



Digitalization and Performance Management: A Conceptual Framework for HR Governance

Digitalisation et Gestion de Performance : Un cadre conceptuel pour la Gouvernance RH

MIRDASSE Samir

Ph.D. in Economics and Management Sciences

Equipe de Recherche Pluridisciplinaire en Gestion (ERPG)

Faculté des Sciences Juridiques Economiques et Sociales

Université Ibn Zohr - Agadir - Maroc

<https://orcid.org/0000-0002-3100-5416>

Abstract: In an era of increasing digital transformation, human resource management (HRM) and performance management (PM) have become areas of major interest for organizations seeking to maximize their operational efficiency and competitiveness. This article proposes an innovative conceptual framework for understanding the complex interactions between digitalization, HR governance, and performance management. We address the challenge of adapting HR and performance management practices to the demands of digitalization, highlighting the need for strategic HR governance and data-driven performance management to fully leverage the benefits of digital transformation.

In this study, our objectives are to define the key dimensions of digitalization, HR governance, and performance management, identify their interrelations, and develop a robust conceptual model to analyze these complex dynamics. To achieve this, we conducted an exhaustive literature review and conducted a thorough analysis of key concepts in this field.

In terms of methodology, our research adopts a conceptual approach, drawing on existing theoretical frameworks and proposing an innovative synthesis of the concepts under study. The findings of our study shed light on the significant impact of digitalization on HR governance and performance management practices, as well as the challenges and opportunities associated with this transformation.

In conclusion, our research provides new and insightful perspectives on the interactions between digitalization, HR governance, and performance management, emphasizing the importance of a strategic and integrated approach to addressing the challenges posed by the evolving digital landscape. We formulate recommendations for future research and managerial practice, highlighting the need to develop flexible and adaptive HR strategies and performance management systems to successfully navigate this rapidly changing environment.

Keywords: Digitalization; Performance Management; HR Governance; Conceptual Framework; Conceptual Model.

Digital Object Identifier (DOI): <https://doi.org/10.5281/zenodo.11234574>

1. Introduction

The ongoing digital transformation has significantly revolutionized traditional management practices and paradigms within organizations (Chirumalla, 2021; Cortellazzo & al., 2019; Zhang & al., 2024). Continuously evolving, this phenomenon has profoundly reshaped organizational interactions, both internally and externally, driven by constant technological innovation and the relentless pursuit of competitiveness (Franccaroli & al., 2024; Leso & al., 2023; Mirdasse, 2024; Shet & Bajpai, 2023). In this dynamic and ever-changing context, the interaction between digitalization, HR governance, and performance management emerges as a crucial area of study for understanding the challenges and opportunities facing the contemporary business world.

Digitalization, the first fundamental dimension of our study, encompasses all processes, technologies, and strategies aimed at integrating digital tools within organizational structures (Acciarini & al., 2022; Binner, 2022; Saadatmanesh, 2023; Zangiacomì & al., 2020). It transcends traditional business boundaries and offers significant transformative potential, impacting all aspects of management, from production to distribution and HRM (Hasan & al., 2022; Krajnik & Foszto, 2023; Nissen, 2018; Venumuddala & Kamath, 2023). This technological revolution redefines operational practices, alters communication modes, and profoundly influences organizational culture.

HR governance, the second pillar of our analysis, encompasses the structures, policies, and processes governing human capital management within organizations (Manafi & al., 2019; Prabawati & Nuriyah, 2023; Rizki & Saputra, 2021). It includes strategic workforce planning, talent management, training and professional development, as well as the establishment of compensation and recognition policies (Gile & al., 2022; Salgado-Criado & Fernández-Aller, 2024). HR governance plays an essential role in aligning employees' individual goals with overall organizational objectives, thus fostering cohesion and collective performance.

Finally, organizational performance management constitutes the third key dimension of our study (Almulaiki, 2023; Al Reeshi, 2023; Faozen & Sandy, 2024). It represents the systematic evaluation of the results achieved by an organization relative to its predefined objectives. Organizational performance encompasses not only financial aspects such as revenue and profitability but also non-financial indicators such as customer satisfaction, employee productivity, and innovation.

These three dimensions interact in a complex and dynamic manner, shaping organizational strategies, structures, and practices (Kiu & Chan, 2024; Martínez-Morán & al., 2024; Poulouse & al., 2024; Sulaeman & Nurholidah, 2023). Thus, exploring their interactions is essential for practitioners and researchers in management.

The problematics of this research lie in understanding the mechanisms by which digitalization, as a driver of organizational transformation, shapes HR governance and ultimately impacts overall organizational performance. In this context, the *central problematics* of this research can be formulated as follows: *To what extent does digitalization influence HR governance and organizational performance management?* This question raises a set of key issues:

RQ1: How does digitalization affect HR governance policies and processes?

RQ2: What is the impact of HR governance on organizational performance management?

RQ3: How does digitalization directly influence organizational performance management?

RQ4: What are the specific relationships between digitalization, HR governance, and organizational performance management in the organizational context? Through the exploration of these questions, this research aims to provide valuable insights into the complex dynamics between digitalization, HR governance, and performance management in the contemporary organizational context.

To address these questions, our research will adopt a multi-step methodological approach. Firstly, an in-depth literature review will be conducted to explore the key dimensions of the proposed conceptual model and identify relevant previous works. Subsequently, a detailed analysis of the relationships between digitalization, HR governance, and performance management will be carried out, formulating specific hypotheses and identifying potential causal links. Finally, an empirical methodology will be developed to test the formulated hypotheses and validate the proposed conceptual model.

In conclusion, this research will strive to make a significant contribution to the understanding of contemporary organizational dynamics and the implications of digitalization for HR governance and performance management.

Thus, in terms of plan, this research will unfold in three main stages: exploration of the literature to identify key dimensions, theoretical analysis of the relationships between digitalization, HR governance, and performance management, and development of a conceptual framework to inform future research in this field.

2. Literature Review

Digitalization and HR performance management occupy a central place in the contemporary business landscape, and their understanding is essential for effective HR governance. This section undertakes an in-depth exploration of fundamental theories of digitalization and HR governance, highlighting the evolution of concepts and relevant theoretical frameworks in this ever-evolving field.

Digitalization of HR, as defined by Nicolás-Agustín (2022), Strohmeier (2020), and Zavyalova & al. (2022), is a transformative process that integrates digital technologies into all aspects of HRM. Over the years, it has evolved from merely automating administrative processes to a strategic approach that redefines how organizations manage their talent and HR operations. This evolution is supported by the work of Shaddiq & al. (2023), Theotokas & al. (2024), and Verma & al. (2024), who emphasize that digitalization of HR has become a strategic priority for companies seeking to increase their agility and competitiveness in a dynamic business environment.

Concurrently, HR performance management has become increasingly interconnected with digitalization and HR governance. Research by Rožman & al. (2023), Sapta & al. (2022), Singh & al. (2017), and Wijayati & al. (2022) shows that technological advancements have significantly influenced how companies evaluate and enhance the performance of their employees. This complex interrelation between digitalization, HR governance, and performance management is explored in depth in the subsequent sections of this article.

Regarding theoretical frameworks, various perspectives are used to understand and analyze digitalization and HR governance. For example, the contingency theory framework of HRM by Delery and Doty (1996) along with the insights provided by Colbert (2004), Lepak & al. (2005), and Shafagatova and Van Looy (2020) highlight the importance of adapting HR practices to the specific characteristics of the organization and its environment. Similarly, the HR governance model by AlDhaheri & al. (2023), Kaehler and Grundei (2018), Martin & al. (2016), Shaddiq & al. (2023), and Suhail and Steen (2021) offers insights into how governance structures and processes can influence HR practices and, ultimately, organizational performance.

In conclusion, this literature review highlights the critical importance of digitalization and HR performance management for organizational governance. By examining relevant theories and frameworks, this article aims to provide an in-depth overview of these essential areas and to enlighten organizations' strategic decisions regarding HRM. It is worth noting that organizational governance is understood here in its broad sense, encompassing how the organization is directed and managed as a whole. In the specific context of this research, the focus is on HR governance, which examines HR policies, HR processes, and the alignment of talent management practices with the organization's strategic objectives.

2.1 Theories of Digitalization and HR Governance

Digitalization of HR is a complex process that involves the integration of digital technologies into all spheres of talent management. From staffing to performance evaluation to skill development, traditional HR practices are profoundly transformed by this evolution. According to Ammirato & al. (2023), da Silva & al. (2022), Fernandez & Gallardo-Gallardo (2020), and Gilch & Sieweke (2021), digitalization of HR is now a strategic priority for many organizations as it directly influences how they recruit, develop, and retain their talents. In an increasingly competitive business environment, maximizing agility and innovation is essential to remain globally competitive, further emphasizing the importance of HR digitalization (Alqarni & al., 2023; Saridakis, 2023).

Furthermore, HR digitalization brings about significant changes in how employees interact with organizational systems and processes. According to Omol (2023), Ravn & al. (2022), and Vasilev & al. (2023), this transformation promotes greater autonomy and accountability among employees while encouraging new forms of collaboration and communication within the organization. Employees are now more empowered to make decisions and proactively contribute to organizational goals, enhancing team effectiveness and cohesion.

However, despite the numerous benefits of HR digitalization, challenges remain. Issues such as safeguarding employees' data privacy, resistance to change, and unequal access to technologies can hinder the success of these initiatives (Bischoff & al., 2023; Tursunbayeva & al., 2022). It is therefore essential for organizations to implement policies and practices that ensure effective and ethical implementation of HR digitalization.

2.1.1 Evolution of Digitalization and HR Governance Concepts

The evolution of digitalization of HR concepts is a continuously changing phenomenon, influenced by rapid advancements in digital technologies and shifts in organizational management practices. Initially, HR digitalization focused on automating administrative tasks such as payroll and benefits management (Boiko & al., 2023; Murugesan & al., 2023). However, over time, it has become much more strategic, fundamentally reshaping how businesses manage their HR.

Authors such as Lee and Lee (2024) and Tuffaha & al. (2022) have emphasized that HR digitalization goes beyond the integration of new technological tools but requires a profound transformation of culture and organization. Employees need to be encouraged to adopt new ways of working and acquire new skills to adapt to a constantly evolving digital environment. This cultural transformation is essential to fully leverage the benefits of HR digitalization (Guzmán-Ortiz & al., 2020; Trushkina & al., 2020).

The evolution of HR digitalization concepts also has significant implications for organizational governance. Companies must rethink their governance strategies to fully integrate the digital dimension. This involves developing HR policies and processes that effectively support organizational goals in a rapidly evolving digital world (Cherep & al., 2022; Ruiz & al., 2024; Yorks & al., 2022).

Furthermore, recent studies such as those by Di Prima & Ferraris (2023) and Eliza (2023) have highlighted the growing importance of HR digitalization in transforming the world of work. Digitalization offers new opportunities to rethink operational models and HR practices to enhance organizational efficiency.

Similarly, research by Setyawan & al. (2022) and Zehir & al. (2020) has demonstrated the positive impact of HR digitalization on organizational performance. Their studies have shown that companies that successfully integrate the digital dimension into their HR are better positioned to achieve their strategic objectives and improve their market competitiveness.

In conclusion, the evolution of HR digitalization concepts is a dynamic and ongoing process that requires constant adaptation to new technologies and organizational changes. This evolution provides new opportunities for companies that successfully integrate the digital dimension into their HR.

2.1.2 Relevant Theoretical Frameworks in the Field

The analysis of digitalization and HR governance relies on several theoretical frameworks that offer diverse perspectives on the challenges and opportunities associated with these evolving domains. Among these theoretical frameworks, contingency theory holds a central place, suggesting that HR practices must be adapted based on the organizational and environmental context (Rosyafah & Pudjowati, 2024; Snell & al., 2023; Zhou & al., 2021). This approach recognizes that solutions that work in one company may not be effective in another due to cultural differences, size, and organizational structure.

Additionally, dynamic resource theory highlights the importance of flexibility and adaptability of HR in a constantly evolving digital environment (Gao & al., 2024; Liu & Su, 2022; Paillé & Halilem, 2019; Zhu & Jin, 2023). According to this theory, organizations must be able to identify, develop, and deploy their HR effectively to remain competitive in the market. In a world where digitalization rapidly transforms work practices and business models, this ability to adjust and optimize HR becomes crucial for ensuring organizational performance (Halid & al., 2022; Zhang & al., 2021).

Furthermore, competency-based approaches like Barney (1991) and Wernerfelt's (1984) resource-based views provide complementary perspectives by emphasizing the role of organizational skills and intangible assets in creating and sustaining competitive advantage in a digital environment (Danescu, 2020; Moschogianni, 2024). These theoretical frameworks offer essential analytical tools for understanding the complex interactions between digitalization, HR governance, and organizational performance (Shaddiq & al., 2023; Suryanto & al., 2021; Zhou & al., 2021). By combining these

theoretical perspectives with empirical studies and case analyses, researchers can develop a deeper understanding of the challenges and opportunities related to HRM in an evolving digital environment.

2.2 Links with Performance Management

Performance management is a crucial element of organizational strategy, aiming to maximize the effectiveness of individuals and teams in achieving set objectives (Kadak & Laitinen, 2023; Mueller-Hanson, 2020; Noordiatmoko & al., 2023). Digitalization has significantly impacted this domain by enabling process automation, real-time data collection, and advanced performance analysis (Alobidyeen & al., 2022; Peng & al., 2023). This evolution has transformed how organizations assess, manage, and improve employee performance.

Recent research has shown that integrating digital technologies into performance management can lead to significant improvements in operational efficiency and employee productivity (Dreković & al., 2023; Firdaus & Ambarwati, 2024; Lusiana & al., 2024). For example, performance management systems based on digital platforms enable continuous performance assessment, thereby promoting real-time feedback and increased responsiveness to employee needs (Kamble & al., 2020; Rivera & al., 2021; Yeung, 2018).

Digitalization has also opened up new possibilities in terms of performance evaluation, particularly by facilitating data collection on individual and collective performance through various digital sources such as collaborative work platforms, time tracking tools, and project management systems (Kamalaldin & al., 2020; Korsen & Ingvaldsen, 2022; Reibenspiess & al., 2022). This data can be analyzed in real-time to identify trends, strengths, and weaknesses, enabling managers to make informed decisions to optimize organizational performance.

2.2.1 Interactions between Digitalization, HR Governance, and Performance Management

Digitalization has profoundly altered the interactions between performance management, HR governance, and organizational strategy (Saunila & al., 2023; Shaddiq & al., 2023; Sitaniapessy & al., 2021). By enabling faster and more precise data collection and analysis, digital technologies have facilitated the implementation of more effective and results-oriented performance management practices. Additionally, HR governance plays a crucial role in defining performance goals, allocating resources, and evaluating individual and collective performance.

Recent studies have highlighted the importance of HR governance adapted to the challenges of digitalization to maximize the impact of performance management initiatives (Salgado-Criado & Fernández-Aller, 2024; Shaddiq & al., 2023). Robust HR governance can ensure alignment between organizational goals and performance management processes, thereby fostering a culture of sustainable performance (Halid & al., 2022; Uysal, 2013; Warbhuwan, 2018).

Collaboration between HR and information technology departments is also essential for successful integration of digitalization into performance management (Kanungo & al., 2023; Vardarlier, 2020). These synergies enable the development and implementation of systems and technological tools that effectively support performance management processes while ensuring compliance with applicable standards and regulations (Kok, 2023; Selvaraj & Venkatakrishnan, 2023).

2.2.2 Influence of Governance Models on Performance Management Practices

HR governance models are fundamental elements in structuring performance management practices within contemporary organizations (Becker & Smidt, 2016; Grobler & al., 2014; Parker, 2019). HR governance encompasses a complex set of policies, organizational structures, and decision-making processes that shape how employee performance is evaluated, tracked, and managed (Abedini & al., 2023; Suhail & Steen, 2021). Effective HR governance is characterized by principles of transparency, fairness, and objectivity in performance evaluation, thus fostering a culture of excellence and accountability within the organization (Alemayehu, 2022; Gomomo, 2019; Kertati & al., 2023; Warbhuwan, 2018).

Recent studies, such as those conducted by Kaehler (2022) and Kardini & al. (2023), have highlighted the importance of HR governance models focused on collaboration and employee participation to promote effective performance management. These models encourage active employee involvement in the evaluation process, thereby enhancing their engagement and motivation to achieve organizational goals (Gile & al., 2022; Yuliana & Sutrisno, 2023). Furthermore, innovative HR governance,

integrating practices such as the use of advanced analytics, offers new opportunities for more accurate and objective performance assessment, enabling more informed talent management decisions (Atmaja & al., 2022; Kaehler & Grundei, 2018).

It is now evident that the shift towards more strategic and agile HR governance is crucial to address the challenges posed by digitalization and the rapidly evolving organizational environment. Further research, such as that conducted by Ananzeh & al. (2022); Chen & al. (2022); Eilstrup-Sangiovanni & Westerwinter (2022); Lee & Suh (2022); Mansour & al. (2022), is needed to deepen our understanding of the underlying mechanisms and specific effects of governance models on organizational and individual outcomes.

3. Research Conceptual Framework

In this section, we develop the research conceptual framework to analyze the interrelations between digitalization, HR governance, and performance management, highlighting the key dimensions of each domain and constructing a hierarchical structure to integrate them coherently.

Digitalization, as a major transformative force in organizations, encompasses various aspects, including process automation, the use of emerging technologies such as artificial intelligence and the Internet of Things, and the transformation of traditional business models. The works of Chirumalla (2021), Cortellazzo & al. (2019), and Zhang & al. (2024) highlight the impact of digitalization on how work is done, freeing employees from routine tasks and paving the way for new ways of collaboration and innovation.

HR governance plays a crucial role in defining policies, processes, and structures that shape the interactions between employees and the organization. Effective HR governance, as emphasized by Leso & al. (2023) and Shet and Bajpai (2023), ensures alignment of talent management practices with the strategic objectives of the company, thus fostering an organizational culture focused on performance and innovation.

Lastly, performance management is a key element of organizational strategy, aiming to maximize the efficiency of individuals and teams in achieving set goals. Research by Fraccaroli & al. (2024), Ivanov & al. (2019), and Ullrich & al. (2023) highlights the importance of integrating digital technologies into performance management, enabling continuous evaluation and increased responsiveness to employee needs.

In the research conceptual framework, we plan to define the key dimensions of digitalization, HR governance, and performance management, and then develop a hierarchical structure that will allow us to explore the complex interactions between these domains. By integrating HR governance into this framework, we aim to identify specific mechanisms that can contribute to improving organizational performance, while considering the challenges and opportunities posed by digitalization.

3.1 Structuring the Conceptual Framework

The conceptual framework of the study is based on an integrated approach to digitalization, HR governance, and performance management, aiming to understand how these domains interact and mutually influence each other in the organizational context. To achieve this, we propose a structuring into several key dimensions, allowing us to grasp the complexity of the issues related to these domains.

Firstly, the dimension of digitalization encompasses not only the adoption of digital technologies but also their impact on processes, structures, and organizational culture. According to the works of Acciarini & al. (2022), Binner (2022), Saadatmanesh (2023), and Zangiacomì & al. (2020), digitalization can be seen as a holistic process involving a profound transformation of work methods and traditional business models.

Next, HR governance constitutes an essential pillar of the conceptual framework, determining the policies, decision-making processes, and control mechanisms that govern HRM within the organization. Research by Leso & al. (2023) and Shet et Bajpai (2023) highlights the importance of appropriate HR governance to ensure alignment of talent management practices with the strategic objectives of the company.

Finally, performance management focuses on evaluating and improving individual and collective performance to achieve organizational goals. According to the works of Chavez & al. (2022),

Dragičević & Bošnjak (2019), and Wiechmann & al. (2022), performance management in a digital context requires an agile and data-centric approach, promoting continuous feedback and rapid adaptation to changes in the environment.

By integrating these key dimensions, our conceptual framework aims to provide a comprehensive analytical framework for studying the complex interactions between digitalization, HR governance, and performance management, thus offering new perspectives for strategic decision-making and the design of innovative organizational policies.

3.1.1 Definition of Key Dimensions of Digitalization, HR Governance, and Performance Management

In the research conceptual framework, digitalization is defined as the process of integrating digital technologies into all aspects of organizational activity, from HRM to customer service delivery (Hasan & al., 2022; Krajnik & Foszto, 2023; Nissen, 2018; Venumuddala & Kamath, 2023). This dimension encompasses a variety of technologies such as artificial intelligence, data analytics, process automation, and network connectivity, which transform how organizations operate and interact with their environment. Digitalization also offers new opportunities in terms of work flexibility, service customization, and the creation of new business models (Franzè & Pesce, 2024; Hadjielias & al., 2022; Lähteenmäki & al., 2022; Rachinger & al., 2018).

HR governance, on the other hand, refers to the structures, processes, and policies that govern HRM within the organization (Manafi & al., 2019; Prabawati & Nuriyah, 2023; Rizki & Saputra, 2021). This dimension includes aspects such as strategic workforce planning, talent management, compensation and benefits, as well as regulatory compliance. Effective HR governance is essential to ensure alignment of HR practices with organizational goals and to promote a culture of performance and innovation. Moreover, it plays a crucial role in creating an inclusive and equitable work environment, thereby fostering diversity and collaboration within the organization (Gile & al., 2022; Salgado-Criado & Fernández-Aller, 2024).

Performance management is defined as the process by which organizations evaluate, measure, and manage the performance of their employees to achieve organizational goals (Almulaiki, 2023; Al Reeshi, 2023; Faozen & Sandy, 2024). This dimension encompasses activities such as goal setting, performance evaluation, feedback and skill development, as well as reward and recognition of exceptional performance. Effective performance management is crucial for driving employee engagement, enhancing motivation, and facilitating the achievement of organizational goals. Furthermore, it helps identify skill gaps and training needs, thus contributing to employees' continuous professional development and organizational growth (Al Reeshi, 2023; Eliza, 2023; Noordiatmoko & al., 2023; Vaskova Kjulavkovska & al., 2022).

3.1.2 Elaboration of a Hierarchical Structure to Integrate These Dimensions

To integrate these key dimensions, we propose a hierarchical structure that articulates the links between digitalization, HR governance, and performance management at different organizational levels. At the strategic level, digitalization is considered a catalyst for change, influencing how organizations design and implement their HR strategy and performance management system (Kiu & Chan, 2024; Martínez-Morán & al., 2024; Poulouse & al., 2024; Sulaeman & Nurcholidah, 2023). In a context where market competition demands rapid adaptation, companies must align their HR strategy with technological advancements to remain competitive. Thus, digitalization enables companies to innovate in their HR practices, such as remote recruitment and online training, to attract and retain talent in a constantly evolving competitive environment (Al-Omush & al., 2023; Kambur & Yildirim, 2023; Zhao & al., 2024).

At the tactical level, HR governance plays a crucial role in defining policies and processes that support the adoption and effective use of digital technologies in HRM (Al-Alawi & al., 2023; Anayat, 2023; Bhatnagar, 2014; Boselie & al., 2013; Gadzali & al., 2023; Vardarlier, 2020). Strong HR governance ensures regulatory and ethical compliance while fostering innovation and adaptability. Furthermore, it facilitates collaboration among different stakeholders, including executives, managers, and employees, to ensure effective implementation of digitalization initiatives (Arief & al., 2021). Consequently, effective HR governance optimizes HR processes and maximizes the value of digital technologies in talent and performance management.

At the operational level, performance management relies on tools and practices that enable the evaluation and management of individual and collective performances, leveraging the benefits offered by digitalization and HR governance (Leoni & al., 2023; Manuti & de Palma, 2023; Nayeli & George, 2023). By using digital platforms to collect and analyze data on employee performance, organizations can make informed decisions to improve operational efficiency and productivity. Moreover, the transparency and objectivity of performance management processes enhance employee trust and foster a positive work climate, contributing to the achievement of organizational goals.

This hierarchical structure provides a better understanding of the complex interactions between digitalization, HR governance, and performance management, highlighting the challenges and opportunities associated with the adoption and integration of digital technologies in HRM and organizational performance management.

3.2 Integration of HR Governance

The integration of HR governance into the conceptual framework of the study is crucial for digitalization and performance management within organizations. At this stage, we delve into the importance of HR governance in the context of digital transformation and explore the specific mechanisms through which it contributes to enhancing organizational performance.

HR governance plays a fundamental role in the strategic direction of the organization by aligning HR policies and practices with business objectives and the imperatives of digital transformation (Ajayi-Nifise & al., 2024; Blanka & al., 2022; Malan, 2021; Robu & Lazar, 2021). By establishing clear governance structures and effective decision-making processes, companies can ensure judicious use of digital technologies in HRM, fostering innovation, and strengthening competitiveness in the market (Li & al., 2023; Ramos & al., 2022; Szép & al., 2021; Villani & al., 2024).

Furthermore, HR governance is essential to ensure fairness and transparency in talent management and performance management practices (Gomomo, 2019; Schiemann & Ulrich, 2017; Zuma, 2018). By establishing equitable compensation policies, objective evaluation processes, and transparent promotion mechanisms, companies can promote an inclusive work environment and foster employee engagement, resulting in better overall organizational performance (Ghani & al., 2022; Koeswayo & al., 2024; Lu & al., 2023).

Moreover, HR governance promotes regulatory compliance and risk management related to HRM by ensuring compliance with laws and standards in the field of employment and labor (Halid & al., 2022; Hyat-Khan, 2023; Kaehler & Grundei, 2018). By implementing strong governance practices, organizations can minimize legal disputes and regulatory sanctions, contributing to preserving their reputation and credibility in the market (Kandpal & al., 2024; Nandiroh & al., 2023).

In conclusion, the integration of HR governance into the conceptual framework of digitalization and performance management is essential for organizational success in the digital age. By establishing robust governance structures, promoting fairness and transparency, and ensuring regulatory compliance, companies can fully leverage the benefits offered by digital transformation and strengthen their competitive position in the market.

3.2.1 Importance of HR Governance in the Conceptual Framework of the Research

HR governance occupies a central position in the overall strategy of organizations, particularly in a constantly evolving digital environment. It provides essential structure and guidelines for strategic decision-making regarding talent management, organizational development, and change management (Mitra & al., 2019; Ramachandran & al., 2023; Sangu & al., 2024; Turner, 2021). By aligning HR policies and practices with organizational objectives, HR governance ensures effective use of HR and promotes consistency in implementing digital strategies (Kurniawan, 2023; Mahanti, 2021).

In this regard, it is crucial to emphasize the pivotal role played by HR governance in the digital transformation of businesses. Indeed, organizations that strategically integrate HR governance are better prepared to address the challenges of digitalization and seize the resulting opportunities (Bahiroh, 2024; Hirvonen & Majuri, 2020). By investing in innovative HR policies and implementing effective governance processes, companies can not only attract and retain top talent but also enhance employee engagement and foster the development of a performance- and innovation-oriented organizational culture (Leso & al., 2023; Shet & Bajpai, 2023).

HR governance is also a key lever for ensuring fairness and diversity within the organization by implementing policies and processes aimed at promoting inclusion and combating discrimination (Gile & al., 2022; Smith-Meyer, 2022). By fostering an inclusive work environment, HR governance contributes to strengthening employees' sense of belonging and creating more creative and collaborative teams (Kardini & al., 2023).

In conclusion, HR governance plays an essential role in the success of organizations in the era of digitalization. By adopting a strategic approach to HR governance and investing in innovative policies and practices, companies can maximize the value of their HR and enhance their competitiveness in the global market.

3.2.2 Mechanisms of HR Governance to Enhance Organizational Performance

The mechanisms of HR governance play a crucial role in enhancing organizational performance. By adopting a strategic approach to talent management, organizations can identify, recruit, develop, and retain the most competent employees to support their digital transformation (Ajayi-Nifise & al., 2024; Ginting & al., 2023; Pea-Assounga & Sibassaha, 2024). Practices such as strategic workforce planning, employee training and development, and performance management contribute to strengthening competitiveness and sustainability of organizations in a digital context (Guerra & al., 2023; Ismail & al., 2023; Mattajang, 2023; Salvadorinho & Teixeira, 2023).

Strategic workforce planning is essential to ensure that organizations have the necessary skills to address the challenges of digitalization. By anticipating future workforce needs and identifying skill gaps, companies can implement targeted recruitment and development programs to address these gaps (Juhász & al., 2023; Odulaja & al., 2023; Popo-Olanian & al., 2022). Similarly, employee training and development play a crucial role in acquiring new skills and upgrading existing skills to meet the changing market requirements (Chunhui & Jantan, 2023; Di Sabato & Savov, 2023; Leon, 2023).

Performance management is also a key element of HR governance mechanisms to enhance organizational performance. By setting clear and measurable goals, providing regular feedback, and offering development opportunities, managers can help employees reach their full potential and contribute significantly to organizational goals (Efe & al., 2023; Kawiana, 2023; Marrucci & al., 2024). Moreover, effective performance management enables the identification and rewarding of outstanding performance, motivating employees to deliver high-quality work and achieve set goals (Agarwal, 2021; Almulaiki, 2023; Faozen & Sandy, 2024).

In conclusion, the integration of HR governance into the conceptual framework of the study provides an essential strategic framework for effectively managing digitalization and organizational performance. By providing a robust structure and control mechanisms, HR governance enables organizations to maximize the value of their human capital and maintain a competitive advantage in a rapidly evolving digital environment (Bahiroh, 2024; Malan, 2021; Shaddiq & al., 2023).

3.3 Proposal of a Conceptual Model for the Research

To finalize the schema of the research conceptual model, we follow a methodical approach in several steps. First, we identify the key dimensions of the model, namely digitalization, HR governance, and performance management, along with their associated variables. We categorize these variables into explanatory factors for digitalization and HR governance, and variables to be explained for performance management. This initial step allows us to establish a solid foundation for constructing the conceptual model.

Next, we proceed with reducing the number of variables to simplify the relationships in the model, selecting the most relevant and significant variables while ensuring the relevance and robustness of the model. We rely on a comprehensive literature review and similar previous studies to justify this selection, highlighting relevant findings. This step will enable us to streamline the model and focus our analysis on the most significant relationships.

Finally, we describe the various relationships between the factors and their key variables, formulating strong hypotheses based on the literature review and previous studies. These hypotheses are essential for guiding our empirical analysis and interpreting the results rigorously and informedly. This process leads us to create a clear and coherent conceptual model schema, providing a visual representation of the links between dimensions and key variables. This schema will serve as an analytical framework for our study, guiding our empirical analyses and interpretations of the results.

3.3.1 Dimensions of the Conceptual Model and Their Key Variables

In this section, we identify and describe the key dimensions of the proposed conceptual model, along with their associated variables. These dimensions represent essential aspects of digitization, HR governance, and performance management in the organizational context.

❖ Digitalization

Digitalization represents the first major axis of the conceptual model. It encompasses the adoption of digital technologies and their impact on various aspects of the organization. The key variables included in this dimension are as follows:

- **Adoption of digital technologies**

This factor examines the extent to which an organization integrates digital technologies such as artificial intelligence, process automation, and data analytics. The work of Acciarini & al. (2022) and Binner (2022) provides insights into trends and challenges related to this adoption.

- **Impact on processes**

This variable explores how digitalization transforms operational processes within the organization. Saadatmanesh's research (2023) offers insights into the new opportunities and challenges arising from this transformation.

- **Impact on structures**

This variable evaluates how digitalization influences organizational structure, including hierarchy, communication, and decision-making. The work of Zangiacomini & al. (2020) highlights the structural changes induced by digitalization.

- **Impact on organizational culture:**

This variable examines how digitalization shapes corporate culture, including values, norms, and behaviors. Saadatmanesh's research (2023) provides insights into the cultural adaptation necessary for digital transformation.

❖ HR Governance

HR governance represents the second important axis of the conceptual model. It encompasses policies, processes, and control mechanisms related to HRM. The key variables associated with this dimension are as follows:

- **HR policies:**

This variable examines the policies and guidelines established by the organization to manage its HR. The work of Leso & al. (2023) offers perspectives on the importance of effective HR policies to support organizational goals.

- **HR processes:**

This variable evaluates the operational processes involved in the day-to-day management of HR, including recruitment, training, and compensation. The research of Shet and Bajpai (2023) provides insights into optimizing HR processes to improve organizational performance.

- **Alignment** of talent management practices with strategic objectives:

This variable examines the extent to which talent management practices are aligned with the organization's strategic objectives. The work of Leso & al. (2023) emphasizes the importance of this alignment to foster growth and innovation.

❖ Performance Management

Performance management represents the variable to be explained in the conceptual model. It focuses on the evaluation and improvement of individual and collective performance to achieve organizational goals. The key variables associated with this dimension are as follows:

- **Goal setting:**

This variable examines how goals are defined and communicated to employees. The work of Ivanov & al. (2019) provides perspectives on the importance of this practice in guiding individual efforts towards organizational goals.

- **Performance evaluation:**

This variable assesses the methods used to evaluate employee performance. The research of Ullrich & al. (2023) offers insights into effective performance evaluation approaches in a digital context.

- **Feedback and skill development:**

This variable examines how feedback is provided to employees to help improve their performance, as well as the opportunities for professional development offered. The work of Fraccaroli & al. (2024) provides perspectives on the impact of feedback and skill development on organizational performance. By integrating these dimensions and key variables, the conceptual model provides a comprehensive analytical framework for studying the interactions between digitization, HR governance, and performance management in the organizational context. Table 1 below presents a summary of the dimensions and their key variables, thus providing an overview of the dimensions explored in the research conceptual framework.

Table 1: Dimension & Variables of the Conceptual Model for Research

Factor	Key Variable	Source
Explanatory Dimensions & Variables		
Digitalization	<ul style="list-style-type: none"> • Adoption of Digital Technologies • Impact on Processes • Impact on Structures • Impact on Organizational Culture 	<ul style="list-style-type: none"> • Acciarini & al. (2022) ; Binner (2022) ; Hasan & al. (2022) ; Venumuddala et Kamath (2023) • Chirumalla (2021) ; Franzè et Pesce (2024) ; Saadatmanesh (2023) ; Zhang & al. (2024) • Binner (2022) ; Cortellazzo & al. (2019) ; Hadjielias & al. (2022) ; Zangiacomì & al. (2020) • Franzè et Pesce (2024) ; Hadjielias & al. (2022) ; Rachinger & al. (2018) ; Saadatmanesh (2023)
HR Governance	<ul style="list-style-type: none"> • HR Policies • HR Processes • Alignment of Talent Management Practices with Strategic Objectives 	<ul style="list-style-type: none"> • Leso & al. (2023) ; Manafi & al. (2019) ; Rizki et Saputra (2021) ; Shet et Bajpai (2023) • Manafi & al. (2019) ; Prabawati et Nuriyah (2023) ; Rizki et Saputra (2021) ; Shet et Bajpai (2023) • Gile & al. (2022) ; Leso & al. (2023) ; Salgado-Criado et Fernández-Aller (2024) ; Shet et Bajpai (2023)
Outcome Dimension & Variables		
Performance Management	<ul style="list-style-type: none"> • Goal Setting • Performance Evaluation • Feedback and Skills Development 	<ul style="list-style-type: none"> • Dragičević et Bošnjak (2019) ; Ivanov & al. (2019) ; Ullrich & al. (2023) ; Wiechmann & al. (2022) • Al Reeshi (2023) ; Almulaiki (2023) ; Faozen et Sandy (2024) ; Ullrich & al. (2023) • Dragičević et Bošnjak (2019) ; Fraccaroli & al. (2024) ; Wiechmann & al. (2022)

3.3.2 Identification of potential relationships between the three types of dimensions and their key variables

In this step, we explore potential relationships between the three key dimensions of our conceptual model: Digitalization, HR Governance, and Performance Management, as well as their respective key variables. First, we examine the impact of key variables of Digitalization on HR Governance. We analyze in detail the adoption of digital technologies, the impact on processes, the impact on

structures, and the impact on organizational culture, highlighting their potential influence on HR policies, HR processes, and the alignment of talent management practices with strategic objectives. We then formulate specific sub-hypotheses for each explanatory variable, reflecting their impact on HR governance. Finally, we propose a central hypothesis summarizing the overall impact of Digitalization on HR Governance.

Next, we focus on identifying relationships between key variables of HR Governance and Performance Management. We examine in detail HR policies, HR processes, and the alignment of talent management practices with strategic objectives, highlighting their potential influence on goal-setting, performance evaluation, and feedback and skill development. Specific sub-hypotheses will also be formulated for each explanatory variable, reflecting their impact on performance management. Finally, we will propose a central hypothesis summarizing the overall impact of HR Governance on Performance Management.

Lastly, we examine the impact of key variables of Digitalization on Performance Management. We analyze in detail the adoption of digital technologies, the impact on processes, the impact on structures, and the impact on organizational culture, highlighting their potential influence on goal-setting, performance evaluation, and feedback and skill development. Specific sub-hypotheses will also be formulated for each explanatory variable, reflecting their impact on performance management. Finally, a central hypothesis summarizing the overall impact of Digitalization on Performance Management will be proposed.

❖ Impact of Digitalization on HR Governance

• Adoption of Digital Technologies → HR Governance

The increasing adoption of digital technologies in organizations can have a significant impact on HR governance. Digital technologies such as HRIS systems can facilitate the collection, analysis, and management of employee data, which can influence HR policies and talent management processes (Bahiroh, 2024; Salgado-Criado & Fernández-Aller, 2024; Shaddiq & al., 2023; Suryanto & al., 2021). Thus, we formulate the following hypothesis:

Hypothesis 1a: The adoption of digital technologies has a positive impact on HR policies and talent management processes.

• Impact on Processes → HR Governance

Changes induced by digitalization can transform HR processes by making them more efficient and agile. For example, automating administrative processes can free up time to focus on more strategic tasks such as talent development (Ruiz & al., 2024; Shaddiq & al., 2023; Vardarlier, 2020; Zavyalova & al., 2022). Thus, we posit the following hypothesis:

Hypothesis 1b: The positive impact of digital technologies on organizational processes results in improved efficiency of HR processes.

• Impact on Structures → HR Governance

Digitalization can also influence organizational structure by promoting the creation of more fluid communication networks and enabling greater organizational agility (Bhatnagar, 2014; Halid & al., 2022; Mahanti, 2021; Parker, 2019; Ulrich, 2017). These structural changes can affect how HR policies are formulated and implemented. Therefore, we postulate the following hypothesis:

Hypothesis 1c: Changes induced by digitalization in organizational structures have a positive impact on the adaptation of HR policies to the changing needs of the organization.

• Impact on Organizational Culture → HR Governance

Digitalization can shape organizational culture by fostering innovation, collaboration, and agility (Abedini & al., 2023; Halid & al., 2022; Kurniawan, 2023; Salgado-Criado & Fernández-Aller, 2024). A digitally oriented organizational culture may encourage the adoption of more modern and talent-focused HR practices. Thus, we formulate the following hypothesis:

Hypothesis 1d: A digital-friendly organizational culture positively influences the alignment of talent management practices with strategic objectives.

Finally, we propose the following central hypothesis summarizing the overall impact of the digitalization dimension on the HR governance dimension:

Central Hypothesis 1: Digitalization, by positively influencing the adoption of digital technologies, processes, structures, and organizational culture, promotes more effective HR governance aligned with the organization's strategic objectives.

❖ Impact of HR Governance on Performance Management

• HR Policies → HR Performance Management

HR policies encompass the guidelines and strategies established by an organization to manage its HR. They shape personnel management practices such as recruitment, compensation, and professional development. Research indicates that well-designed HR policies are associated with improved organizational performance (Alemayehu, 2022; Arief & al., 2021; Becker & Smidt, 2016; Bhatnagar, 2014; Rizki & Saputra, 2021). Therefore, we posit the following hypothesis:

Hypothesis 2a: Effective HR policies are positively associated with improvements in organizational performance management.

• HR Processes → HR Performance Management

HR processes refer to the methods and procedures used to manage HR activities, such as workforce planning, training, and development. Previous research shows that well-structured and efficient HR processes can enhance employee productivity and performance (Gomomo, 2019; Grobler & al., 2014; Kardini & al., 2023; Parker, 2019). For this reason, we formulate the following hypothesis:

Hypothesis 2b: Optimized HR processes are positively associated with improvements in organizational performance management.

• Alignment of Talent Management Practices with Strategic Objectives → HR Performance Management

Aligning talent management practices with the strategic objectives of the organization is crucial to ensure that HR efforts support the overall goals of the company. Research suggests that this alignment is a key determinant of organizational performance (Bahiroh, 2024; Bhatnagar, 2014; Gomomo, 2019; Shaddiq & al., 2023; Yuliana & Sutrisno, 2023). Therefore, we posit the following hypothesis:

Hypothesis 2c: Effective alignment of talent management practices with strategic objectives is positively associated with improvements in organizational performance management. Finally, our central hypothesis regarding the overall impact of the HR governance dimension on performance management is as follows:

Central Hypothesis 2: Effective HR governance, characterized by robust HR policies, optimized HR processes, and alignment of talent management practices with strategic objectives, is positively associated with overall improvements in organizational performance management.

❖ Impact of Digitalization on Performance Management

• Adoption of Digital Technologies → HR Performance Management

The increasing adoption of digital technologies within organizations can have a significant impact on performance management. Digital tools can facilitate the collection of data on individual performance, automate goal tracking, and enable continuous performance evaluation (Eliza, 2023; Ruiz & al., 2024; Strohmeier, 2020; Vardarlier, 2020). Therefore, we formulate the following hypothesis:

Hypothesis 3a: Increased adoption of digital technologies is positively associated with improvements in organizational performance management.

• Impact on Processes → HR Performance Management

The changes induced by the digitalization of organizational processes can directly influence how performance is managed. More efficient and agile processes can enable better goal identification, more precise performance evaluation, and faster feedback (Dreković & al., 2023; Eliza, 2023; Kanungo & al., 2023; Ruiz & al., 2024; Zehir & al., 2020). Consequently, we formulate the following hypothesis:

Hypothesis 3b: A positive impact on processes induced by digitalization is associated with improvements in organizational performance management.

• Impact on Organizational Structures → HR Performance Management

Digitalization can also impact organizational structure, influencing how responsibilities are defined, information is shared, and decisions are made. An adapted organizational structure can promote more effective performance management by facilitating communication, collaboration, and coordination (Shaddiq & al., 2023; Zhao & al., 2024). Thus, we formulate the following hypothesis:

Hypothesis 3c: A positive impact on organizational structures induced by digitalization is associated with improvements in organizational performance management.

• Impact on Organizational Culture → HR Performance Management

Digitalization can also influence organizational culture by changing values, beliefs, and behaviors within the organization. A culture that values innovation, transparency, and accountability can

promote performance management focused on excellence and continuous improvement (Al-Alawi & al., 2023; Dreković & al., 2023; Firdaus & Ambarwati, 2024; Gadzali & al., 2023; Guerra & al., 2023; Halid & al., 2022). Thus, we formulate the following hypothesis:

Hypothesis 3d: A positive impact on organizational culture induced by digitalization is associated with improvements in organizational performance management. Finally, our central hypothesis regarding the overall impact of the digitalization dimension on performance management is as follows:

Central Hypothesis 3: Digitalization, by positively influencing the adoption of digital technologies, processes, structures, and organizational culture, is associated with overall improvements in organizational performance management.

3.1.1 Conceptual Model Diagram of the Research

The conceptual model diagram proposed in this research aims to explore the interrelations between digitalization, HR governance, and performance management. This model identifies key dimensions and their associated variables, thus providing an analytical framework for studying the impact of these areas on organizational performance. Following a methodical multi-step approach, this diagram offers a visual representation of the links between dimensions and key variables, thus guiding our empirical analysis and interpretations of the results. Figure 1 illustrates this conceptual model graphically, providing an overview of the relationships explored in our research.

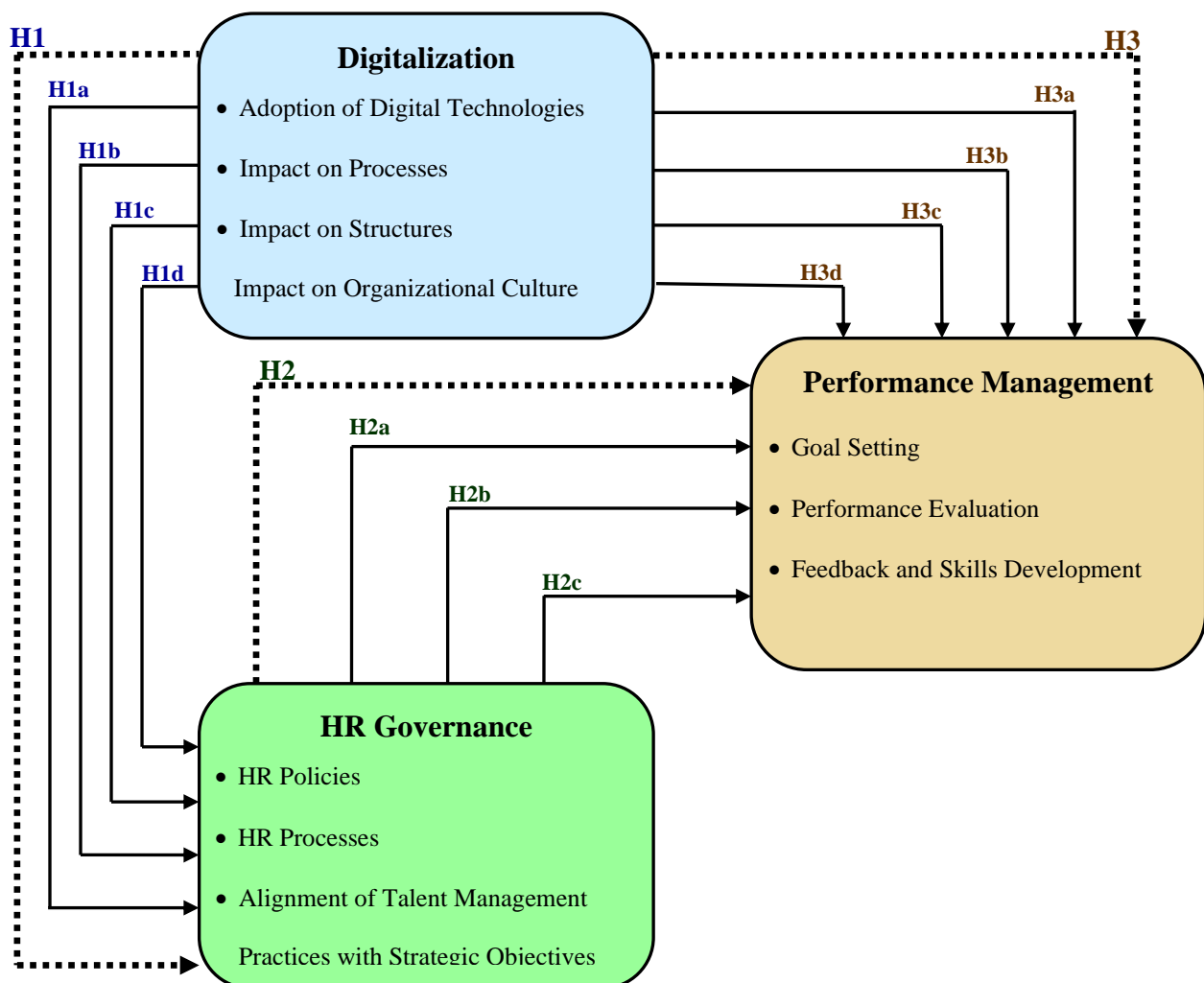


Figure 1: Research Conceptual Model.

4. Conclusion

This research has proposed a conceptual model aimed at exploring the interrelations between digitization, HR governance, and performance management in the organizational context. Following a systematic multi-step approach, the model identifies key dimensions and their associated variables, providing an analytical framework for studying the impact of these areas on organizational performance. The main dimensions include digitization, encompassing the adoption of digital technologies and their impact on processes, structures, and organizational culture, as well as HR governance, which includes policies, processes, and alignment of talent management practices with strategic objectives. Finally, performance management focuses on goal setting, performance evaluation, and feedback and skill development (Acciarini & al., 2022; Ivanov & al., 2019; Leso & al., 2023).

A critical analysis of the conceptual model reveals its robustness in capturing the complex dynamics between digitization, HR governance, and performance management. By integrating findings from previous research and drawing on a thorough literature review, the model offers a solid foundation for understanding how these dimensions interact and influence organizational performance. However, it is important to note some limitations of this conceptual approach.

Among the limitations, generalization of results may be limited due to differences between organizational contexts and sector-specific specificities. Furthermore, while the conceptual model provides a holistic representation of the relationships between digitization, HR governance, and performance management, it may not capture all the nuances and possible interactions in complex organizational environments (Fraccaroli & al., 2024; Ullrich & al., 2023).

Despite these limitations, this research makes several important contributions to both academic and practical literature. By providing an analytical framework for studying the interrelations between digitization, HR governance, and performance management, the conceptual model offers fresh and in-depth insights into how these dimensions shape organizational performance. These contributions enrich our understanding of the challenges and opportunities related to digital transformation and HRM in a rapidly evolving world.

The managerial implications of this research are significant for HR practitioners and organizational decision-makers. By better understanding the links between digitization, HR governance, and performance management, managers can develop more effective strategies to adapt their HR practices to the changing requirements of the organizational environment. For example, by investing in innovative digital technologies and aligning HR policies and processes with the organization's strategic objectives, companies can enhance their ability to achieve higher levels of performance (Ivanov & al., 2019).

From a scientific standpoint, this research paves the way for future studies aiming to deepen our understanding of the underlying mechanisms behind the relationships between digitization, HR governance, and performance management. Future longitudinal and comparative research could explore how these relationships evolve over time and vary across organizational contexts. Additionally, in-depth qualitative studies could provide further insights into the experiences and perceptions of key stakeholders involved in these processes.

In conclusion, the proposed conceptual model offers a valuable analytical framework for understanding the complex interactions between digitization, HR governance, and performance management in the organizational context. While it presents some limitations, it constitutes a significant contribution to academic literature and offers important implications for managerial practice. By continuing to explore these dimensions and their interrelationships, we can deepen our understanding of how organizations can adapt and thrive in an ever-changing environment.

REFERENCES

1. Abedini, N., Falsafi Fard, M., Bakhshayesh Ardestani, S., Alaei, N., & Askari Masuleh, S. (2023). Human Resource Governance in Crisis Situations: Strategies for Effective Management. *International Journal of Innovation Management and Organizational Behavior (IJIMOB)*, 3(1), 114-121. <https://doi.org/10.61838/kman.ijimob.3.1.14>
2. Acciarini, C., Borelli, F., Capo, F., Cappa, F., & Sarrocco, C. (2022). Can digitalization favour the emergence of innovative and sustainable business models? A qualitative exploration in the automotive sector. *Journal of Strategy and Management*, 15(3), 335-352. <https://doi.org/10.1108/JSMA-02-2021-0033>

3. Agarwal, A. (2021). Investigating design targets for effective performance management system: an application of balance scorecard using QFD. *Journal of advances in management research*, 18(3), 353-367. <https://doi.org/10.1108/JAMR-05-2020-0075>
4. Ajayi-Nifise, A. O., Odeyemi, O., Mhlongo, N. Z., Ibeh, C. V., Elufioye, O. A., & Falaiye, T. (2024). Digital transformation in banking: The HR perspective on managing change and cultivating digital talent. *International Journal of Science and Research Archive*, 11(1), 1452-1459. <https://doi.org/10.30574/ijrsra.2024.11.1.0237>
5. Al Reeshi, B. O. A. (2023). Improving the Effectiveness of Employee Performance Management Process: A Managerial Values Approach. *International Journal of Information*, 12(2). <https://doi.org/10.30534/ijiscs/2023/011222023>
6. Al-Alawi, A. I., Messaadia, M., Mehrotra, A., Sanosi, S. K., Elias, H., & Althawadi, A. H. (2023). Digital transformation adoption in human resources management during COVID-19. *Arab Gulf Journal of Scientific Research*, 41(4), 446-461. <https://doi.org/10.1108/AGJSR-05-2022-0069>
7. AlDhaheeri, H., Hilmi, M. F., Abudaqa, A., Alzahmi, R. A., & Ahmed, G. (2023). The relationship between HRM practices, innovation, and employee productivity in UAE public sector: a structural equation modelling approach. *International Journal of Process Management and Benchmarking*, 13(2), 157-176. <https://doi.org/10.1504/IJPMB.2023.128471>
8. Alemayehu, M. (2022). *The Effect Of Human Resource Management Practices On The Organizational Performance The Case Of Yekabdi Agro Processing PLC* (Doctoral dissertation, ST. Mary's University). <http://hdl.handle.net/123456789/7175>
9. Almulaiki, W. A. (2023). The impact of performance management on employee performance. *Saudi Journal of Business and Management Studies*, 8(2), 22-27. doi: 10.36348/sjbms.2023.v08i02.002
10. Alobidyeen, B., Al-Edainat, S., Al-Shabatat, S., & Al-Shabatat, S. (2022). Digitalization and its Impact on Employee's Performance: A Case Study on Greater Tafila Municipality. *International Journal of Business and Administrative Studies*, 8(1), 33-47. <https://dx.doi.org/10.20469/ijbas.8.10004-1>
11. Al-Omush, A., Momany, M. T., Hannon, A., & Anwar, M. (2023). Digitalization and Sustainable Competitive Performance in Small-Medium Enterprises: A Moderation Mediation Model. *Sustainability*, 15(21), 15668. <https://doi.org/10.3390/su152115668>
12. Alqarni, K., Agina, M. F., Khairy, H. A., Al-Romeedy, B. S., Farrag, D. A., & Abdallah, R. M. (2023). The Effect of Electronic Human Resource Management Systems on Sustainable Competitive Advantages: The Roles of Sustainable Innovation and Organizational Agility. *Sustainability*, 15(23), 16382. <https://doi.org/10.3390/su152316382>
13. Ammirato, S., Felicetti, A. M., Linzalone, R., Corvello, V., & Kumar, S. (2023). Still our most important asset: A systematic review on human resource management in the midst of the fourth industrial revolution. *Journal of Innovation & Knowledge*, 8(3), 100403. <https://doi.org/10.1016/j.jik.2023.100403>
14. Ananzeh, H., Al Amosh, H., & Albitar, K. (2022). The effect of corporate governance quality and its mechanisms on firm philanthropic donations: evidence from the UK. *International Journal of Accounting & Information Management*, 30(4), 477-501. <https://doi.org/10.1108/IJAIM-12-2021-0248>
15. Anayat, S. (2023). Human resources management after industry 4.0: Blending AI and HRM. In *Strategic Human Resource Management in the Hospitality Industry: A Digitalized Economic Paradigm* (pp. 97-115). IGI Global. doi: 10.4018/978-1-6684-7494-5.ch005
16. Arief, A. S., Pattiasina, P. J., & Remus, S. P. (2021). Relevance of human resource management on small business objective in digital era: A critical review of research evidence. *International Journal of Social Sciences and Humanities*, 5(2), 79-91. <https://doi.org/10.29332/ijssh.v5n2.1167>
17. Atmaja, D. S., Fachrurazi, F., Abdullah, A., Fauziah, F., Zaroni, A. N., & Yusuf, M. (2022). Actualization Of Performance Management Models For The Development Of Human Resources Quality, Economic Potential, And Financial Governance Policy In Indonesia Ministry Of Education.
18. Bahiroh, E., & Imron, A. (2024). Innovative Human Resource Management Strategies in the Era of Digital Transformation. *Management Studies and Business Journal (Productivity)*, 1(2), 154-162. <https://doi.org/10.62207/6wnrgj39>
19. Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99-120. doi:10.1177/014920639101700108
20. Becker, K., & Smidt, M. (2016). A risk perspective on human resource management: A review and directions for future research. *Human Resource Management Review*, 26(2), 149-165. <https://doi.org/10.1016/j.hrmr.2015.12.001>
21. Bhatnagar, D. (2014). Criticality of Human Resource Processes in Indian Banking Industry. *International Journal of Business Management*, 1(1), 85-100.
22. Binner, H. F. (2022). *Holistic Business Model Transformation: Systematic Process Digitization with the Support of the MITO Method Tool*. Springer Nature.
23. Bischoff, L., Ferrer-Serrano, M., Ogando-Vidal, A., & Soto-Rey, A. (2023). Examining the Role of Technology Transfer on Digitalization: Consequences and Challenges. In *Management for Digital Transformation* (pp. 27-59). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-031-42060-3_2
24. Blanka, C., Krumay, B., & Rueckel, D. (2022). The interplay of digital transformation and employee competency: A design science approach. *Technological Forecasting and Social Change*, 178, 121575. <https://doi.org/10.1016/j.techfore.2022.121575>

25. Boiko, J., Vedernikov, M., Zelena, M., Volianska-Savchuk, L., & Bazaliyska, N. (2023). Formation of Innovative Model of Personnel Management on the Basis of Digitalization in the COVID-19 Pandemic. *Management and Production Engineering Review*, 14(2), 49-60. doi: 10.24425/mper.2023.146022
26. Boselie, P., Paauwe, J., & Farndale, E. (2013). The contribution of HRM to fairness, social legitimacy and public value: Human resource governance and risk management in seven leading multinational companies. In *Managing social issues*, 238-257. Edward Elgar Publishing. <https://doi.org/10.4337/9781781006962.00023>
27. Chavez, Z., Hauge, J. B., & Bellgran, M. (2022). Industry 4.0, transition or addition in SMEs? A systematic literature review on digitalization for deviation management. *The International Journal of Advanced Manufacturing Technology*, 1-20. <https://doi.org/10.1007/s00170-021-08253-2>
28. Chen, L., Tong, T. W., Tang, S., & Han, N. (2022). Governance and design of digital platforms: A review and future research directions on a meta-organization. *Journal of management*, 48(1), 147-184. <https://doi.org/10.1177/01492063211045023>
29. 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. <https://doi.org/10.30525/2256-0742/2022-8-3-210-219>
30. Chirumalla, K. (2021). Building digitally-enabled process innovation in the process industries: A dynamic capabilities approach. *Technovation*, 105, 102256. doi:10.1016/j.technovation.2021.102256
31. Chunhui, C., & Jantan, A. H. B. (2023). Research on the Relationship between Enterprise Human Resource Training and Employee Job Performance. *Journal of International Business and Management*, 6(8), 01-12. <https://doi.org/10.37227/JIBM-2023-07-6197>
32. Colbert, B. A. (2004). The Complex Resource-Based View: Implications for Theory and Practice in Strategic Human Resource Management. *Academy of Management Review*, 29(3), 341-358. doi:10.5465/amr.2004.13670987
33. Cortellazzo, L., Bruni, E., & Zampieri, R. (2019). The Role of Leadership in a Digitalized World: A Review. *Frontiers in Psychology*, 10. doi:10.3389/fpsyg.2019.01938
34. da Silva, L. B. P., Soltovski, R., Pontes, J., Treinta, F. T., Leitão, P., Mosconi, E., ... & Yoshino, R. T. (2022). Human resources management 4.0: Literature review and trends. *Computers & Industrial Engineering*, 168, 108111. <https://doi.org/10.1016/j.cie.2022.108111>
35. Danescu, E. (2020). Taxing intangible assets: issues and challenges for a digital Europe. *Internet Histories*, 4(2), 196-216. <https://doi.org/10.1080/24701475.2020.1749806>
36. Delery, J. E., & Doty, D. H. (1996). Modes of theorizing in strategic human resource management: Tests of universalistic, contingency, and configurational performance predictions. *Academy of management Journal*, 39(4), 802-835. <https://doi.org/10.5465/256713>
37. Di Prima, C., & Ferraris, A. (2023). Rethinking the HR Role: How Digital Transformation is Changing HR Departments. In *The International Research & Innovation Forum*, 641-648. Cham: Springer International Publishing. https://doi.org/10.1007/978-3-031-44721-1_48
38. Di Sabato, V., & Savov, R. (2023). Training as a facilitator for Industry 4.0. *Revista de Gestão*. <https://doi.org/10.1108/REG-12-2021-0208>
39. Dragičević, Z., & Bošnjak, S. (2019). Agile architecture in the digital era: Trends and practices. *Strategic Management*, 24(2), 12-33. <https://doi.org/10.5937/StraMan1902011D>
40. Drekočić, E., Radosavljević, M., & Teofilović, Ž. (2023). HR Practices Through the Lens of Technology and Digital Transformation. *Economic Themes*, 61(4), 541-565. DOI 10.2478/ethemes-2023-0028
41. Efe, A. (2023). A Discussion On Problems And Solutions Of Innovative Performance Management In The Public Service And Government. *Uluslararası Akademik Yönetim Bilimleri Dergisi*, 9(13), 100-126. <https://doi.org/10.51947/yonbil.1247897>
42. Eilstrup-Sangiovanni, M., & Westerwinter, O. (2022). The global governance complexity cube: Varieties of institutional complexity in global governance. *The Review of International Organizations*, 17(2), 233-262. <https://doi.org/10.1007/s11558-021-09449-7>
43. Eliza, E. (2023). Human Resource Management Strategies to Improve Performance in the Digital Era. *Implikasi: Jurnal Manajemen Sumber Daya Manusia*, 1(2), 132-139. <https://doi.org/10.56457/implikasi.v1i2.494>
44. Faozen, F., & Sandy, S. R. O. (2024). Performance Management: A New Approach in Performance Management. In *Human Resource Management-An Update*. IntechOpen. doi: 10.5772/intechopen.1002501
45. Fernandez, V., & Gallardo-Gallardo, E. (2020). Tackling the HR digitalization challenge: key factors and barriers to HR analytics adoption. *Competitiveness Review: An International Business Journal*, 31(1), 162-187. doi:10.1108/cr-12-2019-0163
46. Firdaus, F., & Ambarwati, R. (2024). Challenges and Opportunities Management Human Resources in Industry 4.0 Focuses on Digital Skills Syamsudinnoor International Banjarmasin Airport, South Kalimantan. *International Journal of Economics (IJEC)*, 3(1), 470-479. <https://doi.org/10.55299/ijec.v3i1.812>
47. Fraccaroli, F., Zaniboni, S., & Truxillo, D. M. (2024). Challenges in the New Economy: A New Era for Work Design. *Annual Review of Organizational Psychology and Organizational Behavior*, 11, 307-335. <https://doi.org/10.1146/annurev-orgpsych-081722-053704>

48. Franzè, C., & Pesce, D. (2024). Revolutionizing manufacturing: how digital technologies and digital industrial platforms drive business model transformation. In *Handbook on Digital Platforms and Business Ecosystems in Manufacturing* (pp. 10-25). Edward Elgar Publishing. <https://doi.org/10.4337/9781035301003.00007>
49. Gadzali, S. S., Gazalin, J., Sutrisno, S., Prasetya, Y. B., & Almaududi Ausat, A. M. (2023). Human Resource Management Strategy in Organisational Digital Transformation. *Jurnal Minfo Polgan*, 12(1), 760-770. <https://doi.org/10.33395/jmp.v12i1.12508>
50. Gao, X., Wang, L., Lu, L., & Wu, W. (2024). The influence of bootleg innovation on individual innovation performance: The mediating effect of cognitive flexibility and the moderating effect of leadership's emotional intelligence. *Plos one*, 19(2), e0296782.
51. Ghani, B., Zada, M., Memon, K. R., Ullah, R., Khattak, A., Han, H., ... & Araya-Castillo, L. (2022). Challenges and strategies for employee retention in the hospitality industry: A review. *Sustainability*, 14(5), 2885. <https://doi.org/10.3390/su14052885>
52. Gilch, P. M., & Sieweke, J. (2021). Recruiting digital talent: The strategic role of recruitment in organisations' digital transformation. *German Journal of Human Resource Management*, 35(1), 53-82. <https://doi.org/10.1177/2397002220952734>
53. Gile, P. P., Van De Klundert, J., & Buljac-Samardzic, M. (2022). Human resource management in Ethiopian public hospitals. *BMC health services research*, 22(1), 763. <https://doi.org/10.1186/s12913-022-08046-7>
54. Ginting, S., Diantoro, K., Cindrakasih, R. R., & Mubarak, R. (2023). The Impact of Digital Transformation on Talent Recruitment Strategies in Modern Human Resource Management. *Jurnal Minfo Polgan*, 12(2), 2833-2840. <https://doi.org/10.33395/jmp.v12i2.13410>
- Gomomo, J. A. (2019). A strategic HRM framework for improving corporate governance in a municipal environment. PhD thesis.
55. Grobler, A., Bezuidenhout, M. L., & Hyra, A. (2014). Governance and HR: the development of a framework for South African organisations. *Journal of Contemporary Management*, 11(1), 164-184. <https://hdl.handle.net/10520/EJC156372>
56. Guerra, J. M. M., Danvila-del-Valle, I., & Méndez-Suárez, M. (2023). The impact of digital transformation on talent management. *Technological Forecasting and Social Change*, 188, 122291. <https://doi.org/10.1016/j.techfore.2022.122291>
57. Guzmán-Ortiz, C. V., Navarro-Acosta, N. G., Florez-Garcia, W., & Vicente-Ramos, W. (2020). Impact of digital transformation on the individual job performance of insurance companies in Peru. *International Journal of Data and Network Science*, 4(4), 337-346. doi:10.5267/j.ijdns.2020.9.005
58. Hadjielias, E., Christofi, M., Christou, P., & Drotarova, M. H. (2022). Digitalization, agility, and customer value in tourism. *Technological Forecasting and Social Change*, 175, 121334. <https://doi.org/10.1016/j.techfore.2021.121334>
59. Halid, H., Halim, S. N. A., & Ravesangar, K. (2022). Human resource management practices in the digital era. In *Technological Challenges: The Human Side of the Digital Age* (pp. 109-158). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-030-98040-5_5
60. Hasan, Z., Vaz, D., Athota, V. S., Désiré, S. S. M., & Pereira, V. (2022). Can Artificial Intelligence (AI) Manage Behavioural Biases Among Financial Planners?. *Journal of Global Information Management (JGIM)*, 31(2), 1-18.
61. Hirvonen, J., & Majuri, M. (2020). Digital capabilities in manufacturing SMEs. *Procedia Manufacturing*, 51, 1283-1289. <https://doi.org/10.1016/j.promfg.2020.10.179>
62. Hyat-Khan, S. (2023). 3 Human resources: Endogenous political risk. *Socio-Political Risk Management: Assessing and Managing Global Insecurity*, 4, 35.
63. Ismail, A., Hidajat, T., Dora, Y. M., Prasatia, F. E., & Pranadani, A. (2023). *Leading the Digital Transformation: Evidence from Indonesia*. Asadel Publisher.
64. Ivanov, D., Tsipoulanidis, A., Schönberger, J., Ivanov, D., Tsipoulanidis, A., & Schönberger, J. (2019). Digital supply chain, smart operations and industry 4.0. *Global Supply Chain and Operations Management: A Decision-Oriented Introduction to the Creation of Value*, 481-526. https://doi.org/10.1007/978-3-319-94313-8_16
65. Juhász, T., Horváth-Csikós, G., & Gáspár, T. (2023). Gap analysis of future employee and employer on soft skills. *Human Systems Management*, 42(5), 527-542. doi: 10.3233/HSM-220161
66. Kadak, T., & Laitinen, E. K. (2023). How different are performance management systems? Empirical typology of performance management systems. *Journal of Business Economics and Management*, 24(2), 368-386. <https://doi.org/10.3846/jbem.2023.19248>
67. Kaehler, B. (2022). The Complementary Management Model. In *Complementary Management: A Practice-driven Model of People Management and Leadership in Organizations*, 51-123. Cham: Springer International Publishing. https://doi.org/10.1007/978-3-030-98163-1_2
68. Kaehler, B., & Grundei, J. (2018). HR Governance as a Part of the Corporate Governance Concept. *SpringerBriefs in Business*, 27-50. doi:10.1007/978-3-319-94526-2_3
69. Kamalaldin, A., Linde, L., Sjödin, D., & Parida, V. (2020). Transforming provider-customer relationships in digital servitization: A relational view on digitalization. *Industrial Marketing Management*, 89, 306-325. <https://doi.org/10.1016/j.indmarman.2020.02.004>

70. Kamble, S. S., Gunasekaran, A., Ghadge, A., & Raut, R. (2020). A performance measurement system for industry 4.0 enabled smart manufacturing system in SMMEs-A review and empirical investigation. *International journal of production economics*, 229, 107853. <https://doi.org/10.1016/j.ijpe.2020.107853>
71. Kambur, E., & Yildirim, T. (2023). From traditional to smart human resources management. *International Journal of Manpower*, 44(3), 422-452. <https://doi.org/10.1108/IJM-10-2021-0622>
72. Kandpal, V., Jaswal, A., Santibanez Gonzalez, E. D., & Agarwal, N. (2024). Sustainable Financing for ESG Practices. In *Sustainable Energy Transition: Circular Economy and Sustainable Financing for Environmental, Social and Governance (ESG) Practices*, 167-200. Cham: Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-52943-6_5
73. Kanungo, D., Sahu, K., Malla Jogarao, D. K. S., Kumar, T. K., & Nagra, A. (2023). Evolution Towards Greater Digitalization in HR Procedures. *Journal of Pharmaceutical Negative Results*, 1597-1602. <https://doi.org/10.47750/pnr.2023.14.03.210>
74. Kardini, N. L., Elshifa, A., Adiawaty, S., & Wijayanti, T. C. (2023). The Role of Quality Human Resources in Developing Missions of Future Universities in Indonesian Higher Education. *Munaddhomah: Jurnal Manajemen Pendidikan Islam*, 4(1), 49-59. <https://doi.org/10.31538/munaddhomah.v4i1.342>
75. Kawiana, I. G. P. (2023). Utilization of Information and Communication Technology in Performance Management: For a Better Organization. *Neo Journal of economy and social humanities*, 2(3), 186-193. <https://doi.org/10.56403/nejesh.v2i3.126>
76. Kertati, I., Jenita, J., & Mee, L. C. (2023). Synergy Of Human Resources Proficiency With Financial Management As A Policy In Guaranteeing The Quality Of Government Welfare. *Multicultural Education*, 9(01), 74-88.
77. Kiu, C. T. T., & Chan, J. H. (2024). Firm characteristics and the adoption of data analytics in performance management: a critical analysis of EU enterprises. *Industrial Management & Data Systems*, 124(2), 820-858. <https://doi.org/10.1108/IMDS-07-2023-0430>
78. Koeswayo, P. S., Haryanto, H., & Handoyo, S. (2024). The impact of corporate governance, internal control and corporate reputation on employee engagement: a moderating role of leadership style. *Cogent Business & Management*, 11(1), 2296698. doi.org/10.1080/23311975.2023.2296698
78. Kok, S. K., & Akbari, M. (2023). Human Resource Management in Supply Chains. In *The Palgrave Handbook of Supply Chain Management*, 1-28. Cham: Springer International Publishing. https://doi.org/10.1007/978-3-030-89822-9_38-1
79. Korsen, E. B. H., & Ingvaldsen, J. A. (2022). Digitalisation and the performance measurement and management system: reinforcing empowerment. *International journal of productivity and performance management*, 71(4), 1059-1075. <https://doi.org/10.1108/IJPPM-09-2020-0488>
80. Krajnik, I., & Fosztó, M. (2023). Social and Educational Innovations in Accounting and Finance in the Context of Digitization. *The Eurasia Proceedings of Educational and Social Sciences*, 32, 85-93. <https://doi.org/10.55549/epess.1412826>
81. Kurniawan, B. A. (2023). Implementation Of Assessment Centers In Human Resource Governance At Sidoarjo Regional General Hospital. *Jurnal Kebijakan Pemerintahan*, 6(2), 146-160. <https://doi.org/10.33701/jkp.v6i2.3689>
82. Lähteenmäki, I., Nätti, S., & Saraniemi, S. (2022). Digitalization-enabled evolution of customer value creation: An executive view in financial services. *Journal of business research*, 146, 504-517. <https://doi.org/10.1016/j.jbusres.2022.04.002>
83. Lee, J. Y., & Lee, Y. (2024). Integrative Literature Review on People Analytics and Implications From the Perspective of Human Resource Development. *Human Resource Development Review*, 23(1), 58-87. <https://doi.org/10.1177/15344843231217181>
84. Lee, M. T., & Suh, I. (2022). Understanding the effects of Environment, Social, and Governance conduct on financial performance: Arguments for a process and integrated modelling approach. *Sustainable Technology and Entrepreneurship*, 1(1), 100004. <https://doi.org/10.1016/j.stae.2022.100004>
85. Leon, R. D. (2023). Employees' reskilling and upskilling for industry 5.0: Selecting the best professional development programmes. *Technology in Society*, 75, 102393. <https://doi.org/10.1016/j.techsoc.2023.102393>
86. Leoni, G., Maione, G., & Mazzara, L. (2023). Digital Governance for Addressing Performance Challenges Within Inter-municipalities. In *Big Data and Decision-Making: Applications and Uses in the Public and Private Sector*, 27-42. Emerald Publishing Limited. <https://doi.org/10.1108/978-1-80382-551-920231003>
87. Lepak, D. P., Bartol, K. M., & Erhardt, N. L. (2005). A contingency framework for the delivery of HR practices. *Human Resource Management Review*, 15(2), 139-159. [doi:10.1016/j.hrmr.2005.06.001](https://doi.org/10.1016/j.hrmr.2005.06.001)
88. Leso, B. H., Cortimiglia, M. N., & Ghezzi, A. (2023). The contribution of organizational culture, structure, and leadership factors in the digital transformation of SMEs: a mixed-methods approach. *Cognition, Technology & Work*, 25(1), 151-179. <https://doi.org/10.1007/s10111-022-00714-2>
89. Li, W., Yigitcanlar, T., Nili, A., & Browne, W. (2023). Tech Giants' Responsible Innovation and Technology Strategy: An International Policy Review. *Smart Cities*, 6(6), 3454-3492. <https://doi.org/10.3390/smartcities6060153>
90. Liu, L., & Su, Y. (2022). Digital Transformation and Strategic Analysis of Human Resource Value. *Advances in Management and Applied Economics*, 12(6), 99-130. <https://doi.org/10.47260/amae/1266>

91. Lu, Y., Zhang, M. M., Yang, M. M., & Wang, Y. (2023). Sustainable human resource management practices, employee resilience, and employee outcomes: Toward common good values. *Human Resource Management*, 62(3), 331-353. <https://doi.org/10.1002/hrm.22153>
92. Lusiana, H., Azahraty, A., & Ambarwati, R. (2024). Innovative Model Development Performance Management for Increase Productivity in the Digital Era at PT. Indofood CBP Sukses Makmur Tanah Laut South Kalimantan. *International Journal of Economics (IJEC)*, 3(1), 459-469. <https://doi.org/10.55299/ijec.v3i1.811>
93. Mahanti, R. (2021). Corporate Governance Subdisciplines, Data, and Data Governance. *Data Governance and Compliance: Evolving to Our Current High Stakes Environment*, 51-88. https://doi.org/10.1007/978-981-33-6877-4_3
94. Malan, D. (Ed.). (2021). *Responsible board leadership in a digital age*. Haupt Verlag.
95. Manafi, F., Takian, A. H., & Sari, A. A. (2019). Assessing the governance of human resources for health in Iran: A qualitative study. *Journal of education and health promotion*, 8(1), 97. doi: 10.4103/jehp.jehp_265_18
96. Mansour, M., Al Amosh, H., Alodat, A. Y., Khatib, S. F., & Saleh, M. W. (2022). The relationship between corporate governance quality and firm performance: The moderating role of capital structure. *Sustainability*, 14(17), 10525. <https://doi.org/10.3390/su141710525>
97. Manuti, A., & de Palma, P. D. (2023). Digital Enablers as Strategic Allies of HRM Practices in the Cognitive Technology Era. In *Digital HR: A Critical Management Approach to the Digitalization of Organizations in the New Normal*, 69-99. Cham: Springer International Publishing. https://doi.org/10.1007/978-3-031-43563-8_5
98. Marrucci, L., Daddi, T., & Iraldo, F. (2024). Creating environmental performance indicators to assess corporate sustainability and reward employees. *Ecological Indicators*, 158, 111489. <https://doi.org/10.1016/j.ecolind.2023.111489>
99. Martin, G., Farndale, E., Paauwe, J., & Stiles, P. G. (2016). Corporate governance and strategic human resource management: Four archetypes and proposals for a new approach to corporate sustainability. *European Management Journal*, 34(1), 22-35. doi:10.1016/j.emj.2016.01.002
100. Martínez-Morán, P. C., Díez, F., Solabarrieta, J., Urgoiti, J. M. F. R., & Igoa-Iraola, E. (2024). The Talent Management Digitalization and the Company Size as a Catalyst. <https://doi.org/10.20944/preprints202403.0745.v1>
101. Mattajang, R. (2023). Organizational Agility: HR Practices for Facing Rapid Change in the Digital Era. *Jurnal Info Sains: Informatika dan Sains*, 13(03), 829-837. Retrieved from <https://ejournal.seaninstitute.or.id/index.php/InfoSains/article/view/3475>
102. Mirdasse, S. (2024). Fondements théoriques d'utilisation des technologies de l'information et des systèmes d'information. Proposition d'un cadre intégrateur de groupe de variables clés. *International Journal of Strategic Management and Economic Studies (IJSMES)*, 3(2), 719-738. <https://doi.org/10.5281/zenodo.11073448>
103. Mitra, A., Gaur, S. S., & Giacosa, E. (2019). Combining organizational change management and organizational ambidexterity using data transformation. *Management decision*, 57(8), 2069-2091. <https://doi.org/10.1108/MD-07-2018-0841>
104. Moschogianni, G. (2024). Interplay between Digital Marketing, Business Analytics and Innovation Capability: A Case of Greece SMEs. *Journal of Management Practices, Humanities and Social Sciences*, 8(2), 24-37. <https://doi.org/10.33152/jmphss-8.2.3>
105. Mueller-Hanson, R. (2020). *Driving Organizational Strategy Through Performance Management. Performance Management Transformation: Lessons Learned and Next Steps*, 289.
106. Murugesan, U., Subramanian, P., Srivastava, S., & Dwivedi, A. (2023). A study of artificial intelligence impacts on human resource digitalization in industry 4.0. *Decision Analytics Journal*, 100249. <https://doi.org/10.1016/j.dajour.2023.100249>
107. Nandiroh, U., Hidayati, I., & Anggraeni, V. (2023). Good Corporate Governance And Financial Performance Of Shariah Banks In Indonesia : Literature Review. *Asian Journal of Management, Entrepreneurship and Social Science*, 3(03), 369-384. Retrieved from <https://www.ajmesc.com/index.php/ajmesc/article/view/431>
108. Nayeli, I. T. Z. A., & George, B. (2023). Advancing Performance Management In Digital Enterprises: Exploring Challenges, Opportunities, And Recommendations For The Digital Age. *Ecoforum Journal*, 12(3), 80-96. doi: 10.32996/jbms.2023.5.3.8
109. Nicolás-Agustín, Á., Jiménez-Jiménez, D., & Maeso-Fernandez, F. (2022). The role of human resource practices in the implementation of digital transformation. *International Journal of Manpower*, 43(2), 395-410. <https://doi.org/10.1108/IJM-03-2021-0176>
110. Nissen, V. (2018). Digital transformation of the consulting industry—introduction and overview. *Digital Transformation of the Consulting Industry: Extending the Traditional Delivery Model*, 1-58. https://doi.org/10.1007/978-3-319-70491-3_1
111. Noordiatmoko, D., Anggriawan, T., & Saputra, A. E. (2023). The Key Factors To Improve The Government Performance Management System: A Lesson From Indonesia. *Вопросы государственного и муниципального управления*, (6), 122-136. doi: 10.17323/1999-5431-2023-0-6-122-136
112. Odulaja, B. A., Nnabugwu, O. C., Abdul, A. A., Udeh, C. A., & Daraojimba, C. (2023). HR'S role in organizational change within Nigeria's renewable energy sector: a review. *Engineering Science & Technology Journal*, 4(5), 259-284. <https://doi.org/10.51594/estj.v4i5.615>
113. Omol, E. J. (2023). Organizational digital transformation: from evolution to future trends. *Digital Transformation and Society*. <https://doi.org/10.1108/DTS-08-2023-0061>

114. Paillé, P., & Halilem, N. (2019). Systematic review on environmental innovativeness: A knowledge-based resource view. *Journal of cleaner production*, 211, 1088-1099. <https://doi.org/10.1016/j.jclepro.2018.11.221>
115. Parker, M. R. (2019). The Role of HR in Corporate Governance. *NHRD Network Journal*, 12(4), 351-356. <https://doi.org/10.1177/2631454119872027>
116. Pea-Assounga, J. B. B., & Sibassaha, J. L. B. (2024). Impact of Technological Change, Employee Competency, and Law Compliance on Digital Human Resource Practices: Evidence from Congo Telecom. *Sustainable Futures*, 7, 100195. <https://doi.org/10.1016/j.sfr.2024.100195>
117. Peng, Y., Ahmad, S. F., Irshad, M., Al-Razgan, M., Ali, Y. A., & Awwad, E. M. (2023). Impact of digitalization on process optimization and decision-making towards sustainability: The moderating role of environmental regulation. *Sustainability*, 15(20), 15156. <https://doi.org/10.3390/su152015156>
118. Popo-Olaniyan, O., James, O. O., Udeh, C. A., Daraojimba, R. E., & Ogedengbe, D. E. (2022). Future-Proofing Human Resources In The Us With Ai: A Review Of Trends And Implications. *International Journal of Management & Entrepreneurship Research*, 4(12), 641-658. <https://doi.org/10.51594/ijmer.v4i12.676>
119. Poulouse, S., Bhattacharjee, B., & Chakravorty, A. (2024). Determinants and drivers of change for digital transformation and digitalization in human resource management: a systematic literature review and conceptual framework building. *Management Review Quarterly*, 1-26. <https://doi.org/10.1007/s11301-024-00423-2>
120. Prabawati, I., & Nuriyah, S. (2023). Policy Implementation Of Human Resources Governance In Increasing Competence In The Era Of State Higher Education Legal Agency (PTN-BH). In *International Joint Conference on Arts and Humanities 2023 (IJCAH 2023)*, 1789-1796. Atlantis Press. https://doi.org/10.2991/978-2-38476-152-4_180
121. Rachinger, M., Rauter, R., Müller, C., Vorraber, W., & Schirgi, E. (2018). Digitalization and its influence on business model innovation. *Journal of manufacturing technology management*, 30(8), 1143-1160. DOI 10.1108/JMTM-01-2018-0020
122. Ramachandran, R., Babu, V., & Murugesan, V. P. (2023). The role of blockchain technology in the process of decision-making in human resource management: a review and future research agenda. *Business Process Management Journal*, 29(1), 116-139. <https://doi.org/10.1108/BPMJ-07-2022-0351>
123. Ramos, M. E., Azevedo, A., Meira, D., & Curado Malta, M. (2022). Cooperatives and the Use of Artificial Intelligence: A Critical View. *Sustainability*, 15(1), 329. <https://doi.org/10.3390/su15010329>
124. Ravn, J. E., Moe, N. B., Stray, V., & Seim, E. A. (2022). Team autonomy and digital transformation: Disruptions and adjustments in a well-established organizational principle. *AI & SOCIETY*, 37(2), 701-710. <https://doi.org/10.1007/s00146-022-01406-1>
125. Reibenspiess, V., Drechsler, K., Eckhardt, A., & Wagner, H. T. (2022). Tapping into the wealth of employees' ideas: Design principles for a digital intrapreneurship platform. *Information & Management*, 59(3), 103287. <https://doi.org/10.1016/j.im.2020.103287>
126. Rivera, M., Qiu, L., Kumar, S., & Petrucci, T. (2021). Are traditional performance reviews outdated? An empirical analysis on continuous, real-time feedback in the workplace. *Information Systems Research*, 32(2), 517-540. <https://doi.org/10.1287/isre.2020.0979>
127. Rizki, M., & Saputra, E. K. (2021). Empowering Human Resources Management in Technology to Improve Leadership Function in Business Practice: Systematic Review. *The journal of contemporary issues in business and government*, 27(2), 4154-4161. doi: 10.47750/cibg.2021.27.02.434
128. Robu, D., & Lazar, J. B. (2021). Digital transformation designed to succeed: Fit the change into the business strategy and people. *Electronic Journal of Knowledge Management*, 19(2), pp133-149. <https://doi.org/10.34190/ejkm.19.2.2411>
129. Rosyafah, S., & Pudjowati, J. (2024). What are the Key Determinants of Human Resource Management Effectiveness in Enhancing Organizational Financial Performance?. *Atestasi: Jurnal Ilmiah Akuntansi*, 7(1), 525-560. <https://doi.org/10.57178/atestasi.v7i1.815>
- Rožman, M., Oreški, D., & Tominc, P. (2023). Artificial-intelligence-supported reduction of employees' workload to increase the company's performance in today's VUCA Environment. *Sustainability*, 15(6), 5019. <https://doi.org/10.3390/su15065019>
130. Ruiz, L., Benitez, J., Castillo, A., & Braojos, J. (2024). Digital human resource strategy: Conceptualization, theoretical development, and an empirical examination of its impact on firm performance. *Information & Management*, 103966. <https://doi.org/10.1016/j.im.2024.103966>
131. Saadatmanesh, H. (2023). AI-enabled dynamic capabilities for transforming digital business models to smart business models.
132. Salgado-Criado, J., & Fernández-Aller, C. (2024). Navigating through ethical dilemmas, human rights and digital governance. In *Research Handbook on Human Resource Management and Disruptive Technologies*, 51-73. Edward Elgar Publishing. <https://doi.org/10.4337/9781802209242.00013>
133. Salvadorinho, J., & Teixeira, L. (2023). Happy and engaged workforce in industry 4.0: A new concept of digital tool for hr based on theoretical and practical trends. *Sustainability*, 15(3), 2781. <https://doi.org/10.3390/su15032781>
134. Sangu, V. S., Saini, R., Prabakar, S., Hussain, G. J., & Thayumanavar, B. (2024). HR Analytics: Leveraging Big Data And Artificial Intelligence For Decision-Making In Human Resource Management. *Educational Administration: Theory and Practice*, 30(4), 5967-5974. <https://doi.org/10.53555/kuey.v30i4.2327>

135. Sapta, I. K. S., Gunantra, I. W., & Widnyana, I. W. (2022). The Role Of Work Competence, Motivation, And Work Environment In Improving Employee Performance. *Journal of Business and Behavioural Entrepreneurship*, 6(1), 69-86. <https://doi.org/10.21009/JOBBE.006.1.07>
136. Saridakis, G. (2023). Organizational Performance of Entrepreneurial Firms: Exploring the Link Between Digitalization, Internationalization, and Human Resource Management. In *The Palgrave Encyclopedia of Entrepreneurship*, 1-14. Cham: Springer International Publishing. https://doi.org/10.1007/978-3-030-68128-9_19-1
137. Saunila, M., Ukko, J., Nasiri, M., & Garengo, P. (2023). The role of digital governance in the integration of performance measurement systems uses and Industry 4.0 maturity. *International Journal of Computer Integrated Manufacturing*, 1-14. <https://doi.org/10.1080/0951192X.2023.2257918>
138. Schiemann, W. A., & Ulrich, D. (2017). Rise of HR-New mandates for IO. *Industrial and Organizational Psychology*, 10(1), 3-25. <https://doi.org/10.1017/iop.2016.76>
139. Selvaraj, V., & Venkatakishnan, S. (2023). Role of Information Systems in Effective Management of Human Resources during the COVID-19 Pandemic. *Systems*, 11(12), 573. <https://doi.org/10.3390/systems11120573>
140. Setyawan, A. A., PRABOWO, H., SIMATUPANG, B., & PRADIPTO, Y. D. (2022). Effect of Quality Management Practices, and Digital Innovation on Organizational Performance Mediated by Competitiveness Strategy and Moderated by Industrial Collaboration at Vocational Colleges in Indonesia. *ITALIENISCH*, 18(1), 834-841. Doi 10.17605/OSF.IO/TP7DW
141. Shaddiq, S., Khuzaini, & M. Irpan. (2023). Governance of Human Resources Management in the Digital Era. *Journal of Business and Management Studies*, 5(3), 80-96. <https://doi.org/10.32996/jbms.2023.5.3.8>
142. Shafagatova, A., & Van Looy, A. (2020). A conceptual framework for process-oriented employee appraisals and rewards. *Knowledge and Process Management*, 1-15. <https://doi.org/10.1002/kpm.1644>
143. Shet, S. V., & Bajpai, A. (2023). Integrating competency modeling in talent management: Framework for implications in a disruptive environment. *Thunderbird International Business Review*, 65(1), 177-187. <https://doi.org/10.1002/tie.22246>
144. Singh, D., Khamba, J. S., & Nanda, T. (2017). Influence of technological innovation on performance of small manufacturing companies. *International Journal of Productivity and Performance Management*, 66(7), 838-856. <https://doi.org/10.1108/IJPPM-02-2016-0035>
145. Sitaniapessy, R. H., Boediman, S. F., & Yulianti, E. B. (2021). Developing the Effective Digital Human Resource Management What Experts Say For Tourism Industry Preparations. *International Journal of Business, Economics and Management*, 4(2), 407-416. <https://dx.doi.org/10.31295/ijbem.v4n2.1720>
146. Smith-Meyer, A. (2022). Unlocking the Potential of Diversity in Organisations: The Governance of Inclusion in a Racialised World. Springer Nature.
147. Snell, S. A., Swart, J., Morris, S., & Boon, C. (2023). The HR ecosystem: Emerging trends and a future research agenda. *Human Resource Management*, 62(1), 5-14. <https://doi.org/10.1002/hrm.22158>
148. Strohmeier, S. (2020). Digital human resource management: A conceptual clarification. *German Journal of Human Resource Management: Zeitschrift Für Personalforschung*, 34(3), 345-365. doi:10.1177/2397002220921131
149. Suhail, A., & Steen, T. (2021). Exploring the implementation gap: organizational autonomy and line managers' participation in human resource decision-making. *Asia Pacific Journal of Public Administration*, 43(4), 276-297. <https://doi.org/10.1080/23276665.2021.1963995>
150. Sulaeman, M. M., & Nurcholidah, L. (2023). Optimising Organisational Performance Through Human Resource Management Strategy and Technology Integration to Enhance Innovation. *Technology and Society Perspectives (TACIT)*, 1(3), 139-147. <https://doi.org/10.61100/tacit.v1i3.81>
151. Suryanto S., Antoni L. A., Antaiwan B. P., Muhammad R., & Satriadi S. (2021). The future of human resources and digital trend phenomenon in Indonesian business practices: Review literature. *Journal of Contemporary Issues in Business and Government*, 26(2), 1976-1984. doi: 10.47750/cibg.2021.27.02.208
152. Szépl, V., Wessel, R. A., Sabatino, E., Gebhard, C., & Simon, E. (2021). The Current Legal Basis and Governance Structures of the EU's Defence Activities.
153. Theotokas, I. N., Lagoudis, I. N., & Raftopoulou, K. (2024). Challenges of maritime human resource management for the transition to shipping digitalization. *Journal of Shipping and Trade*, 9(1), 6. <https://doi.org/10.1186/s41072-024-00165-0>
154. Trushkina, N., Abazov, R., Rynkevych, N., & Bakhautdinova, G. (2020). Digital Transformation of Organizational Culture under Conditions of the Information Economy. *Virtual Economics*, 3(1), 7-38. [https://doi.org/10.34021/ve.2020.03.01\(1\)](https://doi.org/10.34021/ve.2020.03.01(1))
155. Tuffaha, M., Perello-Marin, M. R., & Suárez-Ruz, M. E. (2022). Key elements in transferring knowledge of the AI implementation process for HRM in COVID-19 times: AI consultants' perspective. *International Journal of Business Science and Applied Management*, 17(1), 81-97. <http://hdl.handle.net/10251/199201>
156. Turner, P. (2021). Management Competence for the Fourth Industrial Revolution-Demonstrates Agile Governance and Adaptability to Make Change Work Effectively. *The Making of the Modern Manager: Mapping Management Competencies from the First to the Fourth Industrial Revolution*, 197-228. https://doi.org/10.1007/978-3-030-81062-7_7
157. Tursunbayeva, A., Di Lauro, S., & Antonelli, G. (2022). Remote work at the time of COVID-19 pandemic and beyond: A scoping review. *HR Analytics and Digital HR Practices: Digitalization post COVID-19*, 127-169. https://doi.org/10.1007/978-981-16-7099-2_6

158. Ullrich, A., Reißig, M., Niehoff, S., & Beier, G. (2023). Employee involvement and participation in digital transformation: a combined analysis of literature and practitioners' expertise. *Journal of Organizational Change Management*, 36(8), 29-48. <https://doi.org/10.1108/JOCM-10-2022-0302>
159. Uysal, G. (2013). Dimensions of American SHRM: Human Capital, HR Systems and Firm Performance. *Journal of US-China Public Administration*, 10(7), 720-726., Available at SSRN: <https://ssrn.com/abstract=3337664>
160. Vardarlier, P. (2020). Digital transformation of human resource management: digital applications and strategic tools in HRM. *Digital business strategies in blockchain ecosystems: Transformational design and future of global business*, 239-264. https://doi.org/10.1007/978-3-030-29739-8_11
161. Vasilev, V., Stefanova, D., & Popescu, C. (2023). Human Capital Management and Digitalization—From Good Practices and Traditions to Sustainable Development. In *Digitalization, Sustainable Development, and Industry 5.0*, 41-65. Emerald Publishing Limited. <https://doi.org/10.1108/978-1-83753-190-520231004>
162. Vaskova Kjulavkovska, M., Serafini, G. O., & Szamosi, L. T. (2022). Integrating training and performance management of civil aviation inspectors: A pilot study of the mediating role of competency-based training. *International Journal of Training and Development*, 26(1), 29-54. <https://doi.org/10.1111/ijtd.12234>
163. Venumuddala, V. R., & Kamath, R. (2023). Work systems in the indian information technology (IT) industry delivering artificial intelligence (AI) solutions and the challenges of work from home. *Information Systems Frontiers*, 25(4), 1375-1399. <https://doi.org/10.1007/s10796-022-10259-4>
164. Verma, S., Rana, N., & Meher, J. R. (2024). Identifying the enablers of HR digitalization and HR analytics using ISM and MICMAC analysis. *International Journal of Organizational Analysis*, 32(3), 504-521. <https://doi.org/10.1108/IJOA-01-2023-3611>
165. Villani, E., Linder, C., De Massis, A., & Eddleston, K. A. (2024). Employee incentives and family firm innovation: A configurational approach. *Journal of Management*, 50(5), 1797-1835. <https://doi.org/10.1177/01492063231157323>
166. Warbhuwan, N. C. (2018). Strategic human resource management in public and private banks of latur district: a relative exploration. Lulu. com.
167. Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171-180. doi:10.1002/smj.4250050207
168. Wiechmann, D. M., Reichstein, C., Haerting, R. C., Bueechl, J., & Pressl, M. (2022). Agile management to secure competitiveness in times of digital transformation in medium-sized businesses. *Procedia Computer Science*, 207, 2353-2363. <https://doi.org/10.1016/j.procs.2022.09.294>
169. Wijayati, D. T., Rahman, Z., Rahman, M. F. W., Arifah, I. D. C., & Kautsar, A. (2022). A study of artificial intelligence on employee performance and work engagement: the moderating role of change leadership. *International Journal of Manpower*, 43(2), 486-512. <https://doi.org/10.1108/IJM-07-2021-0423>
170. Yeung, K. (2018). Algorithmic regulation: A critical interrogation. *Regulation & governance*, 12(4), 505-523. <https://doi.org/10.1111/rego.12158>
171. Yorks, L., Abel, A. L., & Rotatori, D. (2022). Strategic human resource development in practice. *Management for Professionals*. Springer, 10, 978-3. <https://doi.org/10.1007/978-3-030-95775-9>
172. Yuliana, M., & Sutrisno, E. (2023). Factors for the Implementation of Talent Management in the Ministry of Marine Affairs and Fisheries of the Republic of Indonesia. *JMKSP (Jurnal Manajemen, Kepemimpinan, dan Supervisi Pendidikan)*, 8(1), 390-404. <https://doi.org/10.31851/jmksp.v8i1.12077>
173. Zangiacomì, A., Pessot, E., Fornasiero, R., Bertetti, M., & Sacco, M. (2020). Moving towards digitalization: a multiple case study in manufacturing. *Production Planning & Control*, 31(2-3), 143-157. <https://doi.org/10.1080/09537287.2019.1631468>
174. Zavyalova E., Sokolov D., Kucherov D., Lisovskaya A. (2022). The Digitalization of Human Resource Management: Present and Future. *Foresight and STI Governance*, 16(2), 42-51. DOI: 10.17323/2500-2597.2022.2.42.51
175. Zehir, C., Karaboğa, T., Başar, D. (2020). The Transformation of Human Resource Management and Its Impact on Overall Business Performance: Big Data Analytics and AI Technologies in Strategic HRM. In: Hacıoglu, U. (eds) *Digital Business Strategies in Blockchain Ecosystems*. Contributions to Management Science. Springer, Cham. https://doi.org/10.1007/978-3-030-29739-8_12
176. Zhang, X., Qi, Z., Ma, L., & Zhang, G. (2024). Assessing the Curvilinear Relationship in Employee Digital Performance: A Task-Technology Fit Perspective. *International Journal of Human-Computer Interaction*, 1-19. <https://doi.org/10.1080/10447318.2024.2327181>
177. Zhang, Y., Fong, P. S. W., & Yamoah Agyemang, D. (2021). What should be focused on when digital transformation hits industries? literature review of business management adaptability. *Sustainability*, 13(23), 13447. <https://doi.org/10.3390/su132313447>
178. Zhao, Y., He, G., Wei, D., & Zhao, S. (2024). When digitalization meets HRM: developing a HRM value chain model in China. *Chinese Management Studies*. <https://doi.org/10.1108/CMS-07-2023-0317>
179. Zhou, Y., Liu, G., Chang, X., & Wang, L. (2021). The impact of HRM digitalization on firm performance: investigating three-way interactions. *Asia Pacific Journal of Human Resources*, 59(1), 20-43. <https://doi.org/10.1111/1744-7941.12258>
180. Zhu, J., & Jin, Y. (2023). How flexible leadership ability affects manufacturing enterprises' digital transformation willingness: The role of innovation commitment and environmental dynamics. *Plos one*, 18(11), e0288047. <https://doi.org/10.1371/journal.pone.0288047>
181. Zuma, S. K. (2018). HR governance for sustainable human resource development: Evidence from private sector of Bangladesh. *European Journal of Business and Management*, 10(12), 207-216.