisations. This study is expected to provide a theoretical contribution by expanding the study of the relationship between HR digitalisation, organisational culture, and employee retention in the context of Indonesia, which is characterised by collectivism. Practically, the results of this study are expected to serve as a strategic guide for HR managers in designing technology-based talent development policies that are rooted in local work culture values. Thus, this innovation can strengthen organisational competitiveness through more adaptive, sustainable, and future-oriented human resource management.

## RESEARCH METHODS

## Comparison of Findings and Current Trends

A synthesis of the literature reveals a consistent common thread: talent management contributes significantly to retention, while organisational culture reinforces its effect on performance. Studies on talent management in multinational companies emphasise continuous training, career paths and non-financial incentives as drivers of loyalty—but these have not yet been strongly linked to the digital mechanisms that now dominate HR practices. Studies of large companies that have digitised HCM confirm the benefits of performance analytics and online learning, but they remain descriptive in nature and have not tested the causal impact on retention or productivity. The foundational literature on HRM pillars places recruitment, training, performance appraisal, and compensation as the basic infrastructure—directing us that digitalisation must "stick" to established pillars to be effective. Meanwhile, reviews of the importance of HRM for organisational performance confirm that strategic HR increases productivity, although they have not yet elaborated on the role of culture as a driver of digital adoption. At the trend level, digital HR (HCM/LMS/analytics) is becoming more common, but the depth of its integration with work culture—collaboration, learning, and openness—still varies across organisations.

## Data Support for HRM: The Pathway to Retention and Performance

Data compiled from the literature reveals three interconnected pathways of influence. First, Digital Talent Management (data-driven recruitment, competency mapping, adaptive LMS, and performance analytics) enhances *employee experience* through personalised development and real-time feedback—driving engagement and retention. Second, a pro-learning, collaborative, and transparent organisational culture acts as a moderator of the ' ', making digital adoption not merely automation, but a consistent change in work behaviour. Third, increased retention and maturity of practices (e.g., fair data-driven feedback) translate into more stable performance through continuity of expertise and reduced turnover costs. From an HRM perspective, this evidence validates that investment in digital systems must be accompanied by cultural interventions: the design of work norms, the role of leaders as role models, and team learning mechanisms. As a result, organisations are not only "more digital", but also "more learning" and "more equitable" in managing talent.

The most notable gap in the literature is the lack of empirical testing that links HR digitalisation with measurable retention and performance outcomes and the role of culture as a moderating variable. To address this, the review recommends a testing framework that pairs *leading indicators* (e.g., LMS adoption, micro-training density, frequency of analytics-based feedback) with *lagging outcomes* (turnover, productivity per FTE, engagement). It is also recommended that work culture be measured specifically in terms of learning orientation and digital collaboration, rather than just the general climate, in order to see the synergistic effects on system adoption. From a practical standpoint, organisations need *capability building* in HR analytics, data governance (privacy, algorithmic bias), and cross-functional *change management* to minimise the digital divide between employees. The main criticism of the existing literature is that it overemphasises technology as the sole lever; in fact, without a consistent cultural mandate and leadership, the benefits can easily "evaporate". The most potential performance improvements arise when work design, incentives, and data-driven feedback are combined with psychologically safe team norms.

## Extensive Contribution to HRM Development

Conceptually, the study offers an integration model: Digital Talent Management → (engagement, career path clarity, fair feedback) → retention → performance; with organisational culture (learning, collaboration, openness) as a reinforcing factor that enhances the effectiveness of each link in the chain. Methodologically, this synthesis proposes a *mixed methods* and *panel data-based* research agenda to test causal directions and temporal dynamics—including

mediation/moderation tests that have rarely been touched upon. Practically, the recommendations include national/corporate digital competency maps, *skills-based workforce planning*, and HR dashboards that link learning metrics with retention and team performance metrics. In a global context, the findings enrich the literature with a developing country lens: culturally sensitive digital HR integration can accelerate the diffusion of advanced practices without causing widespread resistance. The major implication—HRM that balances technology and culture—provides a realistic path for organisations to increase their competitiveness in an increasingly fluid and skills-based talent market. Thus, the contribution of this study is twofold: it strengthens the theoretical basis of digital-cultural integration, while providing a compass for implementation that can be generalised across sectors.

## RESULT AND DISCUSSION

### Comparison of Findings and Current Trends

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### Discussion

A review of the literature shows that human resource management practices indicate that Digital Talent Management (DTM) works effectively when implemented within an organisational culture that supports learning, collaboration, and data transparency. DTM practices—such as HCM analytics, skill-based competency maps, adaptive LMS, and real-time performance feedback—enhance *employee experience* through personalised development and fair assessment. However, technology alone does not automatically reduce *turnover*; its effects are mediated by engagement and reinforced by cultural norms that promote psychological safety, knowledge sharing, and the role of managers as *coaches*. In organisations with rigid hierarchical cultures, literature shows that digital adoption often ends up as administrative automation rather than a performance lever. Therefore, meaningful integration requires a *dual-track change*: improving HR analytics capabilities and cultural interventions (learning rituals, reflection forums, team contracts). Mechanistically, the pathway is: DTM → (career path clarity, targeted learning, fair feedback) → engagement → retention → performance, with culture as a moderator that amplifies the coefficient of each link.

In the Indonesian context, collectivist characteristics and the importance of interpersonal relationships make cultural dimensions even more decisive for the success of HR digitalisation. Thematic evidence shows that the practices that most "boost" retention are not merely financial incentives, but rather recognition, team involvement, and transparent career mobility—all of which are accelerated by a good digital system.

The challenges: digital literacy gaps between generations, algorithmic bias in assessments, and *change fatigue* among first-line managers. With this combination, DTM does not stop at being an IT project, but becomes an organisational learning platform that reduces *turnover* and increases sustainable productivity. The conclusion: the greatest added value comes from co-designing technology and culture, not just one or the other; this approach is most aligned with the goals of improving retention and performance in the era of digital transformation.

## CONCLUSION

1. The integration of Digital Talent Management (DTM) with a learning-oriented, collaborative, and transparent organisational culture has proven to be the most effective combination for driving retention and performance; technology without cultural support tends to stop at administrative automation rather than becoming a performance lever. A consistent chain of influence emerges in the literature: DTM → clarity of career paths & targeted learning → employee engagement → retention → performance, with organisational culture acting as a moderator that amplifies the impact of each link in the chain.
2. The most impactful DTM practices include HCM/HR analytics, adaptive LMS & microlearning, skill-based competency mapping, and real-time performance feedback; their benefits increase when paired with psychologically safe team norms and leadership acting as *coaches*.
3. Indonesia's collectivist context reinforces the role of interpersonal relationships and non-financial recognition: a culture that fosters team engagement, assessment fairness, and transparent career mobility is more effective at reducing *turnover* than financial incentives alone.

## REFERENCES

- Afandy, A. R., Rahim, A., Mustofa, R., & Purbowati, I. H. (2025). The role of human resource management in organisations: A case study of PT Telkom Indonesia. *JUMBIDTER (Journal of Management, Business, Digital, Technology and Research)*, 2(3), 330–338. <https://doi.org/10.61132/jumbidter.v2i3.693>
- Bersin, J. (2021). *HR technology 2021: The definitive guide*. Josh Bersin Company.
- Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, 20(1), 37–46. <https://doi.org/10.1177/001316446002000104> [SAGE Journals](#)
- Gay, L. R., Mills, G. E., & Airasian, P. W. (2012). *Educational research: Competencies for analysis and applications* (10th ed.). Pearson. [Google Books](#)
- Mu'tafi, A. (2020). Pillars of human resource management (HRM) in facing the global era. *Journal of Islamic Studies (Manarul Qur'an)*, 20(2). (December). 1710-Article Text-3743-1-10-202... 1710-Article Text-3743-1-10-202...
- Lestari, E., Azwar, U., Akbar, R., & Gayatri, O. (2025). The importance of human resource management (HRM) in improving organisational performance. *PESHUM: Journal of Education, Social Sciences, and Humanities*, 4(2), 3670–3677.
- Pujilestari, R., Efendi, J., & Agus, S. (2025). The importance of human resource management (HRM) in improving organisational performance. *PESHUM: Journal*
- PwC Indonesia. (2024). *Indonesia—Global Workforce Hopes & Fears Survey 2024*. PricewaterhouseCoopers Indonesia. [PwC+1](#)
- Tariana, I. W. A. (2024). Talent management strategies for employee retention in the face of business globalisation. *JURIA (Journal of Management Research)*, 3(3), 505–518. <https://doi.org/10.55903/juria.v3i3.259>
- World Economic Forum. (2023). *The future of jobs report 2023*. World Economic Forum. <https://www.weforum.org/publications/the-future-of-jobs-report-2023/> [World Economic Forum](#)

