

# Human Resource Adaptive Competence in Digital Disruption: A Humanistic Phenomenological Exploration

*HR Adaptive  
Competence in  
Digital Disruption*

Rince Tambunan

*Sekolah Tinggi Ilmu Ekonomi Enam Enam; Kendari, Indonesia*  
E-Mail: rincetambunan110281@gmail.com

Ayuningtyas Putri Mumpuni Halim Asy' Ary

*Sekolah Tinggi Ilmu Ekonomi Enam Enam; Kendari, Indonesia*  
E-Mail: ayhoe.ningty@gmail.com

Andi M Budihard

*Sekolah Tinggi Ilmu Ekonomi Enam Enam; Kendari, Indonesia*  
E-Mail: mbudihard@gmail.com

Asraf

*Sekolah Tinggi Ilmu Ekonomi Enam Enam; Kendari, Indonesia*  
E-Mail: asrafyunus79@gmail.com

**1365**

Submitted:  
AUGUST 2025

Accepted:  
OCTOBER 2025

## ABSTRACT

*Digital transformation has shifted the paradigm of human resource management from a technical approach to a more reflective and humanistic approach. This study aims to explore human resource adaptive competency in facing digital disruption through a phenomenological approach. This study was designed using a qualitative approach with an exploratory design to understand the phenomenon of adaptive competency from the perspective of human resource actors in the business sector. This study also involved five key informants from the business sector who were selected purposively. Data were collected through in-depth interviews and analyzed using thematic techniques. The results of the study identified reflective, emotional, and social dimensions as the foundation of adaptive competency, such as reflective practices, a safe culture for learning, cross-generational collaboration, and humility to continue learning. This study enriches the human resource management literature by offering an adaptive model based on humanistic values that can be applied in various organizational sectors. Its practical implications include the design of human resource development programs that are more oriented towards meaning, resilience, and collaboration. This study provides a conceptual basis for the development of sustainable human resource strategies in the digital era.*

**Keywords:** *Adaptive Competence, Digital Disruption, Digital Transformation, Human Resources Strategy, Humanistic Approach, Organizational Learning.*

## ABSTRAK

*Transformasi digital telah menggeser paradigma pengelolaan sumber daya manusia dari pendekatan teknis menuju pendekatan yang lebih reflektif dan humanistik. Studi ini bertujuan mengeksplorasi kompetensi adaptif sumber daya manusia dalam menghadapi disrupsi digital melalui pendekatan fenomenologis. Penelitian ini dirancang menggunakan pendekatan kualitatif dengan desain eksploratif untuk memahami fenomena kompetensi adaptif dari perspektif pelaku sumber daya manusia di sektor bisnis. Penelitian ini juga melibatkan lima informan kunci dari sektor bisnis yang dipilih secara purposif. Data dikumpulkan melalui wawancara mendalam dan*

**JIAKES**

Jurnal Ilmiah Akuntansi  
Kesatuan  
Vol. 13 No. 5, 2025  
pp. 1365-1374  
IBI Kesatuan  
ISSN 2337 - 7852  
E-ISSN 2721 - 3048  
DOI: 10.37641/jiakes.v13i5.4068

dianalisis menggunakan teknik tematik. Hasil penelitian mengidentifikasi dimensi reflektif, emosional, dan sosial sebagai fondasi kompetensi adaptif, seperti praktik refleksi, budaya aman untuk belajar, kolaborasi lintas generasi, dan rendah hati untuk terus belajar. Studi ini memperkaya literatur manajemen sumber daya manusia dengan menawarkan model adaptif berbasis nilai humanistik yang dapat diterapkan di berbagai sektor organisasi. Implikasi praktisnya mencakup desain program pengembangan sumber daya manusia yang lebih berorientasi pada makna, resiliensi, dan kolaborasi. Penelitian ini memberikan dasar konseptual bagi pengembangan strategi sumber daya manusia berkelanjutan di era digital.

**Kata kunci:** Disrupsi Digital, Kompetensi Adaptif, Pembelajaran Organisasi, Pendekatan Humanistik, Sumber Daya Manusia, Transformasi Digital

## INTRODUCTION

Digital transformation is reshaping human resource management for efficiency and innovation, with 78% of business leaders prioritizing it in the next two to three years (Goulart et al., 2022). Technologies like Augmented Reality (AR), Extended Reality (XR), and Artificial Intelligence (AI) enhance training and collaboration (Shaddiq & Irpan, 2023). High satisfaction with hybrid work (Balog & Demidova, 2021), HR technology adoption is sub-optimal due to low employee engagement (Cherep et al., 2022). AR/XR and AI improve knowledge transfer and onboarding, but successful Human Resource (HR) digitization requires adequate training, leadership support, and a focus on the human element (Ambrogio et al., 2022).

Practitioners stress the importance of digital skills, like AI and virtual collaboration, for organizational sustainability. However, linear training alone fails to enhance employee engagement and retention, neglecting psychological and social aspects of digital adaptation (Pratama et al., 2023). Inclusive hybrid work policies can promote diversity, but without strategies to boost engagement, HR technology's potential remains unoptimized. A blend of technology and humanistic values is crucial for effective digital transformation (Karneli et al., 2024). Research often overlooks emotional aspects and organizational culture, leading to mechanistic digital Human Resource Management (HRM) implementations that hinder resilience and empathy (Tukker, 2004; Schaltegger & Wagner, 2011; Shaddiq & Irpan, 2023).

The technology-driven HRM paradigm often neglects humanistic aspects such as values and adaptive culture. Dyllick and Hockerts (2002) and Dunleavy et al. (2006) highlight that digital HR literature lacks frameworks incorporating human values. Preliminary findings emphasize the need to address emotional and cultural dimensions for successful adaptation. Therefore, integrating technology and humanity in an adaptive competency model is crucial for fostering resilience and meaningful transformation (Fitzgerald et al., 2014). Adaptive Structuration Theory (AST) explains how technology and organizational structures evolve through actors' interpretations (Rodriguez-Lluesma et al., 2021). Widely used in information systems, AST's use in digital HRM remains limited, particularly in exploring employees' meaning-making. Reflective practices play a key role in this process (Bauer et al., 2018). Additionally, the Resource-Based View (RBV) emphasizes personal competencies like emotional resilience as strategic assets (Schreyögg & Kliesch-Eberl, 2007; Cascio & Montealegre, 2016; Schwarzmüller et al., 2018). Challenge-Based Learning (CBL) framework fosters adaptive competence and innovative thinking, though underexplored in corporate HRM (Galdames-Calderón et al., 2024; Makhoul & Rabahi, 2025).

Digital HRM studies reveal a lack of integration of culture, values, and reflective practices in transformation strategies (Cascio & Montealegre, 2016). This research proposes a multidimensional framework combining technology, organizational culture, and personal values to bridge AST, RBV, and CBL theories, enhancing the relevance of digital HRM theory and practice (Jugdev & Mathur, 2013; Strohmeier, 2014). This research addresses the shortcomings of digital HRM, which often prioritizes technology

over humanistic aspects, hindering the development of adaptive competencies (Parikh & Pirani, 2025). It advocates for a shift towards a reflective and collaborative work environment, offering practical guidelines for HR practitioners to align technology, human values, and organizational culture (Halid et al., 2020). This study enhances employee resilience and creativity by developing adaptive competencies, cognitive, emotional, and cultural across organizations. It proposes a human-centered digital HRM model that aids MSMEs and large companies in navigating uncertainty and implementing value-based HR strategies to avoid cultural resistance and technology failures (Parikh & Pirani, 2025).

This research aims to explore the form, process, and meaning of adaptive competencies developed by HR in the business sector in response to digital disruption, using a humanistic approach for analysis. It seeks to identify key factors that support the formation of adaptive competencies at both individual and organizational levels, including the values that emerge during this process. Through a qualitative approach, the study aims to reconstruct how individuals develop adaptive resilience, self-innovation, and social connectivity in the face of digital work environment pressures. Expected outcomes include a theoretical contribution to a value-based adaptive competence model and practical insights for HR practitioners in developing employee development strategies aligned with the demands of the disruption era. Ultimately, this research provides a scientific basis for designing HR policies and interventions that are more humanistic, contextualized, and sustainable.

## **LITERATURE REVIEW**

### **Digital Transformation and HRM Challenges in the Digital Era**

Digital transformation has reshaped human resource management (HRM), compelling organizations to integrate technology-driven solutions to enhance efficiency and innovation. Studies highlight that 78% of business leaders prioritize digital transformation in the next few years (Goulart et al., 2022), emphasizing technologies such as augmented reality, extended reality, and artificial intelligence in improving training, remote collaboration, and operational efficiency (Shaddiq & Irpan, 2023; Pramesworo et al., 2025). However, despite technological adoption, employee engagement and satisfaction remain suboptimal (Cherep et al., 2022). Hybrid work models show high satisfaction rates (97% among employees in India), yet their effectiveness is often hampered by poor technological adeptness and resistance to change (Balog & Demidova, 2021). The limitations of linear training approaches, which fail to address psychological and cultural adaptation barriers, further exacerbate these challenges (Pratama et al., 2023). This gap underscores the necessity of a human-centered digital transformation strategy in HRM one that considers employees' socio-emotional needs and cultural readiness alongside technological implementation.

The implementation of emerging technologies such as AI-driven simulations and VR training has demonstrated significant potential in reducing skill acquisition time while improving productivity (Thani et al., 2022). However, their success depends on organizational readiness, leadership support, and workforce adaptability (Ambrogio et al., 2022). HRM digitization must move beyond mechanistic adoption towards fostering an inclusive digital culture that bridges technology with human cognitive and emotional responses (Schaltegger & Wagner, 2011). This highlights the importance of adaptive competence encompassing cognitive flexibility, digital dexterity, and emotional resilience as a key enabler for sustainable HRM practices in disruptive environments.

### **The Humanistic Approach in Developing Adaptive Competence**

HRM models often prioritize operational efficiency, overlooking the humanistic dimensions of workforce adaptability. Research indicates that digital-HRM strategies frequently neglect employee well-being, reflective learning, and cultural alignment, leading to disengagement and resistance (Dunleavy et al., 2006). Theoretical frameworks such as Adaptive Structuration Theory (AST) suggest that technology adoption must be

contextualized within social dynamics, emphasizing employee participation in meaning-making (Rodriguez-Lluesma et al., 2021). The Resource-Based View (RBV) theory highlights intangible assets such as resilience and a growth mindset as foundational for digital adaptation (Schwarz Müller et al., 2018). However, most HRM literature lacks integrative models that align technological, cultural, and emotional competencies (Cascio & Montealegre, 2016).

Challenge-Based Learning (CBL) frameworks offer a transformative approach by embedding experiential and collaborative learning within HRM to cultivate adaptive competence (Syabilla et al., 2024; Makhoul & Rabahi, 2025). Studies suggest that HR interventions combining technology with humanistic principles such as participatory decision-making and empathy-driven leadership enhance workforce agility (Meijerink et al., 2021; Asraf et al., 2024). This study advocates for a multidimensional HRM model that harmonizes digital tools with reflective practices, thus fostering an adaptive and inclusive work culture. The integration of humanistic values ensures that technological advancements in HRM do not alienate employees but instead empower them to thrive amidst digital disruption (Parikh & Pirani, 2025).

## **RESEARCH METHODS**

This research design uses a qualitative approach with an exploratory design to understand the phenomenon of adaptive competence from the perspective of HR actors in the business sector. The focus of this study is on the experience, perception, and meaning of the adaptation process in facing digital disruption. This approach was chosen because it can explore meaning in depth through the experiences of participants in a particular social context (Orina et al., 2015). This study emphasizes the subjective meaning constructed by informants based on work experience and humanistic values in the organization. The exploration design was chosen to answer the open and contextual problem formulation.

The data collection technique used in this study was in-depth interviews with a phenomenological approach. Data was collected from five key informants selected using a purposive sampling technique, based on criteria of relevance to the role of HR management and involvement in the digital transformation process. The main instrument used was a semi-structured interview guide developed based on literature studies and actual issues related to adaptive competence. Interviews were conducted directly and boldly according to the availability of informants, and all interview sessions were recorded and transcribed. This approach is in line with Miles' guidelines in qualitative research, which emphasize data depth and narrative validity (Royal, 2020). The population in this study consisted of HR actors involved in the digitalization process in various companies. The sample taken was five key informants who had relevant experience and knowledge. The research variables included dimensions of adaptive competencies that emerged in the context of digitalization.

The data analysis method was carried out manually using thematic coding techniques. After the data was collected, the transcription process was carried out verbatim and analyzed to identify themes that represented dimensions of adaptive competencies. Data analysis was carried out using techniques like NVivo to maintain data accuracy and traceability. Validation of the data was carried out through member check techniques and source triangulation to ensure the consistency and credibility of the research results. This study is expected to provide in-depth insights into adaptive competencies in facing the challenges of digitalization in the business sector.

## **RESULTS**

The findings show that adaptive competence in the face of digital disruption is not solely understood as technical ability or mastery of digital tools. Instead, a deeper meaning emerges from the way individuals and organizations manage the adaptation process in a reflective and planned manner. An HR manager at a tech start-up emphasized the importance of an experiential learning approach to shaping meaningful adaptive

competencies. In this context, digital project-based cross-divisional rotations were implemented as a medium for transformative learning. “We facilitate reflective sessions at the end of each project-we call them ‘Human Checkpoints’-to explore the meaning of each change,” he said. This indicates that adaptive competence is also closely related to the dimensions of self-awareness and meaningful role in the organization.

Furthermore, the process of developing adaptive competence relies heavily on participatory and cognitively challenging learning approaches. The Head of Learning & Development (L&D) at a national company explained that linear training is no longer effective. He mentioned that challenge-based learning encourages new competencies such as agility and curiosity, which are important in the context of disruption. “We help them reframe ‘fear of uncertainty’ into ‘productive curiosity,’” he explains. The findings reinforce the argument that adaptability is not only built through technical instruction, but through stimulating thinking and managing emotions constructively.

In terms of individual experience, findings from a senior employee showed that the digital transition often led to anxiety about loss of control and roles. However, through participation in strategic discussions and buy-in from leadership, the individual managed to develop adaptive competencies based on intergenerational collaboration. “I started to develop an open attitude, learnt from the younger team, and slowly believed that change does not mean losing roles, but expanding the meaning of the role itself,” he explained. This confirms that adaptive competence also grows from social experiences that give space to the values of togetherness, equality, and mutual learning.

A broader view was given by a digital transformation HR consultant who emphasized that adaptive competence should be seen as a set of personal capacities rooted in emotional resilience and sensitivity to social dynamics. He explained that the main obstacle in building adaptive competencies often comes from organizational structures that are too top-down and do not allow room for dialogue. “Adaptive competence will not develop if the organizational culture is not emotionally and psychologically supportive,” he said. These findings make it clear that adaptive competence cannot be separated from the context of an organizational culture and work climate that values the diversity of the learning process.

Furthermore, the development of adaptive competence in the context of Micro and Medium Enterprises (MSMEs) shows that the process is organic and based on collective values. A CEO of a digital native MSME stated that his team grew adaptively because of a sense of safety to try and fail. “The team’s adaptive competence grows not because of training, but because they feel safe to ask questions and learn from failure,” he explained. This suggests that in the context of small-scale enterprises, strengthening an inclusive and collaborative learning culture is a key driver in the development of adaptive competence.

Finally, the findings across informants are consistent in that adaptive competence is not only about the ability to deal with change, but also about how individuals give meaning to the change personally and socially. Values such as “humble to learn”, “trust between team members”, and leadership that gives room to fail” emerged as essential dimensions in shaping humanistic adaptive competence. As the CEO of an MSME said, “It is this culture of learning and helping each other that naturally shapes adaptive competence, and it all starts with leadership that listens.” Thus, the results of this study emphasize that adaptive competence in the era of digital disruption in the business sector is shaped by synergies between personal values, social practices, and organizational culture that favor humanity”

**Table 1.** Mapping of Thematic Codes, Sub-Themes, and Informant Sources

<b>Thematic Code</b>	<b>Sub-Theme</b>	<b>Informant Source</b>
Reflection	Human Checkpoint	HR Manager
Psychological Wellbeing	Mental Health Support	HR Manager
Adaptive Innovation	Independent Digital Solutions	L&D Head
Process and Attitude Evaluation	Adaptability Indicators	L&D Head
Intergenerational Collaboration	Cross-age Learning	Senior Staff
Personal Values	Humble to Learn	Senior Staff

Thematic Code	Sub-Theme	Informant Source
Cultural Barriers	Systemic Resistance	HR Consultant
Value Transformation	Dialogue and Interaction	HR Consultant
Safe Culture for Learning	Trust and Safety	CEO OF MSME
Personalised Learning Strategy	Individualised Learning	CEO OF MSME

Table 1 illustrates the results of thematic mapping obtained from interviews with various informants in the context of developing adaptive competencies in the digital HRM environment. Each thematic code represents a major theme that emerged during the data analysis process, which was then elaborated into specific sub-themes based on the informant's experience and views. For example, from the HR Manager, the theme of Reflection emerged with the sub-theme of Human Checkpoint, and Psychological Wellbeing, with a focus on mental health support. The L&D Head highlighted the importance of Adaptive Innovation through independent digital solutions, and Process and Attitude Evaluation, which includes adaptability indicators. Senior staff emphasized the importance of Intergenerational Collaboration through cross-generational learning, as well as personal values such as Humble to Learn. Meanwhile, the HR Consultant raised the issue of Cultural Barriers in the form of systemic resistance, and Value Transformation through interaction and dialogue. From the perspective of the MSME CEO, Safe Culture for Learning and Personalized Learning Strategy emerged. This overall mapping provides a comprehensive picture of how various organizational actors interpret and shape adaptive competencies.

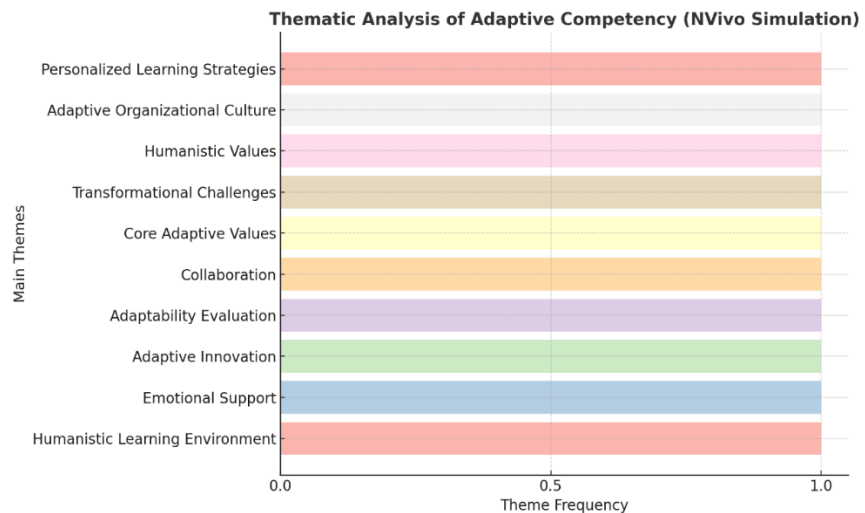


Figure 1. Visualization of Adaptive Competence Thematic Codes (NVivo Simulation)

Figure 1 shows that there are several thematic codes that have high dominance, namely Reflection, Adaptive Innovation, and Safe Culture for Learning. This shows that in the context of a business influenced by digitalization, an individual's ability to self-reflect, innovate independently, and be in an environment that supports learning are core components of adaptive competence.

Such concepts as Psychological Well-being and Value Transformation show that adaptive competence is also closely related to emotional and cultural aspects. Attention to mental health and creating space for dialogue are prerequisites for forming human resources that are resilient to change. This finding strengthens the argument that an adaptive HR development strategy cannot be separated from a humanistic framework that places humans at the center of change. In addition, the Personal Values and Intergenerational Collaboration dimensions emphasize the importance of interpersonal interaction and the willingness to open oneself to cross-age learning. These values create the basis for ethics and attitudes that support the formation of sustainable adaptive

behavior. In practice, this creates strong synergy in a work environment that is constantly disrupted. Thus, the development of adaptive competence is key to facing the challenges that arise in the digital era.

## **DISCUSSION**

The finding that adaptive competencies are rooted in reflection and personal meaning clearly answers the criticism of digital HRM research being too technical (Fenwick et al., 2024). We found that reflective sessions, such as the “Human Checkpoint,” not only serve as an evaluation but also build self-awareness. The literature shows that creating a culture of reflective learning is key to increasing the psychological space for employees to face change (Furtmueller et al., 2012). These results enrich the understanding of the practice of humanistic adaptive processes in the business sector.

The challenge-based learning dimension found in this study supports the CBL literature, stating that participatory and problem-solving approaches enhance agile mindsets (Furtmueller et al., 2012). The finding that employees are expected to generate their own digital solutions suggests a shift from instructional methods to practical methods that are responsive to context (Thite, 2018; Herawati & Sumiati, 2025). This confirms that CBL can be applied in business organizations as an adaptive development strategy, opening important opportunities for HRM studies that integrate pedagogical principles.

The finding on the importance of safe spaces to learn from failure is in line with digital HRM studies stating that digital transformation changes the need for organizational flexibility and emotional resilience (Parikh & Pirani, 2025). A sense of safety triggers the courage to ask questions and try, indicating that psychological culture is very important in realizing adaptive competence. This study shows that, in addition to HRIS tools and systems, emotional capacity building is also needed to address gaps in HRM practices that were previously considered mechanistic (Fenwick et al., 2024).

The role of intergenerational collaboration in the formation of adaptive competence in senior employees shows positive interactions across ages. This finding confirms that adaptive competence is built through social learning in an organizational context (Thite, 2018) and opens up opportunities for the development of HR policies that support informal mentoring and intergenerational collaboration. The finding on the importance of humility in learning is in line with the adaptive HRD competency model in the competency-based procurement (RBV) domain, where personal competencies are considered as strategic resources (Deepa et al., 2024). This study shows that humility influences an individual’s ability to adapt in the context of digitalization.

Based on the results of the study, emotional intelligence and cultural adaptability play an important role in shaping adaptive competencies in the midst of digital disruption. The ability of individuals to recognize, manage, and express emotions constructively is reflected in practices that not only serve as a means of project evaluation, but can also be a moment to understand the meaning of social change. Emotional intelligence is seen in how fear of uncertainty is reconstructed into productive curiosity through cognitively challenging learning. In this context, cultural adaptability is demonstrated through the practice of cross-generational collaboration, where values such as humility to learn, openness to age differences, and mutual trust are the cornerstones in building an adaptive mindset. These findings suggest that the success of adaptation is determined not only by technical ability, but also by emotional sensitivity and the ability to navigate social and cultural dynamics within organizations. A work environment that encourages dialogue, psychological safety, and diversity of perspectives is an important catalyst for the formation of sustainable adaptive competencies.

The findings suggest that top-down organizational culture can hinder adaptation, with excessive hierarchical structures reducing personal dialogue and reflection, thus hindering the penetration of digital culture. This is in line with studies on digital HRM transformation that emphasize the need to integrate digital factors with humanistic values (Hu & Lan, 2024). The model also emphasizes the importance of knowledge sharing and agile learning

in strengthening adaptive competencies (Thite, 2018; Armanious & Padgett, 2021; Levy et al., 2021). This study suggests that reducing the dominance of top-down structures is an important foundation for truly adaptive and humanistic HRM. Furthermore, the study shows that SMEs can build adaptive competencies organically thanks to their unique culture and strong collective values. This is in line with digital HRM literature on SMEs that identifies learning organizational culture as a critical factor in the success of digital transformation (Baojing et al., 2025). These findings challenge the common assumption that digital scaling only works in large organizations and provide insights for SME HR policies to prioritize collective values in digital adaptation efforts. The integration of all reflective, innovative, emotional, cultural, and personal dimensions suggests that adaptive competencies are best explained through a multidimensional model, which is still rare in contemporary HRM practices (Furtmueller et al., 2012; Morozevich et al., 2022). This holistic adaptive model can be a new framework for HR strategies in the era of disruption.

## CONCLUSION

This research concludes that adaptive competencies in the face of digital disruption in the business sector are not sufficiently shaped through technical approaches alone, but require the integration of reflective, emotional, social, and organizational culture dimensions. The findings show that practices such as challenge-based learning, collective reflection spaces, a safe culture of questioning, as well as values such as humility and cross-generational collaboration are key elements in the formation of humanistic adaptive competencies. This research reinforces the notion that people development strategies should go beyond technical training and emphasize the creation of work environments that support sustainable personal and social growth. It also confirms the importance of participatory and dialogic leadership in creating an effective space for adaptation in the midst of digital change. As such, this research provides a new conceptual framework that bridges the technical and humanistic approaches to HR competency development.

Theoretically, the findings extend the adaptive competence literature by introducing a model that incorporates personal values, social practices, and organizational cultural dynamics in the context of digital disruption. Practically, this research contributes to HRM strategy designers in developing learning programs that are not only based on digital skills, but also on values and empowering interactions. The humanistic-based adaptive competency model generated from this research can be used as a reference in designing training, flexible work policies, and organizational culture interventions. However, this study has limitations, especially in the number of informants and industry coverage, that does not fully represent all business sectors. For this reason, future research is recommended to expand the informant population across sectors and regions, as well as to develop qualitative-quantitative measurement instruments that enable broader and more in-depth validation of the model.

## REFERENCES

- [1] Ambrogio, G., Filice, L., Longo, F., & Padovano, A. (2022). Workforce and supply chain disruption as a digital and technological innovation opportunity for resilient manufacturing systems in the COVID-19 pandemic. *Computers & Industrial Engineering*, 169(1), 108158- 108168.
- [2] Armanious, M., & Padgett, J. D. (2021). Agile learning strategies to compete in an uncertain business environment. *Journal of Workplace Learning*, 33(8), 635-647.
- [3] Asraf, A., Hakim, A., Bagea, A., & Paluala, K. (2024). The human resource development and product innovation of MSMEs in Kendari City. *Jurnal Ilmiah Manajemen Kesatuan*, 12(4), 913-924.
- [4] Balog, M. M., & Demidova, S. E. (2021). Human capital development in the context of the fourth industrial revolution. *IOP Conference Series: Earth and Environmental Science*, 666(6), 2120-2134.
- [5] Baojing, Z., Alias, N., & Yaacob, M. H. (2025). The relationship between organizational culture and digital transformation in SMEs: A systematic review. *Multidisciplinary Reviews*, 8(5), 2025162–2025162.
- [6] Bauer, W., Schlund, S., & Vocke, C. (2017, June). Working life within a hybrid world—how digital transformation and agile structures affect human functions and increase quality of work and business

- performance. In *International Conference on Applied Human Factors and Ergonomics* (pp. 3-10). Cham: Springer International Publishing.
- [7] Cascio, W. F., & Montealegre, R. (2016). How technology is changing work and organizations. *Annual Review of Organizational Psychology and Organizational Behavior*, 3(1), 349–375.
- [8] Cherep, A., Voronkova, V., & Androsova, O. (2022). Transformational changes in organizational management and human resources in the digital age. *Baltic Journal of Economic Studies*, 8(3), 210–219.
- [9] Deepa, R., Sekar, S., Malik, A., Kumar, J., & Attri, R. (2024). Impact of AI-focussed technologies on social and technical competencies for HR managers – A systematic review and research agenda. *Technological Forecasting and Social Change*, 202(1), 301-313.
- [10] Dunleavy, P., Margetts, H., Bastow, S., & Tinkler, J. (2006). New public management is dead—long live digital-era governance. *Journal of Public Administration Research and Theory*, 16(3), 467–494.
- [11] Dyllick, T., & Hockerts, K. (2002). Beyond the business case for corporate sustainability. *Business Strategy and the Environment*, 11(2), 130–141.
- [12] Fenwick, A., Molnar, G., & Frangos, P. (2024). 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. *Discover Artificial Intelligence*, 4(1), 34-44.
- [13] Fitzgerald, M., Kruschwitz, N., Bonnet, D., & Welch, M. (2014). Embracing digital technology: A new strategic imperative. *MIT Sloan Management Review*, 55(2), 1-15.
- [14] Furtmueller, E., Wilderom, C., & Tate, M. (2012). Managing recruitment and selection in the digital age: e-HRM and resumes. *Human Systems Management*, 30(4), 243–259.
- [15] Galdames-Calderón, M., Stavnskær Pedersen, A., & Rodriguez-Gomez, D. (2024). Systematic review: Revisiting challenge-based learning teaching practices in higher education. *Education Sciences*, 14(9), 1008-1021.
- [16] Goulart, V. G., Liboni, L. B., & Cezarino, L. O. (2022). Balancing skills in the digital transformation era: The future of jobs and the role of higher education. *Industry and Higher Education*, 36(2), 118–127.
- [17] Halid, H., Yusoff, Y. M., & Somu, H. (2020). The relationship between digital human resource management and organizational performance. *First ASEAN Business, Environment, and Technology Symposium (ABEATS 2019)*, 6(1), 96–99.
- [18] Herawati, H., & Sumiati, D. M. N. (2025). The effect of intellectual capital, firm size, and capital structure on financial performance: Empirical study of sub-sector companies property and real estate registered on the IDX in 2018–2022. *Jurnal Ilmiah Akuntansi Kesatuan*, 13(2), 385–396.
- [19] Hu, D., & Lan, Y. (2024). The dual path effect mechanism study of digital-HRM on employee innovative performance and cyberloafing. *Plos One*, 19(8), 7195-7205.
- [20] Jugdev, K., & Mathur, G. (2013). Bridging situated learning theory to the resource-based view of project management. *International Journal of Managing Projects in Business*, 6(4), 633–653.
- [21] Karneli, O., Handayati, R., & Rijal, S. (2024). Enhancement of soft skills competence in human resources as a key success factor in the digital business era. *Journal of Contemporary Administration and Management (ADMAN)*, 2(1), 319–324.
- [22] Levy, M., Hadar, I., & Aviv, I. (2021). Agile-based education for teaching an agile requirements engineering methodology for knowledge management. *Sustainability*, 13(5), 2853-2864.
- [23] Makhlof, A., & Rabahi, H. (2025). Exploring the implementation of challenge-based learning (CBL): A pathway to student motivation and self-regulated learning. *International Journal of Educational Development*, 2(3), 19–32.
- [24] Meijerink, J., Boons, M., Keegan, A., & Marler, J. (2021). Algorithmic human resource management: Synthesizing developments and cross-disciplinary insights on digital HRM. *The International Journal of Human Resource Management*, 32(12), 2545–2562.
- [25] Morozevich, E. S., Kuznetsova, Y. A., Kubrikova, A. S., Livak, N. S., & Makarov, A. I. (2022). Employee's competence profile for adaptive organization management. *Organizacija*, 55(1), 3-16.
- [26] Orina, W. A., Mwangi, G. F., Sitati, R. N., & Nyabola, F. (2015). Content analysis and a critical review of the exploratory design. *General Education Journal*, 4(2), 32–45.
- [27] Parikh, V., & Pirani, S. (2025). Integrating sustainable HRM, digital HRM, and remote work practices: A conceptual framework for enhancing job satisfaction. *International Journal of Multidisciplinary Research & Reviews*, 4(1), 68–81.
- [28] Pramesworo, I. S., Sugiardi, S., Harahap, I., Nurbakti, R., & Rosari, D. (2025). human resource selection and marketing: the role of human resource management in the Enterprise. *Jurnal Ilmiah Manajemen Kesatuan*, 13(1), 141–150.
- [29] Pratama, A. S., Aditya, R., & Syarif, M. (2023). Human Resource Development: Adaptation and Innovation for Business Sustainability in the Digital Era. In *Proceeding International Conference on Economy, Management, and Business*, 1(1), 127–139.
- [30] Rodriguez-Lluesma, C., García-Ruiz, P., & Pinto-Garay, J. (2021). The digital transformation of work: A relational view. *Business Ethics, the Environment & Responsibility*, 30(1), 157–167.
- [31] Royal, R. (2020). *A qualitative phenomenological study exploring strategies organizational development and change managers need to improve employee involvement*. Colorado Springs: Colorado Technical University.

- [32] Schaltegger, S., & Wagner, M. (2011). Sustainable entrepreneurship and sustainability innovation: categories and interactions. *Business Strategy and the Environment*, 20(4), 222–237.
- [33] Schreyögg, G., & Kliesch-Eberl, M. (2007). How dynamic can organizational capabilities be? Towards a dual-process model of capability dynamization. *Strategic Management Journal*, 28(9), 913–933.
- [34] Schwarzmüller, T., Brosi, P., Duman, D., & Welp, I. M. (2018). How does digital transformation affect organizations? Key themes of change in work design and leadership. *Management Review*, 29(2), 114–138.
- [35] Shaddiq, S., & Irpan, M. (2023). Governance of human resources management in the digital era. *Journal of Business and Management Studies*, 5(3), 80-99.
- [36] Strohmeier, D. E. P. (2014). HRM in the digital age—digital changes and challenges of the HR profession. *Employee Relations*, 36(4), 560-571.
- [37] Syabilla, A. D., Indradewa, R., Abadi, F., & Kustiawan, U. (2024). Implementation of human resource management in the growth of digital personal shopper. *Jurnal Ilmiah Manajemen Kesatuan*, 12(6), 2601-2608.
- [38] Thani, N. F., Mazari, E., Asadi, S., & Mashayekhikhi, M. (2022). The impact of self-development on the tendency toward organizational innovation in higher education institutions with the mediating role of human resource agility. *Journal of Applied Research in Higher Education*, 14(2), 852–873.
- [39] Thite, M. (2018). *e-HRM: Digital approaches, directions & applications*. New York: Routledge.
- [40] Tukker, A. (2004). Eight types of product–service system: eight ways to sustainability? Experiences from SusProNet. *Business Strategy and the Environment*, 13(4), 246–260.