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Editorial

Human Resource Management as a Strategic Lever in Digital Health Transformation

Steven V. Cates[1]

[1]Doctor of Business Administration, Purdue University Global, West Lafayette, Indiana, USA

*Corresponding author: Steven V. Cates, Email: scates@purdueglobal.edu

Background

Digital transformation is now essential for healthcare systems to provide care, improve efficiency, and stay resilient in the face of rapid change. Healthcare organizations must not undervalue the human dimension as they deploy artificial intelligence (AI), cloud platforms, telehealth, and data analytics. Human resource management (HRM), when reimagined strategically, emerges as a critical lever in driving and sustaining digital health transformation.

Strategic Importance of Human Resource Management in Digital Health

Traditional HRM has often been viewed as an administrative support function. However, in the digital era, strategic HRM (SHRM) positions HRM as a co-architect of transformation, aligning workforce capabilities with emerging technologies. Nastase et al argue that strategic HRM in the digital age involves more than transactional tasks; it encompasses agility, continuous reskilling, ethical governance, and human-centered design to secure sustainable competitive advantage.[1]

The role of SHRM is amplified in healthcare settings. The workforce is not just a factor of production but the backbone of patient care. Accordingly, the digital transformation of health systems demands a workforce that is technologically proficient, adaptable, and resilient.

Jouni contends that SHRM and health informatics are deeply interlinked in digital transformation in that success depends on investing in the human cadre, cultivating digital literacy, and promoting shared understanding between clinicians, information technology, and management.[2]

Enabling Factors: Digital Human Resource Maturity and Capacity Building

A key driver of the strategic leverage of SHRM is its *digital*

Author's Biosketch

Dr. Steven Cates received his doctorate degree in Business Administration with a focus on Human Resource Management in 1999 from Nova Southeastern University in Davie, Florida, USA. He is a graduate professor in the School of Business and Information Technology in Human Resource Management at Purdue University Global, where his research focuses on US Employment and Labor Law and Human Resource Management issues. He has published over 200 academic research papers in leading journals, books, and conferences globally. He is cited by hundreds of scholars worldwide.
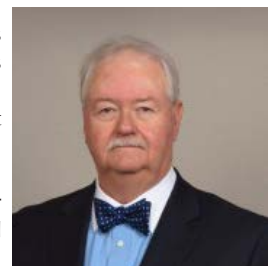
maturity, meaning embedding digital capabilities into SHRM strategy, governance, processes, and culture rather than simply adopting digital tools. Shahiduzzaman's thematic analysis of the SHRM literature identifies pivotal pillars of HR digital maturity that include HR strategy and governance, talent management, employee competencies, stakeholder engagement, and crisis management.[3]

In healthcare organizations, digital HR transformation can materially improve agility and resilience. A recent study in hospitals reports that cloud-based HR systems, AI for recruitment, and e-learning contribute to better institutional responsiveness and workforce stability.[4]

Moreover, the integration of digital SHRM tools has been empirically linked to increased HR efficiency, particularly when mediated by organizational agility. In a model tested by sustainability researchers, digital HRM systems positively influence HR efficiency, and that effect is stronger in more agile organizations.[5]

Human-Centric Artificial Intelligence Adoption: Balancing Technology With Values

A critical fault line in digital health transformation

lies in AI deployment. While AI promises substantial gains (e.g., predictive analytics and diagnostic decision support), uptake can stall if HRM fails to account for the human dimension. Therefore, a paradigm shift is necessary. Fenwick et al argue that HRM must ensure that AI adoption is human-centric, embedding ethical frameworks, fostering psychological safety, and managing employee concerns about displacement.[5]

This balance is especially important in digital health, where AI decisions may affect patient outcomes and clinician trust. As such, HR leaders are uniquely positioned to act as translators among technologists, clinical staff, and executives, aligning AI strategy with workforce readiness, value-based care, and patient-centric goals.[5]

Impact on Well-Being and Organizational Dynamics

Digital transformation is not neutral: it reshapes work, power, and professional identity. In global healthcare sectors, recent research highlights how digital transformation influences organizational culture, commitment, and professional development and how HR practices mediate these effects on employee well-being.

The strategic engagement of SHRM in this space goes beyond managing talent; it involves designing systems that support learning, belonging, and psychological safety in hybrid or technology-augmented work environments.[6,7]

Leadership Alignment and Governance

For SHRM to be a strategic lever, executive leadership must align with its vision. In health systems, C-suite leaders are increasingly recognizing this issue. A qualitative study of U.S. health systems revealed that digitally savvy chief executive officers (CEOs) and chief information officers (CIOs) now form integrated leadership teams, thereby breaking down traditional silos between technology and operations.[8]

These findings underscore that HR strategy must be embedded in governance structures. HR should not merely support digital projects; more precisely, it should help lead them.

Challenges and Risks

Despite its promise, strategic HRM in digital health faces many challenges as follows:

1. Resistance to change: Clinicians and staff may feel alienated by new tools, especially if they perceive them as burdensome or threatening.
2. Skills gaps: Continuous reskilling is required, yet predicting future skill needs remains difficult.
3. Governance and ethics: Without thoughtful frameworks, AI adoption may exacerbate inequities or undermine trust.
4. Resource constraints: Particularly in low-income and middle-income settings, investments in digital HR systems may compete with other pressing priorities.

Call to Action

To harness HRM as a strategic lever in digital health transformation, health systems should:

- Invest in HR digital maturity, not just in tools but in culture, governance, and strategy.
- Develop reskilling programs that anticipate future roles, especially in AI-augmented care.
- Embed ethical and human-centered frameworks into AI policy, with HR leading or contributing.
- Build integrated leadership teams (e.g., CEO, CIO, and chief human resources officer) to align digital, clinical, and people strategies.
- Monitor and evaluate well-being, organizational dynamics, and HR effectiveness throughout transformation.

Conclusion

Digital transformation in healthcare is too often framed as a purely technological challenge. Nonetheless, its success depends fundamentally on people: their skills, mindsets, and engagement. Strategic HRM offers a powerful lever to align the workforce with technological innovation, ensuring that digital health initiatives are sustainable, equitable, and human-centered. By elevating HR from a support function to a strategic partner, health systems can accelerate transformation and safeguard the values of care, empathy, and professional integrity that lie at the heart of medicine.

Competing Interests
None.

Ethical Approval
Not applicable.

References

1. Nastase C, Adomnitei A, Apetri A. Strategic human resource management in the digital era: technology, transformation, and sustainable advantage. Merits. 2025;5(4):23. doi: 10.3390/merits5040023
2. Jouni H. On the digital transformation of health systems: what is the role of human resources management and health informatics? International Healthcare Review (online). 2024. doi: 10.56226/81
3. Shahiduzzaman M. Digital maturity in transforming human resource management in the post-COVID era: a thematic analysis. Adm Sci. 2025;15(2):51. doi: 10.3390/admsci15020051
4. Novitaloka OS, Efendi D, Suryati M, Andriani R. Digital HRM transformation and its impact on agility and resilience in hospitals. Proceeding of International Conference on Economics, Technology, Management, Accounting, Education, and Social Science (ICETEA). 2025;1(1):422-35.
5. Fenwick A, Molnar G, Frangos P. The critical role of HRM in AI-driven digital transformation: a paradigm shift to enable firms to move from AI implementation to human-centric adoption. Discov Artif Intell. 2024;4(1):34. doi: 10.1007/s44163-024-00125-4
6. Mahmoud MH, Ali AA, Alrifae AA, Eitah RA, Alzubi MM. The impact of digital HRM system and digital transformation

on HR efficiency with organizational agility as a moderator. Discov Sustain. 2025;6(1):1038. doi: 10.1007/s43621-025-01713-9

7. Amany S. A review of digital human resource management: transforming HR practices through technology. Luminis Applied Science and Engineering. 2025;2(1):65-71. doi: 10.69760/lumin.20250001011

8. Lemak CH, Pena D, Jones DA, Kim DH, Guptill J. Leadership to accelerate healthcare's digital transformation: evidence from 33 health systems. J Healthc Manag. 2024;69(4):267-79. doi: 10.1097/jhm-d-23-00210