

Digital Transformation and Human Resource Management Practices in UAE Public Universities: A Resource-Based and Dynamic Capabilities Perspective

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ABSTRACT

This study examines the relationship between digital transformation and human resource management (HRM) practices in public universities in the United Arab Emirates via a synthesis of Resource-Based View and Dynamic Capabilities Theory. Despite the growing interest in digital transformation, limited research has examined its implications within public universities in the United Arab Emirates. Adopting a conceptual approach, this paper provides a comprehensive framework that connects the important elements of digital transformation, comprising technological infrastructure, digital transformation culture, and human resource capabilities, to the core HRM practices, namely recruitment, training, and performance appraisal. This study contributes to the existing literature by proposing a dual conceptualization of digital transformation as both a strategic resource and an adaptive capability that enhances HRM effectiveness. Moreover, the current study proposes a structured questionnaire approach for future empirical validation using Structural Equation Modelling (SEM). It is expected that future empirical findings will demonstrate that it is not only the size of technology investment, but also the organization's ability to develop dynamic capabilities like organizational learning and strategic flexibility that mediate the relationship between digital transformation and HRM practices. Despite the growing interest in digital transformation, limited research has examined its implications within public universities in the United Arab Emirates. In particular, little is known about the underlying mechanisms through which digital transformation influences HRM practices, especially the mediating role of dynamic capabilities. Furthermore, the integration of the Resource-Based View and Dynamic Capabilities Theory in explaining this relationship remains underexplored in higher education contexts. Accordingly, this study aims to develop a conceptual framework that explains the relationship between digital transformation and HRM practices in UAE public universities. The study draws theoretical implications through the integration of RBV and the dynamic capabilities perspective into the ecosystem domain of digital HRM, as well as for university leaders and policymakers who would design systematic processes to align digital transformation initiatives in a way that serves human resource strategies. It highlights the need to create a digital culture, develop workforce digital competencies, and take an integrated approach to build sustainable institutional performance.

Keywords: Digital transformation, Human resource management practices, public universities.

INTRODUCTION

However, the rapid evolution of technology and growing global competition have necessitated a shift in thinking for organizations that now need to perform on boarders' improvement scope. Digital Transformation — a scourge or boon in this new landscape has been the main driver of changes deployed by organizations, recreating architectures, processes, and even workforces. Human resource management (HRM) as a strategic function represents the enabler of this transformation through alignment between human capital and technological as well as organizational advancements (Sánchez et al., 2022).

Digital transformation has fundamentally altered the human resource management (HRM) function, moving it away from a reliance on administrative roles and toward a more strategic view of HRM as an enabler to drive

organizational performance and competitiveness through data-driven decisions. Core HR activities. Implicit integration of advanced technologies in most HR processes, from recruitment, training, and performance evaluation to career development. These tools promote increasing efficiency, faster decision-making, and a higher level of engagement of employees (Timotius et al., 2021; Fenech, 2019).

Higher education transformation has become essential in response to technological change and evolving labor market demands. This transformation requires not only digital adoption but also cultural and organizational change. In this context, transformational leadership plays a vital role by inspiring vision, promoting innovation, and enhancing employees' readiness for change, making it a key driver of successful education transformation (Al-Tahitah, A. et al, 2018,).

Paper review on the relationship between transformational leadership and readiness for change. *International Journal of Energy Policy and Management*, 3(1), 1-7..

It faces growing demands for innovation, quality, and alignment with labor market needs, the need for digital transformation becomes even more urgent. National initiatives such as "We Are the UAE 2031" and "UAE Centennial 2071" in the United Arab Emirates highlight the strategic significance of digitalization to enhance institutional efficiency with a particular focus on public universities, which act as key enablers for the knowledge economy.

As promising as these advancements are, there's a glaring gap. Digital transformation and HRM practices have mainly been studied on their own in existing literature without much integration of both constructs into a single framework, especially in the context of UAE public universities (Zwateen, I., et al, 2024). The impact of human resource management practices on organizational learning at Jordanian commercial banks. *International Journal of Scientific Research and Management (IJSRM)*, 12(04), 6039-6155.). Further, existing works often fail to examine how different aspects of digital transformation-technical infrastructure, digital culture, and human resource capabilities- differently impact the core practices of HRM.

This study, therefore, fills this gap by proposing an integrative conceptual framework that explains how important dimensions of digital transformation are associated with HRM practices in UAE public universities. Such a contribution covers both theoretical and practical aspects, namely better conceptualization of digital transformation in HRM for higher education, and also provision of a basis for policy makers and institutional leaders to better seek improvements in effectiveness through ICT.

Problem Statement and Objectives

Although the UAE is progressing towards digital transformation at an unprecedented pace and its strategy focuses on innovation, the HRM practices implemented in public universities are inconsistent and misaligned with digital capabilities. Prior research details several gaps in technology uptake, workforce preparedness and the assimilation of disruptive technologies into HR practices (Al-Wahshi, 2020; Al-Azami et al., 2020).

Although previous studies have addressed digital transformation and HRM separately, very few systematic investigations have explored their integrated relationship in the area of UAE public higher education institutions. In addition, there is a missing holistic conceptual framework connecting selected dimensions of digital transformation to main HRM practices (e.g., recruitment, training, and performance evaluation).

Hence, this study fills these gaps by providing an integrative framework that articulates how digital transformation dimensions affect HRM practices in public universities in the UAE.

Research Significance

The contribution of this study to the literature is threefold:

- **Contribution to Developing Body of Knowledge:** Filling a significant gap as it investigates the UAE public university setting that has been under-researched empirically despite the high stakes involved.

- Theoretical Contribution: Makes an integrated conceptual framework relating the various dimensions of digital transformation to HRM practices available, as the literature on this linkage has been mostly geared towards business firms in other types of industries than higher education.
- Theoretical Contribution: It complements the existing literature by highlighting institutional approaches to aligning digital transformation initiatives with HR strategies, ultimately driving performance and competitiveness.

THEORETICAL FRAMEWORK

Human Resource Management Practices

Human resource management (HRM) has transformed into a strategic element that directly enhances organizational performance and competitive advantage (Dessler, 2023; Armstrong, 2023). Recent definitions focus more on human resource management as a system of human capital management through its practices that can develop employee capability, engagement, and congruence with organizational goals.

Recruitment, Training, and Performance Evaluation Dimensional core HRM practices have also been widely considered as key drivers of enhanced organizational effectiveness in this study. Recruitment is, of course, the process of identifying and attracting qualified talent -and increasingly doing so through digital platforms and data-driven systems. Training underpins ongoing skills development and addresses technological change. Performance evaluation paves the way for organizations to measure results, give feedback, and facilitate employee development (Dessler, 2023; Fadel, 2024).

Collectively, these HR practices represent an aligned system that gives organizations the ability to address dynamic environments while maintaining long-term competitiveness.

Resource-Based View (RBV)

The Resource-Based View states that firms obtain competitive advantages because they own valuable, rare, imperfectly imitable, and non-substitutable (VRIN) resources. Digital transformation capabilities, as technological infrastructure, data systems, and digital platforms, are conceptualized here as strategic resources. Similarly, HRM practices are vital intangible assets due to their ability to provide organizational effectiveness.

In other words, integration of digital technologies with HRM practices helps universities build unique capabilities which are rare and costlier to imitate as per RBV. Data-driven recruitment and AI-enabled performance systems are improving the quality of decision-making processes as well as operational efficiencies. Accordingly, the digital transformation and HRM practices work together as complementary resources that help reinforce institutional competitiveness.

Dynamic Capabilities Theory

The Dynamic Capabilities Theory builds on RBV by highlighting an organization's capacity to adjust and reconfigure resources in highly mutable contexts. It reflects processes involving sensing opportunities and then seizing them or even transforming existing capabilities.

However, these predictions are based on data as far back as October 2023. This involves such things as updating training programs to build digital competencies, redesigning performance systems based on analytics insights, and creating an environment conducive to innovation. Unless an organization also develops these adaptive capabilities, investments in digital technologies do not always yield better outcomes for HR.

Integration with the Study Model

A pay for dynamic capabilities study has a dual foundation on RBV and Dynamic Capabilities Theory. RBV outlines the strategic importance of both digital and human resources (what I also framed as "human capital"), while Dynamic Capabilities Theory explains how those resources are effectively utilized and adapted.

Hence, the present study theorizes ITD dimensions-technology, digital culture, and human resource capability—as strategic resources and capabilities that affect HRM practices. It is presumed that the successful fusion of these components improves HRM in UAE public universities.

Digital Transformation

Digital transformation is defined as the implementation of new-age technologies in an organization to enhance operational efficiency, improve decision-making, and create value. Digital transformation means more than the use of new technologies, but also cultural and structural transition to allow organizations to adapt to a rapidly changing digital world (Vardarlier & Özsahin, 2021; Zhang & Chen, 2024).

Digital transformation can be understood in terms of three critical dimensions:

- Technology infrastructure (AI, cloud computing, data analytics, etc.)
- Digital culture (how open the organization is to innovation)
- Human resource productivity (digital skills and capabilities)

Aggregate all these aspects to improve operational capabilities, support data-driven decisions, and stimulate innovation. Digital transformation needs the technology, organizational culture, and human capability to be in sync.

The Study Environment

This study is based on the public universities in the UAE: United Arab Emirates University, Zayed University, and Higher Colleges of Technology. They are crucial for national development and the shift to a knowledge economy.

The UAE government's National Higher Education Strategy 2030 focuses on quality, efficiency, innovation, and needs-based service with respect to labor market demands. In this regard, digital transformation functions as a strategic priority in improving institutional performance and human capital development.

Digital Transformation and Human Resource Management Practices

While extant literature overall indicates a positive association between digital transformation and HRM practices, results differ based on the context. Some mention the large effects of digital transformation in HR outcomes, while others point out that limited integration within some organizations or organizational inertia hinders progress or limitations arising due to (large portions not being able to exploit) infrastructure.

This variation indicates that the effect of digital transformation is contingent upon contextual aspects, including organizational preparedness, executive endorsement, and digital paradigm. Notably, various dimensions of digital transformation are impacting HRM practices in specific ways. E-recruitment and analytics are making the recruitment process more efficient through technological infrastructure, digital culture is promoting training and engagement, while human resource capability is aiding performance evaluation and better decision-making.

Though previous studies have highlighted the connection between construct of self, social identity, and well-being, the multidimensional relationship of these constructs has received limited attention in higher education research, particularly among public universities in the UAE. The current need for a context-specific framework is why this study was designed.

Proposed Conceptual Framework and Hypothesis Development

This paper develops a conceptual framework defining the relationship between digital transformation and human resource management practices in UAE public universities. Literature indicates that three digital transformation dimensions—technologies and software, digital transformation culture, and human resource capability—

contribute to improving HR management practices. Accordingly, the research framework was constructed as illustrated in Figure 1.

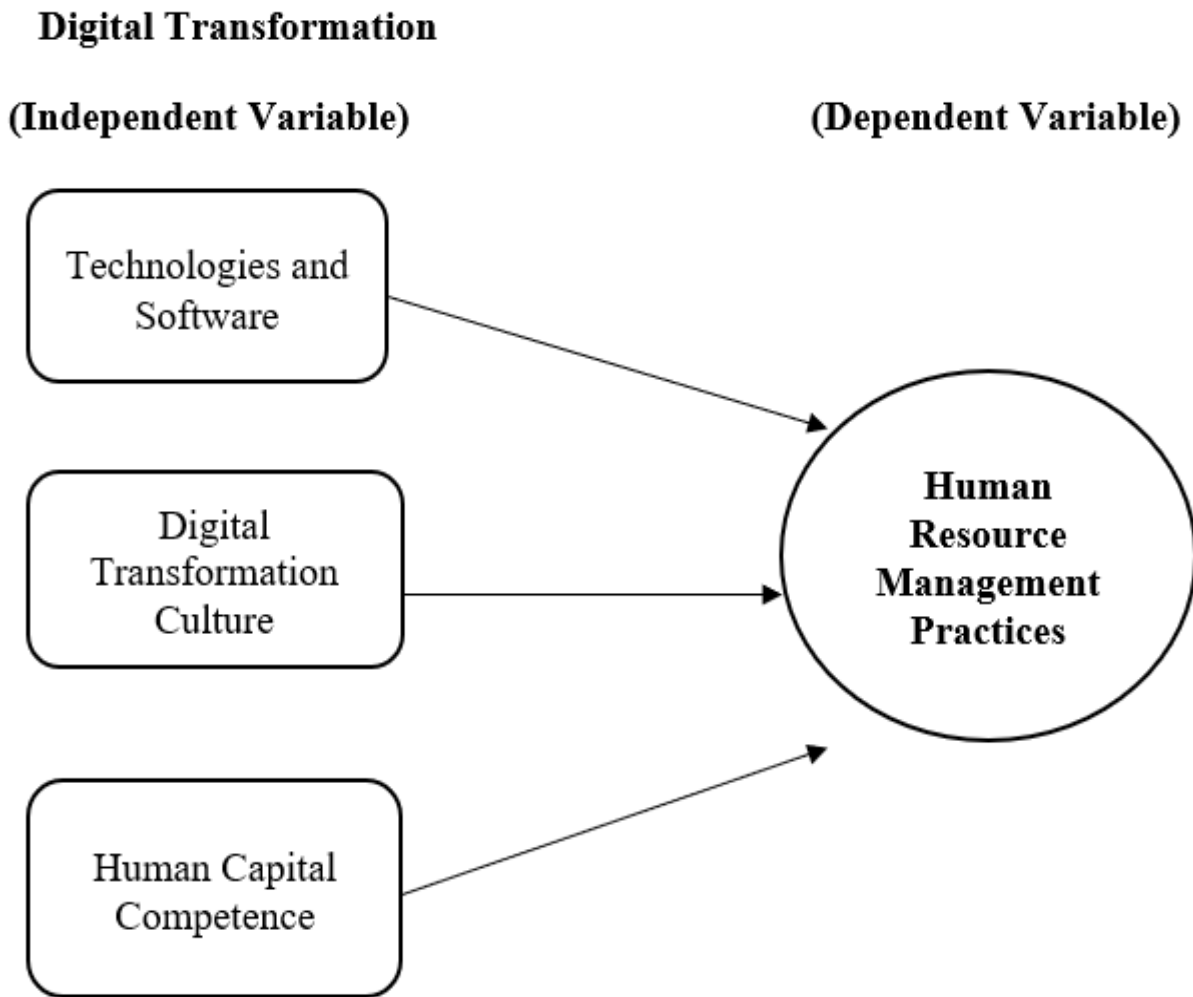


Figure 1: Proposed Conceptual Framework of the Study

The study proposed the following hypotheses:

Hypothesis 1: There is a positive relationship between the technology and software dimension and human resource management practices.

Hypothesis 2: There is a positive relationship between the digital transformation culture dimension and human resource management practices.

Hypothesis 3: There is a positive relationship between the human resource capability dimension and human resource management practices.

Proposed Methodology for Future Emiratization Validation

While being conceptual, it lays down a methodical empirical path for future research to validate the model. Detection of hypothesized relationships is best achieved through a quantitative research design.

Target Population: The target population includes all academic and administrative staff working in UAE public universities, including United Arab Emirates University, Zayed University, and the Higher Colleges of Technology. A stratified random sampling method is proposed to represent those across institutions and job categories.

Data will be collected using a structured questionnaire, which was adapted from validated scales used in previous studies. - Digital transformation dimensions (technology and software, digital culture, and capability of human resources) would be measured via established instruments (for example, Vardarlier & Özsohın 2021), while all HRM practices (i.e., recruitment, training, and evaluation) based on widely adopted HRM scales will be assessed (Dessler 2023; Armstrong 2023).

We highly recommend SEM if your approach is based on the complex relationships between latent constructs. Before testing the hypotheses, reliability and validity tests (Cronbach's alpha, composite reliability, and AVE) will be conducted. This methodology will add strength and empirical evidence to the proposed model.

CONCLUSION

This study shows that digital transformation is not only a technological endeavor but rather an organizational strategic necessity to revamp the human resource management practices in UAE public universities. Digital transformation is found to improve institutional adaptability and efficiency due to its impact on critical functions such as recruitment, training, career management and performance appraisal.

Although past studies universally support a positive association between digital transformation and HRM practices, suggestive results indicate that organizational readiness, digital culture, and competence of the workforce affect outcomes in this relationship. This study addresses this gap by formalizing an Integrated Framework focusing on UAE higher education that includes these dimensions.

The study argues that the practical implications are that universities need to take a holistic approach, developing both technological infrastructure and organizational/human capacity. Focus on Your Digital Culture - Nurturing a digitally savvy culture, investing in digital competencies for your HR function, and ensuring that every transformation initiative is aligned to the larger strategic vision of the organisation will ensure you're making the most of what we're calling digital transformation. This study not only lays the groundwork for further empirical studies but also provides practical implications for improving HRM effectiveness in digitally transforming higher education settings.

REFERENCES

1. Al-Tahitah, A., Muthaliff, M. M. A., Abdulrab, M., & Al-Maamari, Q. A. (2018). Paper review on the relationship between transformational leadership and readiness for change. *International Journal of Energy Policy and Management*, 3(1), 1-7.
2. Al-Tahitah, A. N., Al-Sharafi, M. A., & Abdulrab, M. (2021). How COVID-19 pandemic is accelerating the transformation of higher education institutes: a health belief model view. In *Emerging technologies during the era of COVID-19 pandemic* (pp. 333-347). Cham: Springer International Publishing.
3. Armstrong, M. (2022). *Armstrong's handbook of human resource management practice* (15th ed.). Kogan Page.
4. Armstrong, M. (2023). *Armstrong's handbook of human resource management practice* (16th ed.). Kogan Page.
5. Boudreau, J. W., & Ramstad, P. M. (2024). *Human capital analytics: Creating strategic value from HR data*. Routledge.
6. Dessler, G. (2023). *Human resource management* (16th ed.). Pearson Education.
7. Fenech, R., Baguant, P., & Ivanov, D. (2019). The changing role of human resource management in an era of digital transformation. *International Journal of Entrepreneurship*, 22(2), 166–175.
8. Hang, N. T. (2021). Digital education to improve the quality of human resources implementing digital transformation in the context of industrial revolution 4.0. *Revista Geintec–Gestao Inovacao E Tecnologias*, 11(3), 311–323.
9. Hegedűs, H. (2020). The impact of digital transformation on the world of work and on human resource management. *Hadtudomány*, 30(E-szám), 146–153.
10. Kaufman, B. E. (2024). *Theoretical perspectives on work and the employment relationship* (6th ed.). ILR Press.

11. Kirilmaz, S. K. (2020). Digital transformation in human resources management: Investigation of digital HRM practices of businesses. *Research Journal of Business and Management*, 7(3), 188–200.
12. Kular, S., Gatenby, M., Rees, C., Soane, E., & Truss, C. (2023). Employee engagement: A literature review. *International Journal of Human Resource Management*, 24(1), 9–28.
13. Mathis, R. L., & Jackson, J. H. (2019). *Human resource management* (15th ed.). Cengage Learning.
14. Nachit, M., & Okar, C. (2020, November). Digital transformation of human resources management: A roadmap. In *2020 IEEE International Conference on Technology Management, Operations and Decisions (ICTMOD)* (pp. 1–6). IEEE.
15. Ulrich, D., & Dulebohn, J. H. (2024). Are we there yet? The future of HRM in the age of technology and analytics. *Human Resource Management Review*, 34(1), 1–17.
16. Vardarlier, P. (2020). Digital transformation of human resource management: Digital applications and strategic tools in HRM. In *Digital business strategies in blockchain ecosystems* (pp. 239–264).
17. Vardarlier, P., & Ozsahin, M. (2021). Digital transformation of human resource management: Social media's performance effect. *International Journal of Innovation and Technology Management*, 18(3), 2150005.
18. Zhang, J., & Chen, Z. (2024). Exploring human resource management digital transformation in the digital age. *Journal of the Knowledge Economy*, 15(1), 1482–1498.
19. Zwateen, I., Tahitah, A. N. A. A., Al-Mekhlafi, A., & Banyhamdan, K. (2024). The impact of human resource management practices on organizational learning at Jordanian commercial banks. *International Journal of Scientific Research and Management (IJSRM)*, 12(04), 6039-6155.

ARABIC REFERENCES

1. أكرم، أحمد محمد أحمد. (٢٠٢٣). التحول الرقمي في إدارة الموارد البشرية في وزارة التربية والتعليم الفلسطينية: الآفاق والتحديات والاتجاهات (رسالة ماجستير منشورة)، جامعة القدس.
2. الفاروق، طه عبد العظيم. (٢٠٢٣). دور استراتيجية التحول الرقمي في تطوير منظومة وظائف إدارة الموارد البشرية: دراسة تطبيقية على البنوك الحكومية المصرية. *مجلة البحوث المالية والتجارية*، ١٥(١)، ٤٧-١.
3. حريضي، عبد الرحمن، وحمداوي، أحمد. (٢٠٢١). التحول الرقمي ودوره في تحسين جودة الخدمات التعليمية. (أطروحة دكتوراه)، جامعة أحمد دراية – أدرار.
4. رضوان، محمد عبد الحميد حسن. (٢٠٢٢). أثر التحول الرقمي على الناتج المحلي الإجمالي. *المجلة الدولية للعلوم الإدارية والاقتصادية والمالية*، ٢(١)، ٧٤-٤٥.
5. زعلت، محمد أحمد محمد. (٢٠٢٣). أثر التحول الرقمي على استراتيجيات إدارة الموارد البشرية: دراسة ميدانية على العاملين بشركات الاتصالات في مصر. *المجلة العلمية للبحوث والدراسات التجارية*، ٣٧(٢)، ٦٣٠-٥٦١.
6. عبد الحميد، بلال. (٢٠٢٣). أثر التحول الرقمي على ممارسات إدارة الموارد البشرية في منظمات الأعمال: دراسة حالة اتصالات الجزائر. رسالة جامعية، جامعة الشهيد الشيخ العربي التبسي – تبسة.
7. عبد السميع، وليد فؤاد. (٢٠٢٤). التحول الرقمي وأثره على إدارة الموارد البشرية الخضراء. *المجلة الأكاديمية للعلوم الاجتماعية*، ٢(٢).
8. عبد الله، محمد أحمد. (٢٠٢٣). دور التحول الرقمي في تطوير أداء إدارة الموارد البشرية. *المجلة المصرية للعلوم الاجتماعية والسلوكية*، ٨(٨)، ٦٥-٢٠.
9. ناجي، نادية، وميموني، كريمة. (٢٠٢٣). أثر التحول الرقمي على إدارة الموارد البشرية (رسالة ماجستير)، جامعة ابن خلدون – تيارت.
10. مهدي، أحمد. (٢٠٢٢). دور التحول الرقمي في تحسين ممارسات إدارة الموارد البشرية. *مجلة التنظيم والسياحة*، ١(١١)، ١٦٦-١٥٤.
11. الوحشي، محمد، وحميد، أحمد. (٢٠٢٠). أثر ممارسات إدارة الموارد البشرية على رضا العاملين في الجامعات الحكومية: دراسة حالة جامعة الإمارات العربية المتحدة.
12. زيدان، أحمد. (٢٠٢١). التحول الرقمي في مؤسسات التعليم العالي: دراسة تقييمية للفرص والتحديات (جامعة الأزهر نموذجًا). *المجلة المصرية لبحوث الإعلام*، ٧٥، ٥١٠-٤٦٣.