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EGLĖ KAZLAUSKAITĖ

MASTER'S THESIS

INFLUENCE OF DIGITAL TRANSFORMATION ON HUMAN RESOURCE MANAGEMENT PRACTICES IN MULTINATIONAL CORPORATIONS

Kaunas 2025

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CONTENT

LIST OF ABBREVIATIONS

AI – Artificial Intelligence

AR – Augmented Reality

HR – Human Resources

HRM – Human Resource Management

HRIS – Human Resource Information System

IoT – Internet of Things

IT – Information Technologies

ML – Machine Learning

MNC – Multinational Corporation

RPA – Robotic Process Automation

SHRM – Strategic Human Resource Management

TAM – Technology Acceptance Model

VR – Virtual Reality

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INTRODUCTION

Relevance of the topic. In today's rapidly evolving marketplace, digital transformation is not merely an option but a necessity for multinational corporations seeking to maintain competitive advantage. The development of digital technologies—ranging from Artificial Intelligence (AI) and Big Data to Internet of Things (IoT) and Cloud Computing—has introduced new dynamics in managing human resources across geographically dispersed and culturally diverse environments. These technologies enable organizations to streamline operations, enhance decision-making processes, and improve employee engagement through personalized and real-time human resource (HR) solutions. For instance, digital tools can automate routine HR tasks, freeing up time for strategic functions like talent development and employee well-being initiatives, which are crucial for organizational resilience and adaptability.

From a theoretical perspective, the impact of digital transformation on human resource management (HRM) practices presents a rich field of study that intersects with multiple disciplines, including information technology, management, and organizational behavior. Despite the critical role of digital HRM in shaping the future of work, academic literature has often lagged in providing comprehensive frameworks that integrate these interdisciplinary insights. This research seeks to fill this gap by synthesizing current theories and models with empirical data to offer a solid theoretical framework that can guide future studies and advance our understanding of digital HRM in multinational contexts.

The ongoing shifts in workplace dynamics, particularly in response to global challenges such as the COVID-19 pandemic, have accelerated the adoption of remote working technologies and digital collaboration tools. This shift has profound implications for HRM practices, requiring a reevaluation of strategies related to recruitment, onboarding, training, and performance management. Moreover, as digital technologies continue to evolve, the ability of HR departments to not only adopt but also adapt these tools for maximum effectiveness remains a critical concern that has direct implications for the strategic goals of organizations.

Furthermore, the global and cross-cultural dimensions of modern multinational corporations emphasize the topic's importance. Digital HRM strategies must be tailored to meet the diverse needs of a global workforce, accommodating diverse cultural attitudes towards technology and varying legal frameworks regarding data privacy and worker monitoring. Understanding how digital tools are implemented across these varied contexts can provide valuable insights into the development of more inclusive, fair, and effective HRM practices.

Lastly, this study responds directly to industry trends where leading companies are increasingly viewing HR not just as a support function but as a strategic partner capable of driving

business transformation through people management. By exploring how multinational corporations integrate digital tools into their HRM practices, this research contributes to a deeper understanding of the digital transformation influence on human resource management practices in multinational corporations, offering actionable insights that can help organizations navigate the complexities of digital integration.

Problem investigation level. The relationship between digital transformation and human resource management in multinational corporations (MNCs) has attracted increasing scholarly attention. However, analysis remains fragmented, with many studies focusing narrowly on either technological change or HR practice evolution, without integrating these into a coherent, interdisciplinary view. Several key themes can be identified in existing literature. Many researchers have focused on how digital transformation supports strategic realignment and improves operational efficiency in HRM. Studies have examined the enhancement of HR performance and agility through digital tools such as AI, cloud computing, and HRIS (Gong, & Ribière, 2021; Gebayew et al., 2018; Fuller, Fan, & Day, 2020; Wang et al., 2023; Halid et al., 2020). Authors have particularly emphasized efficiency gains, with HRIS improving administrative processing and strategic alignment by up to 40% (Halid et al., 2020; Barišić et al., 2021). Others have explored decision-making and innovation benefits enabled by AI capabilities, such as predictive analytics and automated talent management (Chen et al., 2022; Rožman et al., 2022; Langer et al., 2020; Adiazmil et al., 2024). Technologies like gamified HR platforms and collaboration tools are also shown to boost employee engagement and adaptability (Silic et al., 2020; Jain et al., 2022; Puspita, 2024; Susanto et al., 2024), facilitating flexible, remote work models. Strategic planning benefits are further discussed in relation to talent analytics and skills forecasting (Budhwar et al., 2022; Dash et al., 2019; Hu & Lan, 2024). Alongside operational improvements, scholars stress the need to address ethical and human-centric issues in digital HRM. Key concerns include data privacy, surveillance, algorithmic bias, and the dehumanization of recruitment and performance evaluation (Strohmeier, 2020; Meijerink et al., 2018; Koivunen et al., 2023; Saurabh et al., 2022; Chilwane, 2021). These challenges raise questions about fairness and trust in automated decision-making (Shankar, & Nigam, 2022; Fenech, Baguant, & Ivanov, 2019). Another key dimension involves the cultural and legal complexities faced by MNCs adopting global HRM systems. Cross-national differences in employee expectations, labor laws, and attitudes toward technology are explored by scholars such as Jack et al. (2019), Farndale et al. (2019), Galanaki et al. (2019), and Wang (2019). They argue that digital transformation strategies must be adapted to local contexts to ensure inclusivity and effectiveness.

While numerous studies provide valuable insights, several significant research gaps remain. There is a lack of longitudinal studies assessing the long-term effects of digital tools on employee well-being, engagement, and HRM strategy (Meijerink et al., 2018; Strohmeier, 2020; Silic et al.,

2020). Authors also call for more research on the ethical consequences of automation and the need for transparent governance structures (Koivunen et al., 2023; Saurabh et al., 2022). Additionally, few frameworks exist that integrate the external drivers of digital change with internal HRM transformations and measurable organizational outcomes. While several scholars propose theoretical models (Gong, & Ribière, 2021; Latemore, Steane, & Kramar, 2019; Hrynko, 2019), these models often lack empirical testing or fail to address the complex mediating role of employee-level outcomes (Chen et al., 2022; Hu, & Lan, 2024; Zavyalova et al., 2022). Finally, studies that compare digital HRM adoption across countries are still rare, despite the global scope of MNCs (Budhwar et al., 2022; Galanaki et al., 2019; Kim et al., 2021). This limits our understanding of how digital HRM strategies can be successfully adapted in culturally diverse and legally varied environments.

In summary, while a growing body of literature explores various elements of digital transformation in HRM, there remains a need for integrative, cross-cultural, and ethically grounded research. This thesis responds to these gaps by developing and empirically testing a theoretical model that examines the influence of digital transformation on HRM practices in multinational corporations, with attention to strategic alignment, technological integration, and human-centric outcomes.

Scientific problem – how does digital transformation influence HRM practices in multinational corporations?

Object of the thesis. The influence of digital transformation on HRM practices in multinational corporations.

The aim of the thesis is to investigate the influence of digital transformation on HRM practices in multinational corporations.

Objectives of the thesis:

1. To analyse the concept of digital transformation.
2. To review HRM practices definition, content, and their types.
3. To examine the links between digital transformation and HRM practices.
4. To analyse the empirical level of research regarding the influence of digital transformation on HRM practices.
5. Having evaluated the results of theoretical and empirical research, to formulate the research model of influence of digital transformation on HRM practices in multinational corporations.
6. To perform empirical evaluation of research model of influence of digital transformation on HRM practices in multinational corporations and determine the influence of AI and automation, big data analytics, cloud-based HR tools, digital upskilling, and organizational readiness on HR efficiency, performance management, and workforce adaptability.

Structure of the thesis. This master's thesis is organized into three main parts, each addressing a critical component of the research.

First part is “Theoretical Aspects of Digital Transformation Influence on Human Resource Management Practices in Multinational Corporations”. This part provides a comprehensive review of the theoretical foundations underpinning the study. It includes an analysis of the concept, types, and instruments of digital transformation, along with a detailed discussion of HRM practices. The part explores the links between digital transformation and HRM practices, including challenges, opportunities, ethical considerations, and technological advancements.

Second part is “Empirical Research Level of Digital Transformation Influence on HRM Practices in Multinational Corporations”. This part delves into existing research on the connections between digital transformation and HRM practices. It includes an examination of enhanced efficiency, adaptability, and strategic HR planning, along with the challenges and opportunities that arise in implementing digital HRM solutions.

Third part is “Empirical Research of Digital Transformation Influence on HRM Practices in Multinational Corporations”. This part presents the research methodology, including the design and tools used to collect and analyze data. It discusses the findings of the study, evaluates the results, and provides a discussion of their implications for HRM practices within multinational corporations.

Thesis and research methods. This research applies a mixed-methods approach combining qualitative and quantitative methods. In the theoretical part, systematization and classification methods were employed to organize and group secondary data from academic literature, industry reports, and case studies. These sources provided the theoretical foundation and empirical evidence needed to explore the influence of digital transformation on HRM practices in multinational corporations. The synthesis method was used to integrate insights from multiple sources and to construct a conceptual framework linking digital transformation drivers with HRM outcomes. The comparative method was applied to contrast theoretical findings with empirical observations. These qualitative methods helped identify patterns, categories, and theoretical relationships, ensuring a coherent interpretation of the existing knowledge base. By relying on validated and widely cited sources, the study ensures both credibility and academic relevance in addressing the research problem.

In the empirical part, a quantitative research method was used to collect and analyse primary data via a structured survey of HR professionals and employees in multinational corporations. The survey addressed themes such as digital HR tools, organizational readiness, and HRM performance outcomes. The collected data were analysed using statistical techniques, including correlation analysis and multiple regression modelling, to assess the impact of digital transformation on HRM

practices. This integrated approach ensures a comprehensive and robust evaluation, combining theoretical synthesis with empirical validation.

Literature used in the thesis. This thesis is based on the work of key authors in the fields of digital transformation and Human Resource Management. Studies by Gebayew et al. (2018) and Gong, & Ribière (2021) provide a foundation for understanding digital transformation frameworks and their influence on organizational processes. Contributions from Latemore et al. (2019) and Koon, & Fujimoto (2023) focus on the evolution of HRM practices, including the integration of AI and data-driven tools. Additionally, ethical considerations in HRM, such as data privacy and employee monitoring, are addressed through the work of Strohmeier (2020) and Fenech et al. (2019). These sources form the theoretical basis of this research and highlight gaps that this thesis aims to address.

Theoretical significance. The theoretical significance of the thesis is presented below as the main theoretical discoveries were made based on the analysis of scientific literature, the constructed conceptual framework, and the conducted empirical research:

- The thesis presents a conceptual structure that identifies key digital transformation drivers (such as artificial intelligence, gamification, and cloud-based platforms) and explains how these technologies influence employee-level outcomes (e.g., satisfaction, engagement, and adaptability) which, in turn, affect organizational performance in multinational corporations. This approach contributes to existing theory by illustrating the interrelated mechanisms through which digital transformation shapes human resource management practices.
- The thesis brings together previously separate academic streams—digital transformation and human resource management theory—into a cohesive conceptual structure. This integration highlights the interdependence between technological progress and evolving human resource functions. Moreover, this structure contributes to theory by offering a conceptual basis for understanding how digital transformation reshapes human resource functions in multinational contexts.
- The conceptual framework introduces a mediating layer—employee satisfaction, engagement, and adaptability—that explains how digital initiatives translate into broader organizational benefits. These variables are often overlooked or undervalued in existing models, and their inclusion contributes to a more realistic and comprehensive understanding of the digital transformation process.
- The thesis extends existing theory by identifying potential ethical implications (e.g., surveillance, algorithmic bias) as important contextual variables that influence the effectiveness and acceptance of digital human resource management tools. This addition emphasizes the need for theory to account for both functional and ethical dimensions when evaluating digital transformation.

Practical significance of the thesis. The practical significance of the thesis is based on the empirical research findings and developed theoretical model. The following points summarize the key practical insights that can be applied by multinational corporations and human resource managers:

- The research revealed that gamified platforms, AI-based feedback systems, and digital collaboration tools resulted in a 66% increase in job satisfaction and a 31% increase in employee engagement. This suggests that companies implementing such tools can expect a more motivated and responsive workforce.
- Among the surveyed companies, cloud-based human resource systems were used significantly more than AI or robotic process automation. Their popularity is due to accessibility, integration with existing processes, and cost-efficiency, making them the most practical entry point for digital transformation in human resource management.
- The thesis findings confirm that organizations applying digital human resource management systems observed an approximate 40% increase in HR efficiency. This includes improvements in recruitment, onboarding, performance tracking, and communication processes.
- Results indicate that in most multinational corporations, human resource leaders and internal departments—not external consultants—are responsible for digital transformation success. This highlights the importance of building internal digital competence and leadership capacity.
- The research identified key obstacles such as lack of digital skills, financial limitations, and employee resistance to new technologies. These challenges must be proactively addressed through internal training, clear communication, and change management planning to ensure smooth adoption.

Structure and scope of the thesis. This thesis consists of introduction, three chapters, conclusions. The thesis comprises a total of 81 page, including 10 figures, 7 tables, 9 appendixes, and 120 references.

1. THEORETICAL ASPECTS OF DIGITAL TRANSFORMATION INFLUENCE ON HUMAN RESOURCE MANAGEMENT PRACTICES IN MULTINATIONAL CORPORATIONS

This chapter provides a theoretical overview of the key concepts relevant to this study. First, the concept and types of digital transformation are examined. Next, the definition, content, and main types of human resource management (HRM) practices are reviewed. Finally, the chapter explores the interconnections between digital transformation and HRM practices, laying the foundation for the empirical part of the thesis.

1.1. Concept of digital transformation

Understanding the significance of digital transformation in today's globalized world is crucial. To discuss its influence on human resource management, it is essential to define digital transformation. Although most authors agree on its fundamental elements, a unified definition of digital transformation does not exist. To better understand how digital transformation is conceptualized, it is important to compare how various scholars define the term (Table 1).

Table 1

Digital transformation definitions

Author(s)	Definition
Barann (2019)	**Digital transformation** is the continuous digitalization process of a company using digital and data-driven innovation to improve existing processes, change business model elements, or reinvent its business model entirely.
Bican, & Brem (2020)	**Digital transformation** refers to the process of transforming existing businesses to address economic and environmental challenges sustainably.
Camarinha-Matos et al. (2019)	**Digital transformation** involves the adoption and integration of new information and communication technologies for more efficient, flexible, agile, and sustainable solutions in industrial systems.
Chan (2020)	**Digital transformation** is the application of innovative digital technology to fundamentally change the model of how business operates and the way technology is delivered to support the overall business.
Gebayew et al. (2018)	**Digital transformation** is the integration of digital technology into all sectors of a business, fundamentally altering how you perform and bring value to customers.
Gong, & Ribière (2021)	**Digital transformation** is a process where digital technologies enable major business improvements, such as enhancing customer experience and creating new business models.
Nadkarni, & Prügl (2021)	**Digital transformation** is an organizational change triggered by digital technologies.
Veldhoven, Song, & Vanthienen (2019)	**Digital transformation** is a broad term describing changes due to the increased use of digital technologies, closely related to digitalization and industry 4.0.

Table 1 (continued)

Vial (2021)	**Digital transformation** is a process that aims to improve an entity by triggering significant changes to its properties through combinations of information, computing, communication, and connectivity technologies.

Source: created by the author.

For instance, Vial (2021) emphasizes digital transformation as a process of improving organizational capabilities through combinations of digital technologies. Similarly, Gong & Ribière (2021) focus on major business improvements such as customer experience and new business models. In contrast, Bican, & Brem (2020) stress the importance of addressing economic and environmental challenges, introducing sustainability as a defining feature of digital transformation. This diversity illustrates how scholars conceptualize digital transformation from different perspectives—technological, strategic, and sustainability-oriented.

Based on the analysed authors, it can be noticed that there is a repeating pattern of a few ground elements that define digital transformation: integration of new technologies, improvement of business efficiency, transformation of business models, and sustainability. These elements collectively highlight the multifaceted nature of digital transformation. The integration of new technologies is essential for modernizing business operations, while improving business efficiency ensures competitive advantage in a rapidly evolving market. Transforming business models allows organizations to adapt to new economic realities, and sustainability emphasizes the importance of addressing environmental challenges. Together, these elements provide a comprehensive framework for understanding and implementing digital transformation in various organizational contexts.

Having reviewed the key definitions and core elements of digital transformation, the next section explores its main types as identified in the academic literature.

Digital transformation types

Digital transformation is a complex process that integrates digital technology across all areas of a business, fundamentally altering how organizations operate and deliver value to customers. Scholars (Tang, 2021; Guinan et al., 2019; Warner, & Wäger, 2019; Pousttchi et al., 2019; Feroz et al., 2021) have identified several key types of digital transformation:

1. Business model transformation
2. Process transformation
3. Organizational transformation
4. Product and service transformation
5. Customer experience transformation

Digital technologies enable the development of innovative business models, such as Everything-as-a-Service (XaaS), where products and services are offered on a subscription basis rather than as one-time purchases. This capability drives business model transformation (Tang, 2021).

Process transformation involves rethinking and reengineering organizational processes to enhance efficiency and productivity, leveraging technologies like robotic process automation (RPA), artificial intelligence (AI), and big data analytics (Guinan, Parise, & Langowitz, 2019; Hanelt et al., 2020). Organizational transformation encompasses changes in structure and culture to promote agility and continuous adaptation, including the development of dynamic capabilities to manage and sustain digital transformation initiatives (Warner, & Wäger, 2019).

Digital technologies also facilitate the creation of new products and services or the enhancement of existing ones, through the use of the Internet of Things (IoT), cloud computing, and AI to develop smart, connected products and services (Pousttchi et al., 2019). This process constitutes product and service transformation. Lastly, customer experience transformation improves customer interactions through personalized services and digital interfaces, with companies utilizing data analytics and AI to better understand customer needs and preferences (Feroz, Zo, & Chiravuri, 2021).

In summary, digital transformation involves multiple dimensions, including business model, process, organizational, product, and customer experience transformations. It leverages emerging technologies to innovate and improve efficiency across all organizational aspects.

Digital transformation instruments

Digital transformation relies on a range of advanced technologies that drive significant improvements in business processes and strategies. Key technologies include the Internet of Things (IoT), Big Data and Analytics, Artificial Intelligence (AI) and Machine Learning (ML), blockchain, and Cloud Computing.

Internet of things (IoT)

IoT involves the interconnection of devices through the internet, enabling real-time data collection and analysis. This technology enhances operational efficiency, improves decision-making, and provides better customer experiences. For example, IoT can monitor equipment performance in real-time, predict maintenance needs, and reduce downtime in manufacturing (Fuller, Fan, & Day, 2020). Additionally, IoT applications in smart homes and cities improve resource management and enhance quality of life by optimizing energy usage and traffic flows.

Big data and analytics

Big data and analytics involve processing and analysing vast amounts of data to uncover patterns, trends, and insights. Businesses use these insights to make informed decisions, personalize customer experiences, and identify new opportunities. For instance, retailers analyse customer purchase data to recommend products and tailor marketing strategies, thereby increasing sales and customer satisfaction (Lin et al., 2021).

Artificial Intelligence (AI) and Machine Learning (ML)

AI and ML technologies automate complex processes, enhance decision-making, and improve customer service. AI-driven chatbots and virtual assistants handle customer inquiries efficiently, providing instant responses and personalized interactions (Wang et al., 2023). In finance, AI algorithms detect fraudulent transactions and assess credit risk with high accuracy (Ramya, Kumar, & Raja, 2020). Moreover, ML models analyse historical data to predict future trends, enabling businesses to anticipate market changes and adjust their strategies accordingly (Muskaan, & Sarangi, 2020).

Blockchain

Blockchain technology ensures secure, transparent, and tamper-proof transactions, making it particularly valuable in supply chain management. By providing a decentralized ledger, blockchain enhances traceability and accountability of goods as they move through the supply chain (Rusch, Schöggl, & Baumgartner, 2021). This technology also reduces fraud and errors, improves contract management through smart contracts, and enables secure and efficient cross-border transactions in financial services (Kongmanee, Kijsanayothin, & Hewett, 2019).

Cloud Computing

Cloud Computing offers scalable and flexible infrastructure, allowing businesses to manage resources efficiently and reduce IT costs. By migrating to the cloud, companies can access powerful computing resources and storage without significant capital investment. Cloud services support collaboration through tools that enable remote work and data sharing across global teams (Gurbaxani, & Dunkle, 2019). Additionally, cloud-based platforms provide robust disaster recovery solutions, ensuring business continuity in case of data loss or system failures (Barbierato et al., 2023).

Emerging Technologies and Future Trends

In addition to the core technologies, emerging technologies like augmented reality (AR), virtual reality (VR), and quantum computing are poised to further drive digital transformation. AR and VR create immersive experiences for training, marketing, and customer engagement, while quantum computing promises to solve complex problems beyond the capabilities of classical computers (Abrash, 2021). Businesses that adopt and integrate these cutting-edge technologies will gain a competitive edge in the rapidly evolving digital landscape.

In conclusion, digital transformation instruments encompass a wide array of technologies that collectively enhance business operations, customer experiences, and strategic decision-making. Successful integration of these technologies requires a clear understanding of their capabilities, strategic planning, and continuous adaptation to technological advancements.

Having provided a comprehensive overview of digital transformation and its impact on organizational operations, the following chapter examines Human Resource Management practices. It focuses on the definition, content, and types of HRM practices, and explores how these elements are evolving in response to digital transformation and the demands of the digital age.

1.2. Human resource management practices definition, content, and types

In today's rapidly evolving business environment, Human Resource Management plays a pivotal role in aligning organizational objectives with the strategic management of personnel, integrating essential functions such as recruitment, training, and performance management to foster a productive and engaged workforce.

Human Resource Management (HRM)

Human Resource Management embodies a strategic approach to managing individuals within an organization, encompassing strategies, policies, and practices aimed at effectively managing personnel (Somarathna, 2020). HRM integrates functions such as recruiting, training, performance management, and compensation, aligning them with organizational goals to foster a productive and engaged workforce. The objective of HRM is to develop a work environment conducive to employee growth, satisfaction, and overall organizational success.

Definition and Evolution of HRM

The concept of Human Resource Management (HRM) originated as an administrative function aimed at handling staffing, payroll, and basic personnel needs. Initially, the focus was operational—ensuring that employees were hired, trained, and compensated effectively to meet immediate organizational requirements. One of the earliest structured definitions was proposed by Fabi, & Pettersen (1992), who identified core HR practices such as human resource planning, recruitment, selection, job analysis, remuneration, performance assessment, training, and career planning as central to both project and general organizational management. Over time, the scope of HRM expanded significantly, evolving into a strategic and integrative organizational function.

Human Resource Management is now widely recognized as a strategic and integrated function focused on optimizing human capital to achieve organizational goals and sustain competitive advantage. It encompasses formal systems and practices including recruitment, development, performance management, compensation, legal compliance, and organizational culture. Beyond operational efficiency, HRM emphasizes employee satisfaction, ethical practices, and the alignment of individual and collective efforts with the long-term strategic direction of the organization (Nandhini, & Vimala, 2020; Mushtaq, 2020; Arbatani et al., 2016; Neupane, 2018; Chauhan, 2012; Davidson, 2015).

HRM is crucial for organizational success, equipping employees with the skills necessary to adapt to changes, lead effectively, and advance within their careers (Jovanović, & Arsenijević, 2020). In an increasingly dynamic and competitive business environment, HRM plays a pivotal role in developing a workforce that is agile, competent, and aligned with the organization's strategic goals. By focusing on continuous learning and development, HRM ensures that employees remain relevant and capable of driving innovation and growth. Traditionally, HRM focused on administrative tasks such as recruitment, performance evaluation, training, compensation, and incentives (Ahmad, & Ali, 2019). Recruitment processes aimed to attract and select the best candidates, while performance evaluations provided a basis for assessing and improving employee performance. Training programs enhanced employees' skills and knowledge, and compensation packages, including salary, bonuses, and benefits, were structured to reward and retain talent. Over time, the scope of HRM has expanded significantly, influenced by globalization and the rapid integration of information technologies. Globalization has introduced new challenges and opportunities for HRM, as organizations operate in diverse and dispersed markets. This has necessitated a more strategic approach to managing a global workforce, including understanding and navigating different cultural, legal, and economic environments. HRM must now address issues such as managing expatriates, developing global leadership capabilities, and fostering cross-cultural collaboration (You et al., 2021). The integration of information technologies has transformed HRM practices. Advanced technologies like Human Resource Information Systems (HRIS), artificial intelligence (AI), and big data analytics have automated many traditional HR tasks, making processes more efficient and data-driven. AI-powered recruitment tools can screen resumes and conduct initial interviews, while analytics can provide insights into employee performance, engagement, and retention trends. These technologies enable HR professionals to make informed decisions, enhance employee experiences, and implement personalized development plans (Markopoulos et al., 2023).

HRM Practices Content

Human Resource Management encompasses a range of practices designed to optimize employee performance and align workforce capabilities with organizational objectives. The core components of HRM practices include:

- Recruitment and selection;
- Training and development;
- Performance appraisal;
- Compensation and reward systems;
- Work environment and employee relations;
- Strategic alignment and culture building;
- Use of HR analytics and technology.

Effective recruitment and selection processes are foundational to building a competent workforce. Structured recruitment strategies and fair selection procedures ensure the acquisition of suitable candidates, thereby enhancing organizational performance (Sonar, & Pandey, 2023; Chatterjee et al., 2021). Continuous learning opportunities and skill enhancement programs are vital for fostering innovation and maintaining a competitive edge. Implementing comprehensive training initiatives contributes to employee growth and organizational success (Liu et al., 2020; Khan et al., 2021). Regular evaluation of employee performance, coupled with constructive feedback, facilitates personal development and aligns individual goals with organizational objectives. Performance appraisals serve as a critical tool for managing and improving employee effectiveness (Galadanchi, & Saulawa, 2024; Babalola, & Aigbavboa, 2022). Implementing equitable compensation structures and recognition programs motivates employees and reduces turnover rates. Financial incentives and rewards play a significant role in enhancing job satisfaction and organizational commitment (Dubisetty, & Reddy, 2022; Khan et al., 2021). Cultivating a safe, inclusive, and motivating work environment fosters healthy relationships between employees and management. Positive employee relations contribute to increased satisfaction, retention, and overall organizational harmony (Storti et al., 2023; Anghel, & Almășan, 2024). Aligning HRM practices with business strategies and shaping organizational culture are essential for managing change effectively. Aligning HRM practices with business strategies and shaping organizational culture are essential for managing change effectively and ensuring long-term organizational success (Cibareva, 2021; Massaquoi, & Caulker, 2024). In addition, the integration of data-driven decision-making through HR analytics and digital tools—such as Human Resource Information Systems (HRIS)—enhances the efficiency and precision of HRM practices. These technologies support recruitment, training, performance evaluation, and compensation management by streamlining processes and enabling informed decision-making (Somarathna, 2020; Mishra, & Lakshmi, 2020). Through structured development programs, performance-based recognition, and technology-supported feedback systems, HRM fosters strong leadership and promotes a values-based organizational culture (Bogavac et al., 2020; Elmortada et al., 2020).

In summary, HRM practices play a critical role in shaping workforce capabilities and organizational effectiveness. By systematically implementing core functions—supported by technology, data, and strategic alignment—organizations can foster employee development, strengthen engagement, and achieve sustainable performance outcomes.

Types of HRM Practices

HRM practices encompass various methodologies, each offering a distinct perspective on employee management. Strategic Human Resource Management (SHRM) focuses on aligning HR policies and practices with the strategic objectives of the organization, emphasizing HR as a strategic

partner in driving performance and achieving long-term goals (Latemore, Steane, & Kramar, 2019). This approach involves proactive planning and development of human capital to gain a competitive advantage. Humanistic management prioritizes the well-being and development of employees, viewing them as valuable assets rather than mere resources (Koon, & Fujimoto, 2023). This approach advocates for practices that promote employee autonomy, creativity, and fulfilment, fostering a supportive and inclusive workplace culture. It emphasizes ethical considerations, employee empowerment, and the importance of a positive work environment in enhancing productivity and job satisfaction. Personalistic management extends this human-centric view by focusing on individual employee needs and aspirations. It involves personalized approaches to employee development, recognizing the unique talents, skills, and potential of each individual. This method seeks to create tailored career paths and growth opportunities, ensuring that employees feel valued and motivated to contribute to the organization's success (Latemore et al., 2019). By integrating these diverse approaches, HRM aims to balance organizational objectives with employee well-being, fostering a synergistic environment in which both can thrive.

In conclusion, recognizing and applying different HRM approaches allows organizations to tailor their human resource strategies to specific goals, workforce needs, and cultural values, thereby enhancing both organizational performance and employee satisfaction.

Impact of Globalization and International HRM

Globalization has led to the emergence of International HRM (IHRM), which is particularly relevant for multinational corporations (MNCs). As businesses expand their operations across borders, they face the complex task of managing a diverse workforce dispersed across various geographical locations. IHRM involves managing expatriates, navigating diverse labour markets, and fostering cross-cultural understanding (Farndale et al., 2019). One key aspect of IHRM is managing employees sent from their home countries to subsidiaries in other countries, often referred to as expatriates. Successful expatriate management includes ongoing support with housing, family integration, and local services to facilitate smooth transitions and operational alignment. Regular communication with home-country offices is vital to maintain a sense of connection and ensure that expatriates remain aligned with the company’s overall strategic objectives (Karst et al., 2023). The global aspect of IHRM requires a deep understanding of diverse labour markets, international labour laws, and cultural nuances. Different countries have distinct labour regulations, employment practices, and workplace norms. IHRM professionals must navigate these complexities to ensure compliance with local laws and regulations while maintaining the organization’s global HR policies (Wang, 2019). Cultural awareness is another critical aspect of IHRM. Cultural differences can impact communication, management styles, and employee expectations. IHRM professionals must foster cross-cultural collaboration and manage diverse teams effectively, implementing cultural sensitivity

training programs and promoting inclusive workplace practices (Jack et al., 2019). Furthermore, IHRM encompasses strategic planning for global talent management. This includes identifying and developing future leaders who can operate effectively in different cultural contexts, creating global mobility programs to facilitate the movement of talent across borders, and establishing succession plans that consider the international scope of the organization (Farndale et al., 2019).

Altogether, IHRM plays a pivotal role in enabling multinational organizations to manage their global workforce effectively, navigate cultural and legal complexity, and align HRM strategies across diverse geographic contexts.

Integration of Information Technologies in HRM

The advent of information technologies has revolutionized HRM practices, fundamentally altering the content of work and organizational attitudes towards employees. Technologies such as HRIS, AI, and big data analytics are now integral to HRM, enhancing efficiency and effectiveness in various HR functions. AI-powered recruitment systems use algorithms to match candidates with job requirements, accelerating the hiring process and improving job fit (Johnson et al., 2022). Additionally, AI chatbots provide round-the-clock assistance to job applicants, answering queries and providing updates on application statuses, thereby enhancing the candidate experience. Big data analytics has transformed performance management by providing actionable insights into employee performance and engagement. By analysing data from various sources such as performance reviews, employee surveys, and productivity metrics, HR professionals can identify patterns and trends that inform decision-making. This data-driven approach enables personalized employee development programs that cater to individual strengths and areas for improvement (Zehir et al., 2019). Digital tools enable real-time tracking of HR metrics, allowing organizations to make informed decisions quickly. Predictive analytics can forecast turnover rates and identify factors contributing to employee attrition, enabling proactive retention strategies (Tiwari et al., 2021). Moreover, digital technologies have enhanced employee engagement and communication. Platforms such as intranets, social media, and mobile applications provide employees with easy access to company information, policies, and training materials. These platforms foster a sense of community and facilitate collaboration, regardless of geographical location. The integration of AI and machine learning in HR processes has enabled more sophisticated employee development and career planning. Personalized learning platforms use AI to recommend training programs and courses based on an employee's role, career aspirations, and performance data. This targeted approach ensures that employees receive relevant and timely development opportunities, enhancing their skills and career progression (Malik et al., 2020). Furthermore, the use of cloud-based HR solutions has enabled greater flexibility and scalability in HR operations. Cloud platforms allow organizations to access HR systems from

anywhere, supporting remote work and global HR management. These systems can be easily scaled to accommodate organizational growth, providing a cost-effective solution for managing HR functions (Nurimansjah, 2023).

In conclusion, Human Resource Management has evolved from an administrative function into a strategically significant component of organizational success. By defining its core principles, examining practical implementations, identifying various conceptual approaches, and exploring the global and technological dimensions shaping its transformation, this chapter demonstrates HRM's integral role in developing agile, engaged, and high-performing workforces. The alignment of HR practices with strategic goals, supported by technological advancements and cultural sensitivity, enables organizations—especially multinational corporations—to respond effectively to contemporary challenges and sustain long-term competitive advantage.

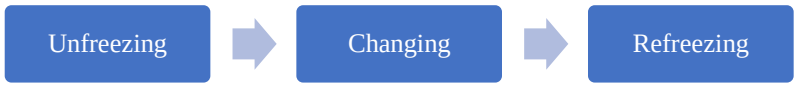
1.3. The links between digital transformation and human resource management practices

In today's business landscape, digital transformation transcends technology upgrades to serve as a strategic enabler, reshaping organizational operations and competitive dynamics. This integration of digital technologies revolutionizes business functions and value delivery to customers. Similarly, Human Resource Management (HRM) practices are being transformed to strategically manage the workforce, optimizing employee performance and effectively achieving organizational goals. The process involves adopting electronic human resource management (e-HRM), which offers a contextualized approach while considering multiple stakeholders to create innovative social value (Fregnan, Ivaldi, & Scaratti, 2020). This approach not only maps various HR processes but also expands opportunities in cloud environments, prompting necessary organizational and functional changes (Ziebell et al., 2019). The introduction of human resources information systems (HRIS) further aids in decision-making, enhancing strategic positioning and user satisfaction (Safaâ, & Mohamed, 2020).

Building on these foundational changes, digitalization in HRM enhances data analytics, streamlines processes, and boosts employee engagement (Girisha, 2021; Zhou et al., 2021). It is essential to consider the impact of these technologies on employee well-being, ensuring that efficiencies are balanced with the human aspects of work (Fedorova et al., 2019). Additionally, the rapid shift towards digitalization underscores the need for workforce upskilling to manage new technological demands and maintain a competitive edge (Priya, 2022). Knowledge management also benefits from digital tools, facilitating better dissemination and organizational learning essential for adapting to digital transformations (Roshchin et al., 2022).

Hrynko (2019) emphasizes the importance of developing a digital strategy for businesses in the digital economy, as well as the need to consider human resource management and compositional

management in this context. The author presents research models and structural models for digital transformation in HRM, emphasizing the importance of considering consumer behaviour changes and compositional management when developing an organization's digital strategy. The incorporation of each of these models into a cohesive framework for digital business transformation demonstrates the comprehensive, strategic approach required for modern organizations navigating the challenges of digitalization. Collectively, these models show that successful digital transformation necessitates a thorough integration of strategic planning, organizational restructuring, and the ongoing development of digital skills at all levels of the company. This synthesis not only promotes long-term competitive advantage but also ensures the organization's agility and responsiveness to digital innovations and market changes. One of the primary ways of preparing for change is by utilizing Lewin's Change Management Model, which consists of three stages: unfreezing, changing, and refreezing (Figure 1).



Source: created by the author.

Figure 1. Lewin's Change Management Model

Although this model has been questioned, it is also considered a well-thought-out change strategy based on the author's field theory work. The concept highlights the significance of identifying and managing the forces that keep an organization in its current state before progressing to a desired end (Burnes, 2020). Organizations can adapt and thrive in today's fast changing business environment by understanding the mechanics of change and implementing effective change management methods. Furthermore, including feedback loops and continuous improvement procedures can help the business remain agile and responsive to digital developments and market changes.

Thus, while digitalization offers numerous benefits, it necessitates a careful approach to balance employees' needs with organizational goals. Proper integration of digital tools can enhance performance metrics, but the success of such initiatives heavily depends on strategic human capital management and the safeguarding of employee well-being.

Challenges and opportunities of digital transformation in HRM

The advent of digital transformation presents both formidable challenges and unprecedented opportunities within the field of Human Resource Management (HRM). This transformation significantly influences the strategic and operational facets of how organizations manage their human capital and utilize digital technologies.

Various researchers have delved into the implications of this digital shift. Kuldosheva (2021) investigates digital transformation in the public sector of transition economies, using Uzbekistan as a case study. The research highlights challenges related to infrastructural and cultural readiness, while

identifying opportunities for enhancing public services and governance. Mitrofanova, & Konovalova (2019) discuss the broader implications for HR management, noting both opportunities for streamlined processes and challenges such as the need for new skills and privacy concerns. Fenech, Baguant, & Ivanov (2019) emphasize the evolving role of HR professionals, who must become strategic partners and technologically adept to navigate these changes effectively. Meijerink et al. (2018) advocate for a deeper examination of HR digitization, suggesting that it affects all aspects of HR, from recruitment to performance management. Strohmeier (2020) proposes a conceptual clarification of digital HRM, highlighting the complex and multifaceted nature of this transformation, which demands a nuanced understanding of both technological and human factors.

The reviewed literature consistently recognizes the significance of digital transformation in HRM and its potential to enhance organizational capabilities. Common themes include the necessity for HR to adapt and the wide range of digital tools available. However, there are variations in focus: some researchers emphasize the strategic role of HR (Fenech et al., 2019), while others highlight operational benefits (Mitrofanova, & Konovalova, 2019) or the conceptual understanding of digital HRM (Strohmeier, 2020).

The shift toward digital globalization, robotization, and artificial intelligence presents a significant issue for the future of labour. Companies are implementing digital solutions such as robotics and drones, resulting in employment losses. The new human-machine frontier will create a jobless society, with many roles becoming automated and human involvement reduced. This transition will influence the future of work in a digital environment. Globalization, smart digitalization, and cognitive automation are all having a significant impact on the future of work, with many skilled jobs being replaced by computerization and office automation. For example, in the manufacturing industry, robots are being utilized to undertake activities previously performed by human workers, resulting in layoffs and job displacement (Dijmărescu, & Ionescu, 2021). Furthermore, in the service industry, chatbots and virtual assistants are replacing real customer support representatives. These changes have an impact on current and future workplaces by making businesses reevaluate their business models and adapt to the new technological landscape. As a result, workers are pushed to learn new skills and adapt to changing job needs to remain competitive in the labour market (Ionescu, & Andronie, 2019). Companies are also investing in training and retraining initiatives to help employees transfer into new roles that are less vulnerable to automation (Tataru, 2019). Overall, the integration of technology in the workplace is transforming the way we work and propelling us toward a more digital and automated future. To survive in an ever-changing labour environment, both firms and employees must accept these changes and stay ahead of the curve.

In conclusion, while digital transformation offers efficiency and strategic advantages, it also necessitates a redefinition of HR roles and a careful balance between adopting modern technologies and managing the human element within organizations.

Ethical considerations and employee perspectives on digital HRM

The ethical implications of technology in the workplace, particularly concerning human resource management (HRM) practices, have garnered significant attention in the digital era. This has raised questions about employee privacy, data security, and the potential for discrimination and bias in decision-making processes. A number of experts argue that technology can improve efficiency and accuracy in HRM, but caution must be taken to ensure ethical use and protection of employee rights and information. Koivunen et al. (2023) explore the complexities of digitalizing talent acquisition and highlight ethical concerns among HRM professionals, such as biases in algorithms and the potential dehumanization of recruitment processes. The authors emphasize the importance of balancing technological advancements with the preservation of human values and principles in talent management practices. In their study, Koivunen et al. (2023) delve into the ways in which technology can both enhance and hinder the recruitment process. They discuss how algorithms used in talent acquisition may inadvertently perpetuate biases, leading to discrimination in hiring decisions. This raises important ethical considerations for HR professionals, who must navigate the fine line between efficiency and fairness in their recruitment practices. Additionally, the authors shed light on the potential dehumanization of recruitment processes through excessive reliance on technology, emphasizing the need for a human touch in talent management. On the other hand, Shankar, & Nigam (2022) investigate resistance to mobile HRM applications, attributing it to apprehensions about privacy, job security, and the reduction of personal interaction in HR services. They found that employees were also concerned about the potential for bias in automated decision-making processes. Overall, the study highlighted the importance of addressing these concerns to successfully implement mobile HRM applications in organizations. Another study done by Saurabh et al. (2022) proposes a framework for AI-led ethical digital transformation in HRM, stressing the importance of responsible AI that safeguards employee rights and privacy and influences managerial decisions. This framework aims to ensure that ethical considerations are integrated into the development and deployment of AI technologies within HRM applications in organizations. Lastly, & Chilwane (2021) addresses the ethical considerations for employees affected by job automation, emphasizing the need for ethical frameworks to manage the disruptions caused by technological advancements.

The reviewed literature underscores the urgent need for comprehensive ethical guidelines and frameworks for the implementation of HRM technologies. The authors collectively recognize that digitalization in HRM presents substantial ethical challenges that must be addressed. There is a unanimous view that technology should be employed responsibly to protect employee well-being and

maintain ethical integrity. While Koivunen et al. (2023) and Shankar, & Nigam (2022) focus on the direct ethical challenges faced by HR professionals and employees, Saurabh et al. (2022) and Chilwane (2021) discuss broader ethical frameworks and their impact on employment.

Technological advancements in HRM

Technological advancements are significantly impacting Human Resource Management (HRM), ushering in an era of digital HR practices. From artificial intelligence (AI) to the Internet of Things (IoT), HRM is being revolutionized. The literature sources gathered explore this technological evolution and its implications for HRM.

Panda, & Mahantshetti (2023) explore the adoption of AI in HR practices within the Indian context, emphasizing AI's potential to transform HR operations. They suggest that AI can streamline recruitment, enhance employee engagement, and improve decision-making processes, thereby offering a comprehensive framework for integrating AI into HRM. Pillai et al. (2022) discuss the integration of Industry 4.0 technology in HRM, proposing the concept of SHRM 4.0, which aligns HR strategies with broader organizational goals. Their work highlights the strategic potential of technologies such as AI, IoT, and big data analytics in creating a more responsive and dynamic HR function, which can adapt to rapidly changing business environments. Rubel et al. (2017) examine how technology adoption within HRM can enhance high-involvement HR practices and organizational trust. They theorize that technology can facilitate better communication, transparency, and employee participation, thereby fostering a more inclusive and engaged workforce. This perspective aligns with the broader view that technology can support a more participative and trust-based HR environment. Vrontis et al. (2022) provide a systematic review of AI, robotics, and advanced technologies in HRM, highlighting the extensive scope of technological integration. They discuss various applications of these technologies, from automating routine tasks to enhancing strategic HRM functions. This review underscores the transformative potential of technology in redefining HR roles and responsibilities. Budhwar et al. (2022) focus on the challenges and opportunities of AI in international HRM, proposing a theoretical framework for future research. They argue that while AI can offer significant advantages in terms of efficiency and global talent management, it also raises ethical and operational challenges that need to be addressed. This work provides a nuanced view of the dual-edged nature of AI in HRM. Dash et al. (2019) discuss the IoT as a new paradigm in HRM, emphasizing the need for skill development to fully exploit Industry 4.0 technologies. They propose that IoT can enhance workforce management through real-time data analytics and predictive maintenance of human capital, suggesting a shift towards more proactive and data-driven HR practices. Galanaki et al. (2019) conduct a cross-national analysis of e-HRM configurations, integrating IT and HRM perspectives to understand digital HR practices across different countries. Their study highlights the varying degrees of e-HRM adoption and its impact on

HR efficiency and effectiveness, providing a comparative view of how different organizational contexts influence technology integration. Arslan et al. (2022) explore AI's role in facilitating human-robot interactions at the team level, considering the potential challenges and HRM strategies to optimize these interactions. They emphasize the importance of designing HR policies that support seamless collaboration between human workers and AI systems, addressing both technological and human factors. Kim et al. (2021) provide a retrospective analysis of sixty years of HRM technology research, offering insights into past trends and future directions. They highlight the evolution of HR technologies from basic automation tools to sophisticated AI-driven systems, reflecting on the continuous transformation of HRM in response to technological advancements. Across these sources, there is a shared recognition of the profound theoretical influence that technology has on HRM. The discussions range from specific technologies like AI and IoT to broader impacts on HRM systems and strategies. Theoretical perspectives converge on the idea that while technology introduces efficiencies and strategic capabilities, it also necessitates significant changes in HR competencies and approaches.

In summary, technological advancements are revolutionizing HRM by introducing digital HR practices. The reviewed literature highlights AI and IoT's specific theoretical impacts and the broader implications of technology integration on HRM systems and strategies. Strategic alignment with organizational goals and the need for theoretical re-skilling of the HR workforce are recurrent themes. Future research should focus on addressing the theoretical challenges and opportunities brought by these technologies, ensuring that HR practices continue to evolve and meet the demands of the digital age.

Theoretical model of digital transformation influence on human resource management practices in multinational corporations

This section presents an overview of the theoretical model illustrating the influence of digital transformation on human resource management practices in multinational corporations.

To synthesize the information presented thus far, a theoretical model was developed (Figure 2). The theoretical model is grounded in the analysis of existing literature and frameworks on digital transformation and Human Resource Management (HRM) practices. The model was developed to conceptualize the intricate relationships between key elements of digital transformation—such as technological advancements, organizational transformations, and process innovations—and their influence on traditional and innovative HRM practices. This framework integrates insights from foundational studies on digital transformation (e.g., Gebayew et al., 2018; Gong, & Ribière, 2021) and HRM strategies (e.g., Latemore et al., 2019; Koon, & Fujimoto, 2023). It highlights the interplay between digital transformation components, such as process automation and customer experience enhancement, and HR outcomes, including strategic HRM, employee satisfaction, and organizational

adaptability. The model's design reflects the multifaceted impact of digital transformation on HRM practices, emphasizing not only technological integration but also the broader organizational and cultural shifts required to implement such changes effectively. In the context of digital transformation, three key outcomes frequently emerge in the literature as indicators of effective HRM transformation: efficiency, productivity, and employee satisfaction. Efficiency refers to the optimization of HR processes through automation, data integration, and reduced administrative burden, often enabled by technologies such as HRIS and AI-driven tools (Halid et al., 2020). Productivity captures the enhancement of employee output and performance due to streamlined workflows, better decision-making, and real-time feedback mechanisms (Chen et al., 2022). Meanwhile, employee satisfaction reflects the degree to which HRM systems support individual needs, career development, and workplace engagement, especially in digitally enabled environments (Silic et al., 2020). These three constructs are central to understanding the pathways through which digital transformation exerts its influence on HRM practices and thus form a foundational part of the theoretical model proposed in this study. By addressing gaps in existing research, the model bridges the theoretical understanding of digital transformation with its practical implications for HRM practices in multinational corporations. This theoretical framework serves as the foundation for empirical analysis, providing a structured approach to evaluate the influence of digital transformation on HRM outcomes.

The theoretical model developed in this thesis conceptualizes the relationship between digital transformation and Human Resource Management (HRM) practices in multinational corporations. It is divided into four primary components: the external digital environment, HRM transformation, intermediate outcomes, and organizational outcomes. Each component and its relationships are described below.

External digital environment

The model begins with the external digital environment, which includes technological advancements, legal-ethical policies, and economic drivers. These factors serve as the driving forces behind digital transformation, influencing the strategies and tools organizations adopt to remain competitive. For example, the rapid development of AI, IoT, and cloud computing introduces new opportunities for process automation and data-driven decision-making in HRM. Additionally, regulatory frameworks and ethical considerations, such as data privacy, further shape the implementation of digital practices in multinational settings.

HRM transformation

The second component of the model focuses on the transformation of HRM practices. It distinguishes between **traditional HRM practices** (these include foundational HR activities such as recruitment, employee training, and performance evaluation; while these practices are essential, they require adaptation to align with digital advancements) and **innovative HRM practices** (enabled by

digital transformation, these practices encompass AI-driven recruitment tools, e-learning platforms, and remote work policies; these innovations are crucial for fostering a flexible, efficient, and adaptive workforce). The relationship between the external digital environment and HRM transformation is direct, as organizations integrate new technologies and strategies into their HR functions to meet evolving demands.

Intermediate outcomes

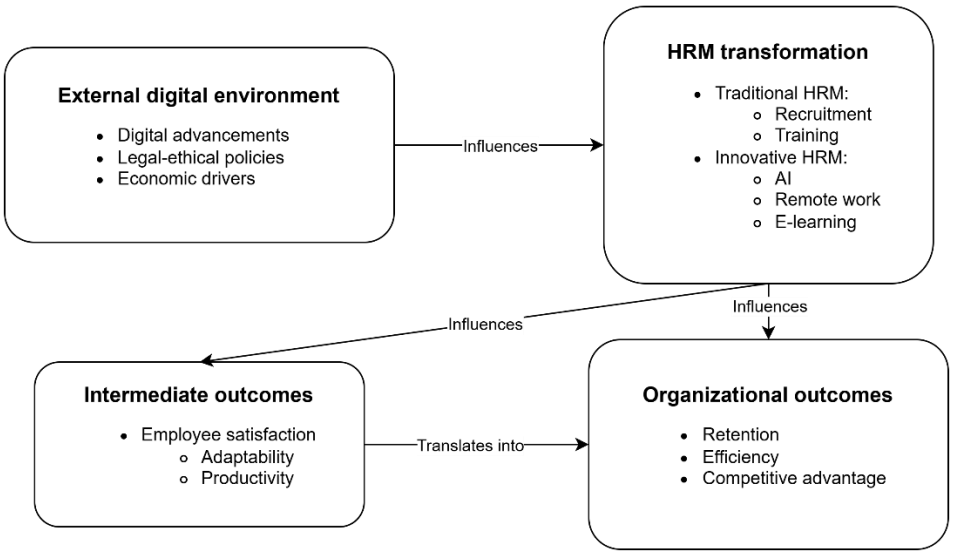
The third component highlights the intermediate outcomes resulting from transformed HRM practices. These include **employee satisfaction** (enhanced through the use of digital tools that streamline processes and provide personalized support), **adaptability** (improved as employees are equipped with digital skills and flexible working options), and **productivity** (boosted by automating repetitive tasks, allowing employees to focus on higher-value activities). These intermediate outcomes act as mediators between HRM transformation and broader organizational goals, reflecting the immediate impact on employees.

Organizational outcomes

The final component of the model focuses on the organizational outcomes that stem from successful HRM transformation. These include **retention** (higher employee satisfaction and engagement reduce turnover rates), **efficiency** (process automation and data analytics improve organizational efficiency and decision-making), and **competitive advantage** (organizations that effectively integrate digital HRM practices are better positioned to innovate and compete in dynamic markets). The relationship between intermediate and organizational outcomes is causal, as improvements in employee satisfaction, adaptability, and productivity directly contribute to organizational success.

Relationships and flow

The model establishes a sequential flow, starting with external digital drivers and ending with organizational outcomes (Figure 2). The arrows between components indicate influence and causality, showing how external forces drive HRM transformation, which in turn leads to intermediate outcomes and ultimately organizational success. This structured approach provides a clear framework for analysing the impact of digital transformation on HRM practices.



Source: created by the author.

Figure 2. Theoretical model of digital transformation influence on human resource management practices in multinational corporations

The theoretical model developed in this thesis is both relevant and original, addressing critical gaps in the intersection of digital transformation and Human Resource Management (HRM) practices in multinational corporations. Its relevance lies in its ability to conceptualize the complex and dynamic impact of digital transformation on HRM, a topic of increasing importance as organizations face rapidly changing technological landscapes and global workforce demands. While existing studies often focus on digital transformation or HRM practices independently, this model uniquely integrates these domains. It incorporates key aspects of digital transformation, such as technological advancements and organizational restructuring, and links them to HRM practices, including both traditional and innovative approaches. By bridging these areas, the model offers a comprehensive framework that reflects the challenges and opportunities posed by digital transformation in HR functions. The originality of the model is demonstrated in its focus on multinational corporations, which face unique complexities such as cross-cultural management, varied legal frameworks, and global workforce coordination. This model provides a structured approach to understanding how digital tools and strategies can enhance HRM practices in these settings, emphasizing both employee-level outcomes, such as satisfaction and adaptability, and organizational benefits, such as retention and efficiency. Furthermore, the model addresses gaps in existing literature by highlighting the mediating role of intermediate outcomes, such as productivity and adaptability, in linking HRM transformation to organizational success. This emphasis on mediators introduces a nuanced perspective that has been underexplored in previous research.

In summary, this theoretical model contributes to academic literature by offering an integrated, multi-level framework that reflects the evolving role of HRM in the digital age, while also providing practical insights for multinational corporations navigating digital transformation.

The first part of this thesis established the theoretical foundations for understanding the influence of digital transformation on HRM practices in multinational corporations. Key components of digital transformation—such as technological advancements, organizational restructuring, and process innovations—were analysed, alongside their impact on traditional and innovative HRM practices. The theoretical model developed in this section integrates these insights, highlighting the mediating role of employee-level outcomes in achieving organizational success. These findings provide a framework for the empirical research that follows, offering a basis for testing and validating the model's relationships.

2. EMPIRICAL RESEARCH LEVEL OF DIGITAL TRANSFORMATION INFLUENCE ON HUMAN RESOURCE MANAGEMENT PRACTICES IN MULTINATIONAL CORPORATIONS

This chapter examines the relationship between digital transformation and human resource management practices in multinational corporations and presents the corresponding research model.

2.1. Research on the links between digital transformation and human resource management practices in multinational corporations

Digital transformation profoundly influences Human Resource Management (HRM) practices within multinational corporations (MNCs) by embedding technology into HR processes, enhancing operational efficiency, and aligning operations with emerging business models. This analysis explores the intricate links between digital transformation and HRM practices, focusing on how these technologies reshape recruitment, employee development, performance management, and overall employee experience.

In order to systematize the findings and gain a holistic understanding of the key aspects analysed by various authors, Table 2 was created. This table provides an overview of the objectives, methodologies, and statistical results of studies investigating the impact of digital transformation on HRM practices. By presenting this information in a structured format, the table highlights the diverse approaches taken by researchers and underscores the empirical evidence supporting the transformative role of digital technologies in HRM.

Table 2

Research Objectives, Methods, and Results in Digital Transformation and HRM

Author	Objective	Methodology	Results (statistical evidence)
Blom et al. (2018)	To evaluate HRM's cross-sectoral impact using the AMO model.	Meta-analysis (134 studies)	Ability-enhancing HRM has the highest effect size (d = 0.45) on job satisfaction across sectors.
Chen et al. (2022)	To analyse the impact of AI capability on decision-making and firm performance.	PLS-SEM analysis (394 firms)	AI capabilities improve decision-making ($\beta = 0.41$, $p < 0.001$) and creativity ($\beta = 0.29$, $p < 0.05$), enhancing firm performance.
Halid et al. (2020)	To review digital HRM's role in improving organizational performance.	Systematic literature review	Digital HRM enhances efficiency by 40% and aligns workforce with strategic goals in 78% of surveyed cases.
Hu, & Lan (2024)	To explore digital-HRM's dual impact on innovation and cyberloafing.	Longitudinal study (487 employees)	Digital-HRM increases innovative performance ($\beta = 0.56$, $p < 0.001$) while reducing cyberloafing ($\beta = -0.34$, $p < 0.01$).
Jain et al. (2022)	To assess the adoption and collaboration benefits of AI-enabled tools in HRM.	Quantitative – online survey	AI-enabled tools improve collaboration significantly ($\beta = 0.32$, $p < 0.01$). Addressing AI aversion is crucial for adoption.
Langer et al. (2020)	To study automation in personnel selection and its impact on decision quality.	Experimental design (122 participants)	Decision support systems improve selection accuracy ($p < 0.05$) and self-efficacy (by 18%).
Puspita (2024)	To evaluate digital technology's role in flexible work models and HRM practices.	Systematic literature review	Digital tools improve employee adaptability by 45%, with real-time feedback enhancing engagement by 30%.
Silic et al. (2020)	To assess gamification's impact on job satisfaction and engagement.	Longitudinal study (398 employees)	Gamified HRM systems increased job satisfaction by 66% and engagement by 31% over 12 months.

Source: created by the author.

Enhanced efficiency and adaptability

Digital technologies have significantly streamlined HR processes, making them more efficient and adaptable to the demands of modern workplaces. This transformation is driven by the integration of Human Resources Information Systems (HRIS), automation tools, and advanced analytics that enhance data management and reduce manual intervention. AI-enabled tools such as smart scheduling and chatbots facilitate seamless collaboration among geographically dispersed teams, enhancing adaptability in dynamic work environments (Jain et al., 2022). For example, AI-enabled tools have been shown to significantly improve team collaboration ($\beta = 0.32$, $p < 0.01$) by automating routine tasks and facilitating decision-making in geographically dispersed teams, as summarized in Table 2 (Jain et al., 2022). Studies indicate that fostering an innovation culture amplifies AI's impact on adaptability and operational efficiency (Chen et al., 2022). The adoption of HRIS has redefined

traditional HR functions, such as payroll processing, performance management, and employee record keeping. HRIS systems, through their ability-enhancing features such as advanced training modules, significantly improve employee skill development, as evidenced in cross-sectoral studies (Blom et al., 2018). Moreover, Table 3 illustrates that multiple studies, such as those by Hu, & Lan (2024) and Puspita (2024), emphasize the adaptability benefits of digital HRM systems. These tools enable transparent workflows, real-time feedback, and remote work solutions, as seen in the incorporation of HRIS and collaboration platforms. As shown in Table 2, Halid et al. (2020) found that digital HRM enhances efficiency by 40%, aligning workforce strategies with organizational goals in 78% of surveyed cases. This underscores the transformative potential of digital tools in optimizing HR operations. Automation, powered by digital tools, reduces human error, speeds up processes, and ensures consistency in operations, which is crucial for maintaining competitive agility in a fast-paced business environment (Halid et al., 2020). Moreover, integrating HRIS systems into core HRM practices has demonstrated efficiency gains, with studies reporting a 40% improvement in administrative processes (Halid et al., 2020). By automating routine administrative tasks, HR departments can allocate resources toward strategic initiatives, thereby increasing their contribution to organizational objectives (Barišić et al., 2021). Studies reveal that decision support systems for personnel selection not only reduce time for hiring decisions but also increase satisfaction with those decisions, particularly when automated recommendations are provided after initial human analysis (Langer et al., 2021). Moreover, digital transformation enables organizations to adopt flexible and dynamic working models. Through tools like cloud computing, mobile applications, and collaboration platforms, employees and HR teams can perform tasks remotely, facilitating seamless communication and collaboration across geographically dispersed teams (Puspita, 2024). This flexibility not only improves operational efficiency but also enhances employee satisfaction by offering more adaptive work arrangements. HRM systems, such as Bitrix24, automate core processes like employee performance tracking, document management, and collaboration, contributing to efficiency gains and reduced operational errors (Khizbullina et al., 2024). Big data analytics further enhances adaptability by providing actionable insights into workforce trends and performance metrics. Empirical evidence highlights that predictive analytics enables proactive workforce planning, reducing skill gaps significantly ($\beta = 0.41$, $p < 0.001$) (Chen et al., 2022). These insights also allow HR professionals to design targeted training programs and optimize recruitment strategies, aligning with long-term business goals (Halid et al., 2020). Digital technologies further enable real-time performance tracking and feedback systems, fostering a culture of continuous improvement. Managers can monitor employee productivity, engagement, and well-being through intuitive dashboards, facilitating timely interventions and decision-making (Barišić et al., 2021). These systems are particularly valuable in hybrid and remote work models, where maintaining connectivity

and engagement is critical. Additionally, gamified HRM systems are emerging as effective tools for fostering engagement, as a longitudinal study revealed a 66% increase in job satisfaction and a 31% boost in employee engagement over 12 months (Silic et al., 2020). Gamification introduces interactive elements such as badges, leaderboards, and rewards that motivate employees to participate in HR processes actively. These systems foster adaptability by engaging employees in goal-oriented, gamified tasks, making workflows more dynamic and productive.

While the benefits of digital HR tools are substantial, challenges remain in their implementation. Data privacy and security are major concerns, as the increasing reliance on digital platforms necessitates robust cybersecurity measures to protect sensitive employee information. Additionally, organizations must invest in upskilling HR professionals to manage these technologies effectively, ensuring a smooth transition from traditional methods to digital frameworks (Puspita, 2024).

In conclusion, the integration of digital technologies into HR processes enhances both efficiency and adaptability, enabling organizations to respond swiftly to changing business dynamics. By leveraging HRIS, automation, and data analytics, companies can streamline operations, foster innovation, and align their workforce strategies with organizational goals. Addressing challenges such as data security and technological adaptation will be crucial for realizing the full potential of digital transformation in HR practices.

Skill and competency development

As digital transformation reshapes organizational practices, the development of new skills and competencies among HR professionals becomes essential to meeting the demands of a technology-driven business environment. Organizations must invest in training programs and strategies that foster digital proficiency, ensuring that HR teams are equipped to support and drive organizational performance effectively. As noted in Table 2, Puspita (2024) reported a 30% improvement in employee engagement through real-time feedback systems. The rapid evolution of digital technologies, including artificial intelligence, big data analytics, and machine learning, demands HR professionals to possess advanced technical skills alongside traditional competencies. For instance, HR teams must be adept at analysing data to identify workforce trends, predict skills gaps, and design targeted training programs that address specific organizational needs (Barišić et al., 2021). This capability enables organizations to align their talent management strategies with broader business objectives while maintaining agility in an ever-changing market. To achieve these objectives, organizations have increasingly integrated online learning platforms, virtual training sessions, and modular learning approaches into their HR development strategies. These tools offer flexibility and accessibility, allowing employees and HR professionals to acquire essential skills at their own pace. Notably, virtual learning environments facilitate collaborative and interactive learning experiences,

enhancing knowledge retention and application (Susanto et al., 2024). These platforms often include real-time feedback and analytics, which provide insights into learner progress and areas for improvement. Furthermore, immersive technologies such as virtual reality (VR) and augmented reality (AR) are gaining prominence in HR training programs. These technologies simulate real-world scenarios, offering a hands-on approach to learning complex tasks or navigating challenging workplace situations. For example, VR-based training modules are particularly effective in industries requiring high-risk decision-making, such as healthcare and manufacturing, where experiential learning can significantly enhance competence and confidence (Barišić et al., 2021). Another example – gamification – further enhances training programs by introducing game-like elements that improve engagement and knowledge retention. According to Silic et al. (2020), gamified HRM systems promote skill development by rewarding employees for completing training modules and sharing knowledge. For example, badges and leaderboards encourage healthy competition and collaboration, motivating employees to acquire and apply new skills actively. Digital-HRM systems have been shown to enhance innovative performance significantly ($\beta = 0.56$, $p < 0.001$) while reducing unproductive behaviours such as cyberloafing ($\beta = -0.34$, $p < 0.01$) (Hu & Lan, 2024). This dual impact, summarized in Table 2, underscores the strategic importance of fostering a culture of continuous learning and adaptability. Leadership development is also critical, as organizations that invest in adaptive leadership programs report significant improvements in innovation culture and team management (Chen et al., 2022). For example, digital systems support leadership by providing continuous analytics-based insights, enhancing decision-making precision. Organizations must prioritize leadership training programs that cultivate strategic thinking, emotional intelligence, and digital literacy among their leaders, ensuring they can effectively guide their teams through transformative shifts (Adiazmil et al., 2024). Cultural transformation also plays a pivotal role in skill and competency development. Organizations must foster a culture of continuous learning and innovation, encouraging employees to embrace new technologies and adapt to evolving business processes. This includes promoting a growth mindset, where employees view challenges as opportunities for development, thus creating an environment conducive to organizational resilience and success (Susanto et al., 2024).

Despite the advantages, challenges remain in implementing effective skill development initiatives. Resistance to change, limited access to resources, and the fast-paced evolution of technologies can hinder the adoption of training programs. To overcome these barriers, organizations must adopt strategic approaches, such as incentivizing participation, collaborating with external training providers, and ensuring inclusivity in program design (Barišić et al., 2021).

In conclusion, skill and competency development is a cornerstone of HR's adaptation to digital transformation. By leveraging advanced training technologies, fostering a culture of

continuous learning, and emphasizing leadership development, organizations can equip their HR teams with the tools needed to thrive in a digitally advanced landscape. Proactively addressing challenges in this domain will ensure that HR professionals remain key drivers of organizational success in the digital era.

Strategic HR planning

Strategic HR planning plays a vital role in ensuring the successful integration of digital transformation within multinational corporations (MNCs). By aligning HR strategies with organizational goals and emphasizing sustainable development, HR planning becomes a critical driver of organizational resilience and adaptability. This process necessitates engaging stakeholders and prioritizing the development of employee skills and leadership capabilities to meet the demands of a rapidly evolving digital environment. A cornerstone of effective strategic HR planning is the integration of technology into HR processes. Technologies such as artificial intelligence (AI), big data analytics, and digital platforms facilitate more efficient workforce planning and decision-making. For example, AI-powered tools can analyse workforce data to predict future skills needs and identify potential talent gaps, enabling organizations to design proactive training and recruitment strategies (Susanto et al., 2024). Empirical studies indicate that organizations employing AI-powered tools for workforce planning experience a significant improvement in selection accuracy ($p < 0.05$) and self-efficacy (by 18%) among hiring managers (Langer et al., 2020). For example, Langer et al. (2020) found that decision-support systems improve hiring accuracy ($p<0.05$) and self-efficacy by 18%, as shown in Table 2. This aligns with findings by Chen et al. (2022), who demonstrated the significant positive impact of AI on decision-making ($\beta=0.41, p<0.001$). The adoption of decision-support systems further streamlines the recruitment process, with automated recommendations increasing satisfaction with hiring decisions (Langer et al., 2020). AI-supported talent management systems optimize employee training and recruitment processes, ensuring alignment with strategic goals while enhancing overall workforce performance (Rožman et al., 2022). Additionally, data analytics supports informed decision-making by providing insights into employee performance, engagement, and development trends, ensuring alignment with long-term organizational goals (Adiazmil et al., 2024). Organizations leveraging gamified HRM systems reported substantial efficiency improvements, with features like leaderboards and recognition badges fostering collaboration and innovation (Silic et al., 2020). Moreover, strategic use of digital HRM tools aligns employee development with organizational goals, enhancing productivity and adaptability. HRIS can also be a useful tool in HR planning. The integration of HRIS systems in strategic planning fosters an equitable and inclusive workplace, enabling employees to feel valued and aligned with organizational objectives (Hu, & Lan, 2024). The AMO model illustrates that HRIS systems are most effective when tailored to sector-specific constraints, such as reducing goal ambiguity in the public

sector through structured performance management tools (Blom et al., 2018). By leveraging these systems, organizations can align workforce development strategies with broader objectives, ensuring resilience in a rapidly evolving business landscape. Engaging key stakeholders, including top management and business unit leaders, is essential for aligning HR strategies with broader organizational objectives. Active involvement from stakeholders ensures that HR planning is informed by the organization's vision, strategic direction, and anticipated market changes. This collaboration fosters a unified approach to workforce development, enabling organizations to anticipate technological disruptions and adapt accordingly (Adiazmil et al., 2024). By establishing clear communication channels, stakeholders contribute to creating HR strategies that address both immediate and future challenges. Developing employee skills and leadership is another critical component of strategic HR planning. Digital transformation demands not only technical competencies but also adaptive and innovative leadership qualities. Organizations must invest in leadership development programs that cultivate digital literacy, strategic thinking, and the ability to manage change effectively. Inclusive initiatives such as mentoring, cross-functional projects, and access to digital learning resources further enhance employees' readiness to navigate technological advancements (Susanto et al., 2024). Additionally, fostering a culture of innovation and collaboration empowers employees to actively contribute to organizational goals. Alignment with sustainable development goals (SDGs) has emerged as a strategic priority in HR planning. By integrating sustainability into workforce strategies, organizations demonstrate a commitment to social and environmental responsibility. This includes adopting green technologies, reducing resource consumption, and promoting practices that enhance the well-being of employees and communities. For example, organizations can leverage digital tools to optimize resource utilization and minimize environmental impact, creating a sustainable and resilient operational framework (Susanto et al., 2024; Adiazmil et al., 2024).

Despite its benefits, implementing strategic HR planning in the digital era is not without challenges. Resistance to change, technological uncertainty, and difficulties in forecasting future skill requirements pose significant hurdles. To address these, organizations must prioritize change management strategies that involve effective communication, transparent decision-making, and ongoing support for employees during transitions. Flexible planning approaches, such as iterative workforce assessments, allow organizations to adapt quickly to shifting market demands and technological advancements (Adiazmil et al., 2024).

In conclusion, strategic HR planning is a foundational element of successful digital transformation. By aligning HR strategies with organizational goals, engaging stakeholders, and emphasizing employee development, organizations can navigate the complexities of a technology-

driven business landscape. The integration of sustainable practices further enhances organizational adaptability and resilience, ensuring long-term success in the digital era.

Impact on organizational performance

Digital HRM practices have become instrumental in enhancing organizational performance by integrating advanced technologies into HR functions, improving efficiency, and enabling better decision-making. The adoption of digital tools such as analytics, artificial intelligence (AI), and human resources information systems (HRIS) empowers organizations to optimize their HR processes and align them more closely with strategic goals. For example, digital-HRM tools facilitate real-time performance tracking, significantly boosting decision-making quality ($\beta = 0.41$, $p < 0.001$) (Chen et al., 2022). The adoption of automated ranking systems for candidate evaluation has been shown to improve decision-making accuracy and reduce cognitive load on managers, enhancing organizational agility (Langer et al., 2021). AI-driven talent management systems directly contribute to organizational performance by increasing employee engagement and productivity. These systems streamline training and reduce workload, enabling employees to focus on value-adding tasks (Rožman et al., 2022). AI-powered recruitment tools reduce unconscious bias and streamline hiring processes, contributing to enhanced performance metrics and improved talent acquisition outcomes (Alam et al., 2020). Gamification further amplifies these benefits by fostering intrinsic motivation and sustained engagement. In a study by Silic et al. (2020), the introduction of gamified HRM systems resulted in measurable improvements in job satisfaction and engagement. Employees reported higher levels of motivation and focus when performing gamified tasks, which contributed directly to enhanced productivity and organizational outcomes. For example, the use of leaderboards and recognition badges in HR processes encouraged employees to achieve higher levels of performance, aligning personal and organizational goals effectively. The use of analytics in HRM plays a pivotal role in enhancing decision-making capabilities. The HR-tech market's growth by 21.2% in 2022 underlines the increasing adoption of automated HR solutions to manage employee productivity and engagement effectively (Khizbullina et al., 2024). Predictive analytics allows organizations to anticipate workforce trends, identify potential risks, and proactively address them. For instance, data analytics can track employee performance, engagement levels, and retention trends, providing actionable insights that enable HR teams to design targeted interventions. This strategic use of data supports better workforce planning and contributes directly to improved organizational outcomes (Zavyalova et al., 2022). AI technologies have revolutionized traditional HR practices, enabling automation of repetitive tasks such as resume screening, performance evaluations, and scheduling. These advancements not only improve efficiency but also reduce the likelihood of errors and ensure consistency in HR operations. AI tools can also analyse large datasets to identify patterns, helping organizations to uncover insights that drive productivity and innovation (Halid et al., 2020). HRIS

further enhances organizational performance by streamlining administrative processes, ensuring accurate record-keeping, and facilitating compliance with legal and regulatory requirements. The sectoral analysis shows that HRIS adoption can improve individual performance outcomes, particularly through opportunity-enhancing practices such as participative decision-making (Blom et al., 2018). HRIS systems promote innovative behaviours by enhancing employees' sense of work gain and mitigating workplace stressors, thereby boosting organizational performance (Hu, & Lan, 2024). These systems enable real-time access to employee data, fostering transparency and enabling HR professionals to focus on strategic priorities. Additionally, cloud-based HR platforms support seamless collaboration across geographically dispersed teams, improving communication and operational efficiency (Halid et al., 2020). One of the critical advantages of digital HRM is its ability to foster agility in dynamic business environments. By leveraging technology, organizations can quickly adapt to market changes, scale operations, and implement innovative practices that enhance competitiveness. For example, digital tools have proven particularly valuable in supporting remote work arrangements, allowing organizations to maintain productivity during disruptions such as the COVID-19 pandemic (Zavyalova et al., 2022).

Despite these benefits, the impact of digital HRM on organizational performance is not uniformly positive and depends on factors such as the breadth and depth of digitalization. Research suggests that organizations with a high degree of digital HRM integration experience greater flexibility and improved performance metrics. However, companies with limited or poorly implemented digital HR practices may face challenges such as underutilization of tools and employee resistance to change, which can hinder performance gains (Zavyalova et al., 2022).

In conclusion, digital HRM practices have a profound impact on organizational performance by enhancing efficiency, decision-making, and adaptability. The strategic use of analytics, AI, and HRIS enables organizations to optimize HR functions and align them with broader business objectives. However, realizing the full potential of digital HRM requires thoughtful implementation, continuous monitoring, and an organizational culture that embraces innovation and change.

Challenges and opportunities

Digital transformation presents significant opportunities for organizations to enhance efficiency, competitiveness, and innovation through the integration of advanced technologies in HRM. However, these advancements are accompanied by notable challenges, including data security risks, resistance to change, and the need for digital literacy across the workforce. One of the most pressing challenges in digital transformation is data security and privacy. As HR processes become increasingly digitized, sensitive employee information is stored and managed on digital platforms, making organizations more vulnerable to cyber threats. The protection of personal and organizational data requires robust cybersecurity measures, strict compliance with privacy regulations, and ongoing

vigilance to counter potential breaches (James et al., 2023). Ethical concerns, such as data privacy and fairness in decision-making, must be addressed during AI integration to maintain trust and ensure inclusivity in HR practices (Singh, & Pandey, 2024). Companies must implement advanced encryption protocols, train employees in cybersecurity awareness, and establish incident response plans to mitigate risks effectively. Resistance to change also emerges as a critical obstacle during digital transformation initiatives. Employees accustomed to traditional HR practices may be hesitant to adopt new technologies, particularly if they perceive these changes as threats to their roles or workflows. This resistance can hinder the successful implementation of digital tools and delay organizational progress. To address this, organizations must prioritize change management strategies, including transparent communication, employee engagement initiatives, and the involvement of staff in decision-making processes related to digital transformation (Barišić et al., 2021). One challenge of automation is the initial resistance from HR professionals due to algorithm aversion, which can hinder the effective implementation of decision support systems (Langer et al., 2021). HRM systems must be aligned with existing IT infrastructure to avoid integration issues, which remain a significant challenge for enterprises undergoing digital transformation (Khizbullina et al., 2024). Another key challenge is the need for digital literacy among the workforce. As digital tools become integral to HRM functions, employees and HR professionals must acquire the necessary skills to utilize these technologies effectively. This includes training in data analytics, AI-driven systems, and digital communication platforms. Organizations must invest in comprehensive training programs and foster a culture of continuous learning to ensure employees remain competent and confident in using new tools (Puspita, 2024). HRIS systems face challenges such as varying organizational goals and personnel constraints, which limit their uniform application across sectors (Blom et al., 2018). While HRIS systems offer immense potential, their success is contingent on user-friendly interfaces, which significantly influence employee adoption and satisfaction (Hu, & Lan, 2024). While AI adoption enhances operational efficiency, it can lead to job stress among employees. Leadership strategies like coaching are critical in mitigating stress and ensuring a smooth AI transition (Jeong et al., 2024). Algorithm aversion remains a significant barrier to AI adoption in HR processes. Transparent communication and tailored training programs are essential for fostering trust in AI tools (Jain et al., 2022). Gamification, on the other hand, introduces unique challenges and opportunities in this context. While gamified systems are effective in fostering engagement, sustaining long-term interest remains a concern. Silic et al. (2020) note that younger employees adapt quickly to gamification, but older employees may view it as a distraction. Addressing these generational differences requires tailoring gamification elements to suit diverse workforce demographics.

Despite these challenges, the opportunities provided by digital transformation are substantial. Automation of repetitive HR tasks, such as payroll processing and applicant tracking, allows HR

professionals to focus on strategic initiatives, thereby enhancing productivity and innovation. Additionally, digital tools provide advanced analytics capabilities, enabling organizations to gain insights into workforce trends, predict future needs, and make data-driven decisions. These tools also enhance employee experience by offering self-service platforms and personalized career development plans, which improve satisfaction and engagement (James et al., 2023). Digital transformation also facilitates the adoption of flexible working models, such as remote work and hybrid arrangements, which have become increasingly relevant in the post-pandemic era. These models promote work-life balance, attract top talent, and enable organizations to operate efficiently across geographical boundaries. Collaboration tools like video conferencing, shared digital workspaces, and project management software ensure that remote teams remain connected and productive, fostering innovation and creativity (Barišić et al., 2021). Gamification provides substantial opportunities as well. It enables organizations to create inclusive and collaborative HR ecosystems that enhance employee satisfaction and drive organizational success. By strategically addressing barriers such as data security and workforce readiness, organizations can fully harness the potential of gamified HRM systems. To fully realize the benefits of digital transformation, organizations must address the underlying challenges strategically. This includes developing robust policies for data security, engaging employees throughout the change process, and ensuring inclusivity in digital literacy programs. By doing so, companies can harness the opportunities of digital transformation to create a resilient, adaptive, and competitive workforce.

Overall, while digital transformation introduces complex challenges in HRM, it also offers transformative opportunities that redefine the future of work. Organizations that effectively navigate these challenges and embrace technological advancements will be better positioned to thrive in a dynamic and digital-first business environment.

To further contextualize the findings, Table 3 categorizes research aspects of digital transformation's influence on HRM practices. It illustrates the primary focus areas addressed by each study, such as the integration of HRIS, the adoption of AI-enabled tools, and adaptability to remote work. This structured representation not only provides clarity but also emphasizes the breadth and depth of digital transformation's impact across multiple HRM dimensions.

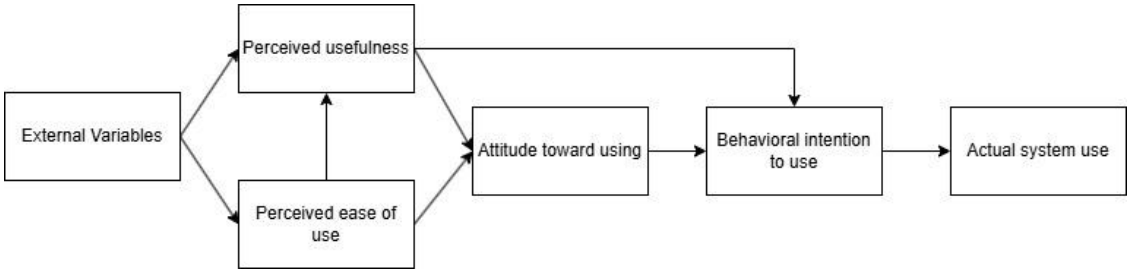
Table 3

Research Aspects of Digital Transformation's Influence on HRM Practices

Author	Integration of HRIS	AI-Enabled Tools	Big Data Analytics	Gamified HR Systems	Remote Work Adaptability
Barišić et al. (2021)	+				
Blom et al. (2018)	+				
Chen et al. (2022)		+			
Halid et al. (2020)			+		+
Hu, & Lan (2024)	+				+
Jain et al. (2022)	+	+			+
Khizbullina et al. (2024)					+
Langer et al. (2021)		+			
Puspita (2024)					+
Silic et al. (2020)				+	

Source: created by the author.

In examining how employees engage with digital HR technologies, it is important to consider theoretical models that explain user behaviour. One such model is the Technology Acceptance Model (TAM) proposed by Davis (1989), which posits that individuals' acceptance and use of technology are primarily influenced by two factors: perceived usefulness and perceived ease of use (Figure 3).



Source: Davis, F.D., Bagozzi, R.P., & Warshaw, P.R. (1989). *User acceptance of computer technology: A comparison of two theoretical models*. *Management Science*, 35(8), 982–1003, p. 985.

Figure 3. Technology Acceptance Model (TAM)

These constructs shape employees' willingness to adopt digital tools, influencing their satisfaction, productivity, and engagement. TAM has been widely applied in HRM research to understand employee reactions to platforms such as self-service HR systems, AI-powered tools, and performance management software. In the context of this thesis, TAM provides a theoretical foundation for analysing how perceived ease of use and usefulness (as later tested in Hypothesis 7) relate to employee productivity in multinational corporations undergoing digital transformation.

In conclusion, this analysis highlights the critical links between digital transformation and HRM practices in multinational corporations. By integrating advanced technologies into HR functions, organizations achieve improved efficiency, adaptability, and alignment with strategic objectives. Although challenges such as data security and workforce readiness persist, MNCs that address these issues effectively are well-positioned to secure long-term success in a rapidly evolving business landscape.

2.2. Research model of digital transformation influence on human resource management practices in multinational corporations

The research model serves as the foundational framework for investigating the influence of digital transformation on Human Resource Management (HRM) practices within multinational corporations. This section integrates insights from the theoretical analysis and existing empirical findings to formulate a structured approach that links key variables such as digital transformation technologies, organizational readiness, employee adaptability, and HRM efficiency.

Digital transformation, characterized by the integration of technologies like Artificial Intelligence (AI), Big Data Analytics, and cloud-based HR tools, fundamentally reshapes traditional HRM functions (Panda, & Mahantshetti, 2023; Halid et al., 2020; Fuller et al., 2020). However, the extent of this influence depends on various factors, including organizational culture (Adiazmil et al., 2024), employee digital literacy (Puspita, 2024), and the perceived usefulness of these technologies. By designing a research model, this thesis seeks to systematically analyse these relationships and identify pathways through which digital transformation impacts HRM outcomes, such as efficiency, productivity, and employee satisfaction. This section begins by presenting the core components of the research model, encompassing independent, mediating, and dependent variables, as well as the moderating factors that shape these relationships. The research model not only illustrates the theoretical underpinnings of these variables but also sets the stage for empirical evaluation, forming a bridge between the theoretical concepts outlined in the earlier chapter and the practical findings explored in subsequent sections.

Core components of the research model

The research model of this study is built upon a comprehensive analysis of the interplay between various factors that drive and influence the digital transformation of Human Resource Management (HRM) practices in multinational corporations. At the core of this framework are four distinct types of variables: independent variables, which represent the driving forces behind digital transformation; dependent variables, which capture the outcomes of these transformations; mediating variables, which explain the mechanisms through which changes occur; and moderating variables, which determine the conditions under which these relationships are amplified or diminished. By

integrating these variable types, the model provides a structured pathway for investigating how digital transformation technologies impact key HRM outcomes, such as employee satisfaction, HR efficiency, and organizational productivity. Each variable group plays a vital role in linking theoretical insights with practical applications, thereby enabling a nuanced understanding of the influence of digital transformation on HRM practices. The subsequent sections outline these variables in detail, starting with the independent variables that represent the driving forces of change.

Independent variables (IVs)

Digital transformation comprises various technologies that directly influence HRM practices in multinational corporations. These are the primary drivers of change:

1. AI and automation integration refers to the application of artificial intelligence and automation technologies to streamline repetitive HR tasks such as recruitment, payroll processing, and performance evaluations. These tools increase accuracy and efficiency while reducing the time spent on administrative functions.
2. Big data analytics focuses on leveraging vast amounts of HR-related data to identify trends, predict employee performance, and design personalized feedback systems. This provides organizations with actionable insights to improve decision-making.
3. Cloud-based HR tools encompass digital platforms that enable seamless access to HR resources, especially in remote and hybrid work environments. These tools enhance flexibility and adaptability for employees across geographically dispersed teams.

Dependent variables (DVs)

The outcome variables represent the critical HRM practices and organizational performance measures affected by digital transformation:

1. HR efficiency denotes the ability to optimize HR processes, minimize resource wastage, and improve task execution speed due to digital transformation tools.
2. Improved performance management captures enhancements in employee evaluation methods and goal alignment through data-driven feedback mechanisms.
3. Increased productivity measures the overall improvement in employee output and organizational efficiency due to streamlined HR practices and effective digital tools.
4. Reduced employee turnover reflects the positive impact of improved employee satisfaction and performance management on retention rates.

Mediating variables (MVs)

Mediators explain how or why certain relationships occur between independent and dependent variables:

1. Employee satisfaction represents employees' positive perception of digital transformation efforts, such as digital upskilling opportunities and access to user-friendly HR tools. Higher satisfaction levels drive better engagement and participation in HR processes.
2. Employee adaptability refers to the ability of employees to embrace new technologies and workflows. Adaptable employees are better equipped to meet organizational expectations, thus influencing performance outcomes.

Moderating variables

Moderators influence the strength or direction of the relationship between independent and dependent variables:

1. Organizational culture readiness indicates the extent to which a corporation's culture supports innovation, learning, and technological adoption. A readiness for change amplifies the positive effects of digital transformation.
2. Employee digital literacy levels reflect the employees' ability to effectively use digital tools. Higher literacy levels facilitate smoother integration of technologies and improved HR process efficiency.

Justification of relationships between variables

The proposed research model (Figure 4) explores the influence of digital transformation on Human Resource Management (HRM) practices in multinational corporations, supported by theoretical frameworks and empirical studies. Each relationship is carefully designed to reflect established insights and fill gaps identified in the literature.

Building on the justification of relationships between variables, this section outlines the hypotheses developed to guide the empirical investigation of the research model. The relationships identified in the previous section serve as the theoretical foundation for these hypotheses, reflecting the interplay between digital transformation factors, employee outcomes, and organizational performance. Each hypothesis captures a specific aspect of the research model, linking the independent variables, such as AI integration and big data analytics, with dependent outcomes like HR efficiency, employee satisfaction, and productivity. Mediating and moderating variables are also incorporated to address the indirect and conditional effects of digital transformation on HRM practices. These hypotheses not only provide a structured approach to exploring the research problem but also establish the basis for the quantitative analysis in the empirical section.

H1: AI and automation integration positively impacts HR efficiency

AI and automation technologies streamline repetitive HR tasks such as recruitment, payroll processing, and performance evaluations. By automating these processes, organizations achieve higher accuracy and speed, freeing HR professionals to focus on strategic initiatives. Studies by Gong, and Ribière (2021) highlight how AI tools enhance HR processes by enabling better decision-making and resource allocation. Furthermore, Mitrofanova, & Konovalova (2019) emphasize that integrating AI improves operational efficiencies in multinational contexts, reducing errors and administrative burdens.

H2: Big data analytics enhances improved performance management

Big data analytics provides HR professionals with actionable insights into employee performance trends, skill gaps, and future workforce needs. These insights support the development of personalized feedback systems and targeted training programs. Fenech et al. (2019) emphasize the transformative role of data-driven insights in reshaping traditional performance management practices, enabling a shift toward real-time, evidence-based decision-making. Strohmeier (2020) further underscores the importance of leveraging analytics to align employee goals with organizational objectives.

H3: Cloud-based HR tools positively influence employee adaptability

Cloud-based HR tools facilitate real-time access to HR resources, enabling employees to navigate dynamic work environments more effectively. These tools support remote collaboration and flexibility, crucial in multinational corporations operating across dispersed geographies. Fuller et al. (2020) illustrate the significance of cloud-based platforms in enhancing team adaptability, particularly during transitions to hybrid or remote work models.

H4: Employee digital upskilling increases employee satisfaction

Digital upskilling initiatives empower employees to remain relevant in the digital workplace, fostering a sense of growth and career security. Employees who perceive their organizations as investing in their development are more likely to report higher job satisfaction. Studies such as those by Wang et al. (2023) and Malik et al. (2020) highlight that upskilling programs lead to improved morale and engagement by equipping employees with the tools needed for their evolving roles.

H5: Employee satisfaction mediates the relationship between digital transformation factors and HR efficiency

Satisfied employees engage more actively with digital transformation efforts, resulting in improved HR process efficiency. As Fenech et al. (2019) assert, employee satisfaction is a key mediator that drives effective adoption of digital tools. Employees who are satisfied with user-

friendly tools and transformation processes are more likely to interact positively with HR systems, thereby enhancing efficiency.

H6: Employee adaptability mediates the relationship between cloud-based HR tools and improved performance management

Employee adaptability to new technologies is a critical factor in realizing the benefits of cloud-based HR tools. Adaptive employees embrace new workflows more effectively, contributing to seamless performance management. Mitrofanova, & Konovalova (2019) stress the importance of adaptability in organizations navigating digital transformations. The ability to adapt ensures that performance management practices remain aligned with evolving technological landscapes.

H7: Perceived ease of use and usefulness of digital tools positively impacts increased productivity

The perceived ease of use and usefulness of digital tools significantly influence employee productivity in multinational corporations. As outlined in the empirical research in the thesis, digital tools that simplify tasks and provide clear value to employees enhance their engagement and efficiency. For instance, gamified HR systems have been shown to improve job satisfaction by 66% and employee engagement by 31% over a 12-month period, as observed in Silic et al.'s (2020) study. This indicates that user-friendly and beneficial tools encourage active employee participation in HR processes, fostering a more productive work environment. Additionally, Puspita (2024) highlights that real-time feedback provided by digital tools enhances engagement by 30%, further supporting the role of intuitive tools in boosting performance.

H8: HR efficiency positively impacts increased productivity

Efficient HR processes reduce administrative burdens, enabling employees to focus on core responsibilities. This efficiency fosters a more productive workforce. Gebayew et al. (2018) highlight the link between streamlined HR practices and organizational productivity, citing that resource optimization achieved through digital transformation allows employees to devote more time to value-adding activities.

H9: Improved performance management reduces employee turnover

Effective performance management practices, supported by digital transformation, enhance employee engagement and satisfaction, reducing turnover rates. Studies by Strohmeier (2020) and Meijerink et al. (2018) reveal that performance management systems aligned with employee needs lead to stronger retention rates, as employees feel valued and supported in their professional growth.

H10: Organizational culture readiness moderates the impact of digital transformation on HR efficiency

An organizational culture that embraces change and innovation amplifies the positive effects of digital transformation on HR efficiency. Research by Hrynko (2019) indicates that cultural

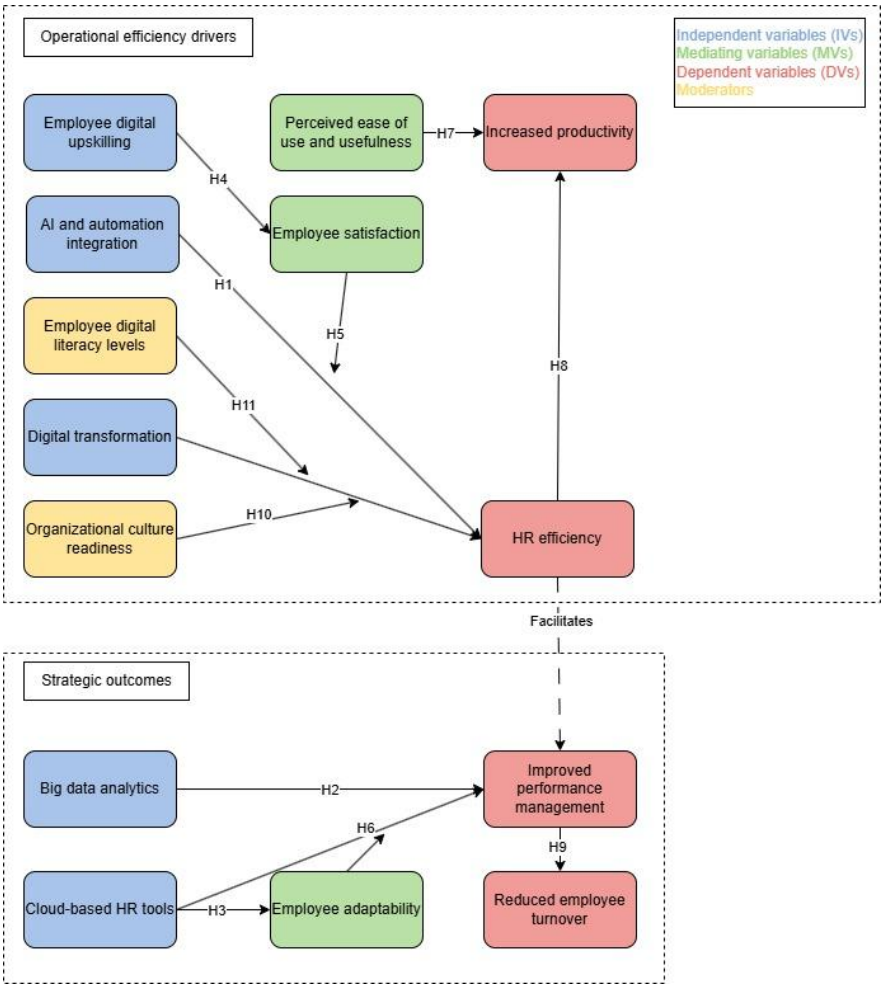
readiness significantly impacts the smooth adoption of digital tools, particularly in multinational settings. Organizations with a proactive culture of technological readiness experience fewer challenges during transitions, ensuring higher efficiency gains.

H11: Employee digital literacy levels moderate the impact of digital transformation on HR efficiency

Employees with higher digital literacy levels are better equipped to use and integrate digital tools effectively. This literacy reduces the learning curve and enhances the efficiency of HR processes. Malik et al. (2020) highlight the role of digital literacy in facilitating technology adoption, stating that organizations that invest in digital literacy training report smoother transitions during digital transformations.

Research model

Based on the theoretical frameworks and empirical findings, a research model was developed and presented in Figure 4.



Source: created by the author.

Figure 4. Research model of digital transformation influence on HRM practices in multinational corporations

This research model provides a structured framework to analyse the influence of digital transformation on Human Resource Management (HRM) practices in multinational corporations. Grounded in theoretical insights and empirical findings, the model integrates key components such as independent variables (AI and automation integration, big data analytics, cloud-based HR tools, and digital upskilling), mediating variables (employee satisfaction, employee adaptability, and perceived ease of use and usefulness), and dependent outcomes (improved performance management, increased productivity, and reduced employee turnover). It is designed to illustrate the relationships between these variables, emphasizing how digital transformation initiatives shape HR practices and organizational outcomes. Additionally, moderating factors, such as organizational culture readiness and employee digital literacy levels, are incorporated to capture the contextual dynamics that amplify or diminish these impacts. The research model not only reflects the complexity of HRM practices in a digitally evolving workplace but also serves as the foundation for testing hypotheses through empirical analysis. Its sequential structure, moving from digital drivers to organizational outcomes, ensures clarity in mapping causal links and intermediate effects. The model is structured into two main segments: operational efficiency drivers and strategic outcomes, which help illustrate the pathway from technology adoption to organizational impact. A dashed arrow illustrates the facilitating role of HR efficiency, which enables the translation of operational improvements into strategic HR outcomes. The research model not only reflects the complexity of HRM practices in a digitally evolving workplace but also serves as the foundation for testing hypotheses through empirical analysis.

The analytical part has identified key factors influencing the integration of digital transformation technologies into HRM practices in multinational corporations. It highlights the critical roles of employee satisfaction, adaptability, organizational culture readiness, and digital literacy in shaping the success of these initiatives. These insights provide a solid foundation for the proposed research model, linking theoretical concepts to the empirical research to follow.

3. EMPIRICAL RESEARCH OF DIGITAL TRANSFORMATION INFLUENCE ON HUMAN RESOURCE MANAGEMENT PRACTICES IN MULTINATIONAL CORPORATIONS

This chapter presents the empirical research methodology employed to examine the impact of digital transformation on human resource management (HRM) efficiency and employee satisfaction within multinational corporations. This chapter presents the analysis and interpretation of the research results, based on the empirical investigation of the formulated hypotheses and evaluation of research results.

3.1. Research methodics

This chapter presents the empirical part of the research. It aims to test the hypotheses developed in the theoretical part and to assess the impact of digital transformation tools on HRM efficiency and related dimensions in multinational companies. The study applies a quantitative approach using survey data collected from HR professionals.

The **research aims** to examine the influence of AI and automation, big data analytics, cloud-based HR tools, digital upskilling, and organizational readiness on HR efficiency, performance management, and workforce adaptability in multinational corporations, *based on the research model of digital transformation influence on HRM practices*.

To achieve this aim, the research is structured around the following **objectives**:

1. Identify the impact of digital transformation technologies (AI, automation, big data, cloud solutions) on HR efficiency and employee adaptability.
2. Assess the role of digital upskilling and perceived usefulness of digital tools in enhancing employee satisfaction and productivity.
3. Examine the relationship between HR efficiency and organizational outcomes, such as employee turnover and overall productivity.
4. Assess the mediating role of HR efficiency, employee satisfaction, and perceived usefulness in the relationship between digital transformation factors and organizational outcomes.
5. Investigate the moderating effects of organizational culture readiness and employee digital literacy on the success of digital transformation in HRM.
6. Determine which HRM practices should be prioritized to maximize the benefits of digital transformation in multinational corporations.

This structured approach ensures that the study adheres to quantitative research principles, maintaining statistical validity and empirical rigor.

Research methods and hypotheses

This study employs a quantitative research approach, grounded in the positivist methodological paradigm, which emphasizes objectivity, measurement, and the use of statistical techniques to identify relationships between variables (Arbnor, & Bjerke, 2016). Positivism assumes that social phenomena can be quantified and generalized across contexts, making it suitable for studies involving large populations and structured data collection instruments such as surveys. A structured questionnaire was used to systematically evaluate the relationships between digital transformation, HR efficiency, and workforce adaptability. The cross-sectional design enabled the collection of standardized data from HR professionals and employees at a single point in time, allowing for comparison and hypothesis testing. The use of quantitative survey methods is well-established in the field, as demonstrated by researchers such as Halid et al. (2020), Silic et al. (2020), and Hu, & Lan (2024), who applied structured questionnaires to explore the impact of digital tools on HR practices, satisfaction, and organizational performance. By adopting this approach, the study aims to ensure data reliability, replicability, and the ability to generalize findings to broader multinational contexts.

The data are collected through an online self-administered survey, ensuring anonymity and confidentiality to encourage candid responses. The questionnaire consists of closed-ended questions, primarily structured using a Likert scale, which allows for the quantification of perceptions and attitudes on a numerical scale. This approach ensures response consistency and enhances the reliability and validity of the data (Wulandari et al., 2023). Previous studies have highlighted the effectiveness of Likert-scale questionnaires in HR research, particularly in digital transformation contexts (Kumala, 2024).

The collected data are analysed using IBM SPSS Statistics version 30. Descriptive statistics summarise the data, including measures of central tendency such as means and medians, and measures of variability such as standard deviations. Pearson correlation coefficients are calculated to examine the strength and direction of linear relationships between key variables. In addition, multiple regression analysis is applied to assess the predictive power of digital transformation factors on HR-related outcomes such as performance, satisfaction, and productivity.

To evaluate indirect and interaction effects, mediation and moderation analyses are conducted using the PROCESS macro version 4.2 by Andrew F. Hayes (2012). Specifically, Model 4 is used to test mediation effects, and Model 1 is applied to test moderation. Bootstrap sampling (5000 resamples, 95% confidence interval) ensures robust estimates. Where necessary, variables are mean-centred to reduce multicollinearity in interaction terms. These methods provide insight into the structural relationships between constructs relevant to digital transformation and HRM and reflect established research practice in this field (Balabanova et al., 2024).

All research activities follow ethical principles, ensuring informed consent, respondent anonymity, and compliance with data protection regulations. The methodological approach ensures empirical rigor, transparency, and reproducibility, contributing to a comprehensive understanding of how digital transformation influences HRM practices (Lukita et al., 2024).

To provide a clearer understanding of the hypotheses and the corresponding survey questions used to test them, Table 4 was created.

Table 4

Hypotheses and Survey Questions on Digital Transformation and HRM in MNCs

Hypothesis	Survey Questions for Hypothesis Validation
H1: AI and automation integration positively impacts HR efficiency	2. AI-powered tools are frequently used in our HR processes (e.g., recruitment, payroll, performance evaluation). 3. AI and automation have improved efficiency in our HR department. 4. AI-driven automation has reduced the administrative workload in our organization. 5. AI has improved the quality of decision-making in HR. 6. Our HR staff is adequately trained to work with AI-powered tools.
H2: Big data analytics enhances improved performance management	7. Our organization uses big data to track and improve employee performance. 8. Big data plays a valuable role in our HR decision-making processes. 9. The use of big data has improved performance evaluations in our organization. 10. HR professionals in our organization have the necessary skills to interpret and apply data insights. 11. Data-driven decisions have contributed to more objective and transparent HR practices.
H3: Cloud-based HR tools positively influence employee adaptability	12. Our corporation uses cloud-based HR tools such as employee self-service platforms or HR portals. 13. Employees in our organization easily adapt to new cloud-based HR technologies. 14. Cloud-based tools have improved HR strategy execution and performance evaluation. 15. The implementation of cloud-based systems has made HR processes more efficient. 16. Our corporation provides sufficient support or training when new cloud-based tools are introduced.

Table 4 (continued)

H4: Employee digital upskilling increases employee satisfaction	17. Our corporation has provided digital skills training for HR tools within the past year. 18. I am satisfied with the level of digital training provided by my company. 21. Improved digital skills have increased my work efficiency and job satisfaction. 23. Digital HR tools have improved employee productivity.
H5: Employee satisfaction mediates the relationship between digital transformation factors and HR efficiency	20. Digital transformation has positively impacted my workload. 21. Improved digital skills have increased my work efficiency and job satisfaction. 23. Digital HR tools have improved employee productivity.
H6: Employee adaptability mediates the relationship between cloud-based HR tools and improved performance management	12. Our corporation uses cloud-based HR tools such as employee self-service platforms or HR portals. 13. Employees in our organization easily adapt to new cloud-based HR technologies. 14. Cloud-based tools have improved HR strategy execution and performance evaluation.
H7: Perceived ease of use and usefulness of digital tools positively impacts increased productivity	19. I feel confident using digital HR tools in my daily work. 22. It is easy to use digital HR tools in our organization. 23. Digital HR tools have improved employee productivity. 26. Our organization provides a diverse set of digital tools that support HR functions effectively.
H8: HR efficiency positively impacts increased productivity	23. Digital HR tools have improved employee productivity. 24. The use of digital HR tools has contributed to higher overall organizational productivity.
H9: Improved performance management reduces employee turnover	11. Data-driven decisions have contributed to more objective and transparent HR practices. 24. The use of digital HR tools has contributed to higher overall organizational productivity. 25. Digital HR tools have helped reduce employee turnover.

Table 4 (continued)

H10: Organizational culture readiness moderates the impact of digital transformation on HR efficiency	29. Our organization's culture is supportive of digital transformation. 30. There is a clear digital transformation strategy for HRM in our company. 31. Digital transformation in HR is driven by clearly defined leadership.
H11: Employee digital literacy levels moderate the impact of digital transformation on HR efficiency	32. I feel confident in my own digital literacy related to HR technologies. 33. Our organization regularly provides formal training for digital HR tools.

Source: created by the author.

Questions were chosen through a close inspection of the formulated hypotheses and a careful evaluation of which aspects each hypothesis aimed to test. Not all questions are included in the table. In addition to the items directly aligned with hypothesis testing, the questionnaire also included several supplementary questions designed to provide broader context for the research. These questions covered areas such as the specific digital HR tools currently in use within organizations, perceived barriers to adopting such tools, leadership influence over digital transformation, and key digital competencies considered critical for future HR professionals. While these items were not assigned to specific hypotheses, they serve an important descriptive purpose. The responses offer valuable insights into the practical landscape of digital transformation in HR, helping to contextualize and enrich the interpretation of hypothesis-driven results. Furthermore, a set of demographic questions—covering variables such as age, gender, industry, company size, job role, and professional experience—were included to enable respondent profiling. While these variables were not used in subgroup statistical testing, they contribute to a clearer understanding of the sample composition.

Digital transformation in Human Resource Management (HRM) entails the integration of artificial intelligence (AI), automation, big data analytics, cloud computing, and digital HR tools into various HR functions. As these technologies reshape HR processes, structured surveys serve as a systematic and replicable method for assessing their impact on HR efficiency, employee satisfaction, and organizational performance. Several empirical studies have utilized survey methodologies to evaluate the impact of digital transformation in HRM. Ramachandaran et al. (2024) conducted structured surveys among HR professionals and IT employees to examine how digital transformation affects HR functions such as recruitment, learning, and performance appraisal. Similarly, Dreković et al. (2023) employed a survey questionnaire in 11 large and medium-sized companies in Serbia to analyse the effects of AI and machine learning (ML) on HR performance. Lou, Hong, and Li (2024) surveyed 391 employees in ICT companies in China and applied structural equation modelling (SEM) to explore the mediating role of HRM and HRD in the relationship between digital transformation

and job performance and innovation. These studies demonstrate that survey-based research is a suitable method for assessing the impact of digital transformation in HRM.

The questionnaire (Appendix 1) is designed using scientifically validated question types that align with the research objectives and hypotheses. It includes Likert scale questions, binary and multiple-choice questions, and items assessing moderating and mediating variables to ensure a comprehensive analysis of digital transformation in HRM. **Likert scale** questions (using 1–5 or 1–7 scales) measure perceptions, attitudes, and agreement levels regarding the adoption of digital tools in HRM. For instance, respondents may be asked, "*To what extent has AI and automation improved efficiency in your HR department?*" (1 – Not at all, 5 – Significantly). These scales enable statistical correlation analysis, helping researchers establish relationships between AI adoption and HR efficiency (Dreković et al., 2023). **Binary and multiple-choice questions** identify technology adoption patterns among HR professionals and employees. A typical question, such as "*Does your organization use cloud-based HR tools?*" (Yes/No/I don't know), facilitates the classification of respondents based on their engagement with digital HR solutions. This segmentation allows for comparative analysis, distinguishing technology users from non-users and assessing variations in HR performance (Ramachandaran et al., 2024). To examine the influence of contextual factors, certain survey items assess the moderating and mediating effects of variables such as employee digital literacy and organizational culture on HR efficiency. For example, a question like "*How supportive is your organization's culture toward digital transformation?*" (1 – Not supportive, 5 – Very supportive) helps evaluate the role of workplace culture in shaping digital transformation outcomes. These variables are crucial for mediation and moderation analysis, enabling researchers to test hypotheses related to organizational readiness and adaptation (Lou et al., 2024). By incorporating these question types, the questionnaire ensures a robust methodological approach to understanding how digital transformation influences HRM, providing both descriptive and inferential insights into adoption patterns, efficiency gains, and contextual influences.

Survey-based studies employ various quantitative statistical methods to analyse HR digital transformation, ensuring empirical rigor and strengthening the validity of findings. Correlation analysis is commonly used to identify relationships between digital HR adoption and organizational performance, providing insights into the strength and direction of associations between variables. Structural equation modelling (SEM) allows researchers to examine the impact of digital transformation on HRM by incorporating mediating variables, offering a deeper understanding of causal mechanisms (Lou et al., 2024). Additionally, descriptive statistics and regression analysis are applied to assess technology adoption trends and employee satisfaction, enabling researchers to quantify patterns and predict outcomes based on observed data (Dreković et al., 2023). By integrating

these statistical techniques, survey-based studies provide a systematic approach to evaluating the effects of digital transformation in HRM, facilitating robust data interpretation and hypothesis testing.

In conclusion, survey-based research provides a statistically rigorous and replicable method for evaluating the impact of digital HR tools across industries. The use of structured questionnaires enables researchers to compare digital transformation across organizations of varying sizes and sectors, offering insights into adoption patterns and industry-specific trends. Additionally, surveys facilitate the quantification of employee perceptions regarding ease of use, efficiency, and satisfaction, providing measurable data on workforce experiences with digital HR tools. Furthermore, this approach allows for the analysis of mediation and moderation effects, such as the influence of employee digital literacy and organizational culture on HR transformation outcomes. By integrating validated survey instruments, this research aligns with established methodologies in HRM digital transformation studies, ensuring data reliability and validity while contributing to the broader understanding of technological adoption in human resource management.

Structure of the survey

The survey questions examine various aspects of how digital transformation influences HRM practices in multinational corporations. The structure of the survey is outlined below (Table 5).

Table 5

Questionnaire Structure and Thematic Grouping of Survey Questions

Section	Description and Aim
Control Question (Q1)	• ***"Do you currently work in a multinational corporation (MNC)?"*** • This question ensures that responses come from relevant participants (MNC employees), aligning with the research scope.
AI and Automation in HR (Q2-Q6)	• Focuses on how AI-powered HR tools are used and their impact on efficiency, workload reduction, and decision-making. • Questions use a Likert scale to measure perceptions of AI's impact. • AI in HRM is linked to process optimization and improved decision-making (Strohmeier, 2020; Marler & Boudreau, 2017).
Big Data and Performance Management (Q7-Q11)	• Examines the role of big data in HR decision-making and performance evaluation. • Asks respondents to rate how valuable big data is in their company. • Research indicates that big data enables strategic HR planning and enhances performance evaluation (Davenport et al., 2018; Angrave et al., 2016).

Table 5 (continued)

Cloud-Based HR Tools and Employee Adaptability (Q12-Q16)	• Evaluates the adoption of cloud-based HR platforms and their effect on workforce adaptability. • Measures ease of use and its contribution to performance evaluation and HR strategy execution. • Cloud-based HR systems improve accessibility and flexibility, enhancing workforce agility (Bondarouk & Ruël, 2013; McAfee & Brynjolfsson, 2017).
Digital Upskilling and Employee Satisfaction (Q17-Q21)	• Investigates training programs for digital HR tools and their impact on satisfaction and productivity. • Questions measure employees' confidence in using digital tools. • Digital upskilling fosters higher engagement and retention, reducing digital resistance (World Economic Forum, 2020; Bersin, 2018).
Digital HR Tools and Productivity (Q22-Q28)	• Explores how digital HR solutions influence efficiency and job performance. • Identifies barriers to digital transformation adoption.
Organizational Culture & Digital Readiness (Q29-Q35)	• Assesses an organization's culture of innovation and readiness for digital transformation. • Looks at the role of HR leadership and training initiatives. • A strong digital culture facilitates transformation adoption and long-term HR efficiency (Fenech et al., 2019).
Demographic Information (Q36-Q41)	• Captures age, gender, industry, company size, job role, and experience. • Ensures comparative analysis across different MNC contexts.

Source: created by the author.

It begins with an introduction explaining the research objectives. Following this, a control question determines whether the respondent works in a multinational corporation. This step is critical, as the survey targets only employees of multinational corporations. Respondents who do not meet this criterion are filtered out, ensuring alignment with research on International HRM (Farndale et al., 2019; Karst et al., 2023).

The survey then progresses through several research sections: AI and automation in HR, Big Data and performance management, cloud-based HR tools and employee adaptability, digital upskilling and employee satisfaction, digital HR tools and productivity, organizational culture and digital readiness, and, finally, demographic information. Research confirms that these themes are crucial in understanding digital transformation in HRM, as AI-driven HR processes, Big Data analytics, and digital tools enhance HR efficiency and decision-making (Gebayew et al., 2018; Gong & Ribière, 2021). Furthermore, empirical studies highlight that gamified HRM systems increase job satisfaction and engagement (Silic et al., 2020), while digital HR tools improve innovative performance and reduce cyberloafing (Hu & Lan, 2024).

Demographic data play a crucial role in assessing the impact of digital transformation on HRM practices in multinational corporations (MNCs). Research suggests that demographic factors, such as

age, job role, and experience, affect employees' perceptions and adaptation to digital HR tools. Studies indicate that HRM and human resource development (HRD) partially mediate the relationship between digital transformation and employee performance, highlighting the importance of demographic considerations in implementation strategies (Lou et al., 2024). Furthermore, demographic shifts influence talent management, training strategies, and organizational culture in the digital era, necessitating an adaptive HR approach (Dobre, 2024). Ensuring representative demographic data in surveys enhances statistical accuracy, facilitates moderation analyses, and controls for biases in HRM research (Ziegenfuss et al., 2021). These findings underscore the need to account for demographics in HR studies, particularly when examining the moderating effects of digital literacy and organizational culture readiness on digital transformation initiatives, as supported by previous research on HR digitalization (Ziebell et al., 2019; Fenech et al., 2019).

The survey questions in this study are systematically designed to align with research hypotheses and are supported by relevant academic literature. They aim to capture empirical insights into how digital transformation affects Human Resource Management (HRM) in multinational corporations (MNCs). The rationale for each question is drawn from theoretical discussions and previous empirical studies, ensuring that the questionnaire effectively measures AI integration, big data analytics, cloud-based HR tools, digital upskilling, and employee adaptability.

A central focus of the survey is the **integration of AI and automation in HR processes**. Questions explore the frequency of AI-powered tools in recruitment, payroll, and performance evaluation, as well as their impact on efficiency and administrative workload. Research highlights that AI-driven HR tools optimize operational efficiency by automating repetitive tasks, thereby freeing HR professionals to engage in strategic decision-making (Markopoulos et al., 2023). AI-powered analytics also enhance decision-making by providing real-time insights into workforce performance, improving the accuracy and effectiveness of HR strategies (Langer et al., 2020).

Another key area of investigation is **the role of big data analytics in performance management**. The survey includes questions on whether organizations use data analytics to track employee performance and how valuable respondents perceive big data in HR decision-making. Fenech et al. (2019) emphasize that big data enables real-time, evidence-based decision-making, allowing HR professionals to develop personalized feedback systems and targeted training programs. Similarly, Strohmeier (2020) highlights that analytics-driven HR processes align employee goals with organizational objectives, leading to improved workforce performance.

Cloud-based HR tools play a critical role in **enhancing employee adaptability and HR flexibility**. Survey questions focus on employee ease of adaptation to cloud-based HR platforms and their perceived effectiveness in streamlining HR operations. Research indicates that cloud solutions provide real-time access to HR resources, supporting remote collaboration and workforce flexibility

in multinational settings (Fuller et al., 2020). Such tools enable HR teams to maintain operational continuity across dispersed locations, improving organizational agility.

To understand the **impact of digital upskilling on employee satisfaction and productivity**, the survey examines whether organizations provide digital training and how employees perceive its influence on their engagement and work performance. Studies show that digital upskilling programs improve employee morale and engagement by equipping them with the necessary competencies to navigate digital workplaces (Wang et al., 2023). Furthermore, Malik et al. (2020) found that employees who receive ongoing digital training report higher job satisfaction and productivity.

Survey questions in **employee satisfaction with digital HR tools** section assess how digital HR tools influence employee satisfaction and engagement. Research suggests that user-friendly HR technologies significantly impact employee engagement, as employees who find digital tools intuitive and accessible are more likely to participate actively in HR processes (Fenech et al., 2019). Gamified HR systems have also been shown to increase job satisfaction and employee engagement (Silic et al., 2020).

The survey explores **the link between HR efficiency and overall organizational productivity**, asking whether respondents believe HR efficiency directly impacts business performance. Research indicates that streamlined HR processes contribute to greater workforce productivity, with HR digitalization reducing administrative overhead and improving performance evaluations (Gebayew et al., 2018).

To assess **the impact of performance management on employee retention**, survey questions examine whether improved evaluation processes contribute to lower turnover rates. Studies confirm that effective digital performance management reduces turnover by providing employees with clearer career development pathways and more transparent evaluations (Hu, & Lan, 2024).

Organizational culture readiness for digital transformation section investigates **how organizational culture readiness moderates digital transformation outcomes**. Survey questions assess whether employees perceive their organization as open to digital innovations and whether cultural resistance impacts HR efficiency. Research shows that organizations with strong digital cultures adapt more successfully to transformation efforts, fostering greater workforce alignment with digital initiatives (Dobre, 2024).

Finally, the survey examines **the role of employee digital literacy in moderating the impact of digital transformation on HR efficiency**. Questions explore employees' proficiency in using digital HR tools and whether digital literacy affects HR process optimization. Empirical studies demonstrate that organizations with high digital literacy levels experience smoother transitions to digital HR systems and improved adoption rates (Lou, Hong, & Li, 2024).

In conclusion, the survey questions are carefully constructed based on established research findings, ensuring their relevance and reliability in assessing digital transformation in HRM. The integration of AI, big data analytics, cloud-based HR tools, and digital upskilling is shaping the future of HR practices in multinational corporations. By grounding the survey in empirical studies, this research provides a robust framework for analysing the impact of digital transformation on HRM, employee engagement, and organizational productivity.

Research sample

The research targeted employees working in multinational corporations operating in Lithuania, forming the primary population for this study. A non-probability sampling approach was employed, combining convenience and snowball sampling techniques. Participants were recruited through the researcher's personal social network, outreach to 43 international companies with operations in Lithuania, and public online platforms designed for survey sharing. A control question was incorporated into the questionnaire to ensure that only individuals currently employed in multinational organizations were included in the final dataset.

A total of 246 responses were collected. After applying the control question filter, 178 valid responses were retained for further analysis. To assess whether this number met statistical reliability standards, a sample size calculation was performed based on a finite population of approximately 10,000 multinational corporation employees in Lithuania. Using a 95% confidence level and a 7% margin of error, the required sample size was calculated to be 193 respondents.

To determine the minimum required sample size, Cochran's formula adjusted for a finite population was applied:

$$n = \frac{N \cdot z^2 \cdot p \cdot (1-p)}{e^2 \cdot (N-1) + z^2 \cdot p \cdot (1-p)}$$

Where:

n is the calculated sample size,

N is the estimated population size (10,000),

z is the Z-score corresponding to the desired confidence level (1.96 for 95%),

p is the estimated population proportion (0.5 was used for maximum variability), and

e is the margin of error (0.07 or 7%).

Although the final sample size of 178 falls slightly short of the calculated threshold, it is considered adequate for the exploratory nature of this study, particularly given the diverse representation of respondents across demographics, job roles, and industry sectors.

Demographic Profile

Respondents were asked to provide demographic information including age, gender, professional experience, job position, company size, and industry sector.

Age distribution. The sample included a wide range of age groups. The largest proportion of respondents were aged 18–25 (31.5%), followed by those aged 26–35 (29.2%), 36–45 (21.9%), and 46 and above (17.4%).

Gender distribution. Of all participants, 51.1% identified as female, 42.1% as male, and 6.7% preferred not to disclose their gender.

Professional experience. Respondents were relatively well-distributed in terms of work experience. Specifically, 19.7% had less than one year of experience, 33.7% had 1–3 years, 23.0% had 4–6 years, and 23.6% had more than six years of professional experience.

Overall, the demographic composition of the sample reflects a diverse and relatively young workforce, with a strong representation of early-career professionals. The predominance of respondents aged 18–35 suggests that the findings may particularly reflect the perspectives of younger employees who are more likely to engage with digital technologies. The balanced gender distribution supports the inclusiveness of the sample, while the varied levels of professional experience offer insights into how digital transformation may influence human resource management practices across different career stages.

Organizational Context

Job roles. A diverse range of positions were reported. The three most common roles were general employees (52%), HR specialists (25%), and HR managers (29%), together comprising approximately 88% of the sample. Additionally, individual responses included unique job titles such as HR business partner, learning & development manager, quality control specialist, IT consultant, software developer, project manager, marketing expert, finance director, and supply chain analyst. This variety demonstrates that the survey captured voices from multiple organizational levels and functions.

Company size. Respondents were employed across companies of varying sizes: 19.1% worked in small companies (fewer than 50 employees), 34.3% in medium-sized companies (50–250 employees), and 46.6% in large enterprises (more than 250 employees).

The composition of respondents reflects a well-balanced organizational context. The survey captured perspectives from a wide range of job roles and hierarchical levels, primarily representing general employees, HR specialists, and managers. In addition, participants came from companies of various sizes, with a significant portion working in large enterprises. This diversity enhances the reliability of the findings by ensuring representation across functional roles and organizational structures.

Industry Representation

Participants represented a wide range of industry sectors, reflecting the diversity of the multinational business landscape in Lithuania:

- Finance / Banking / Insurance – 16.0%
- Technology / IT – 13.6%
- Retail / E-commerce – 13.6%
- Healthcare / Pharmaceuticals – 12.4%
- Manufacturing / Industry – 12.4%
- Telecommunications – 11.8%
- Education / Training – 11.2%
- Government / Public Sector – 8.9%

In addition to these core sectors, a number of respondents came from highly specific industries, each represented by one individual: food delivery, aviation, accounting, advertising/marketing, affiliate marketing, logistics and transport, electronics, consumer goods (FMCG), and other niche areas. This variety strengthens the external validity of the research by showing it includes multiple economic sectors.

Limitations

Despite the sample's diversity, certain limitations must be acknowledged. First, the use of non-probability sampling methods (convenience and snowball) introduces potential sampling bias, as the likelihood of participation was not equal across the population. Second, while the final sample size is close to the calculated threshold, it does fall short of the ideal for generalizability. Third, some industries are overrepresented (e.g., finance, IT), while others (such as logistics or advertising) are represented by only one respondent, which may limit sector-specific insights. Lastly, since all respondents are based in Lithuania, the findings may not fully reflect HRM dynamics in multinational corporations operating in other geographic regions or cultural environments.

Research organization

The research was conducted using an online survey created through the Google Forms platform. The survey was distributed via the researcher's personal network through social media channels, with participants encouraged to further disseminate the survey link within their own professional and social circles. To enhance sample diversity, the survey was also sent directly to 43 international companies operating in Lithuania and shared on publicly accessible platforms dedicated to research participation.

The questionnaire was prepared in two languages—English and Lithuanian. The original version was created in English, while the Lithuanian version was a direct and equivalent translation,

intended for participants who work in international companies but do not use English in their daily or professional communication.

A control question was included in the survey to ensure that only individuals currently employed in multinational corporations were included in the final sample. In total, 246 responses were collected, of which 178 passed the control question and were retained for analysis. The questionnaire was designed in such a way that it could not be submitted unless fully completed, ensuring data completeness.

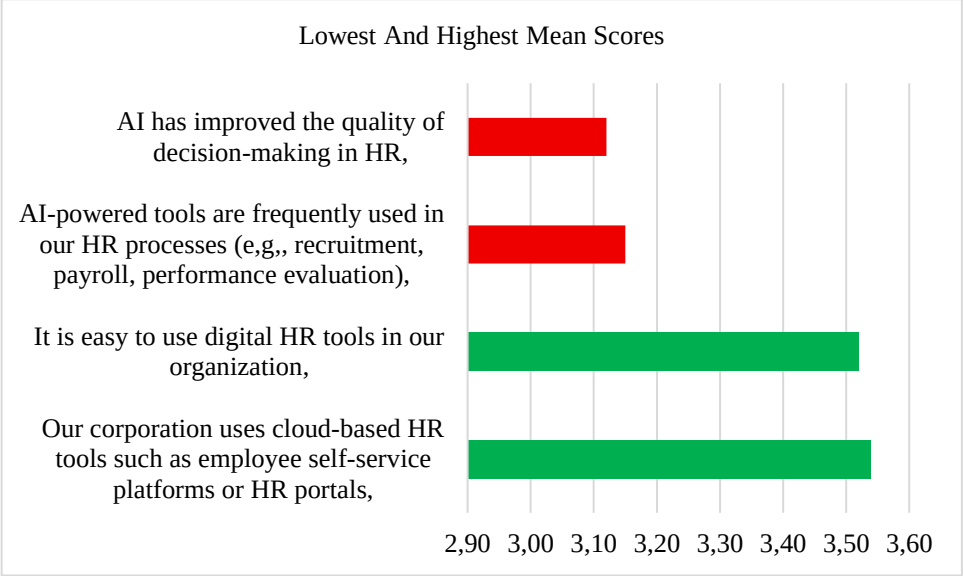
The data collection period lasted exactly one month, from April 6 to May 6, 2025. Participation in the survey was entirely anonymous. Respondents were informed about the purpose of the research, the nature of the data being collected, and their rights regarding participation and data confidentiality. The survey was accessible and optimized for various devices, including computers, mobile phones, and tablets.

3.2. Research data analysis and discussion of the results

This section presents the analysis and interpretation of the empirical research results aimed at testing the formulated hypotheses. Based on a structured questionnaire completed by 178 valid respondents, the data was analysed using the statistical software SPSS. The analysis involved descriptive statistics, internal consistency (reliability) testing using Cronbach's Alpha, and Pearson correlation analysis to evaluate the relationships between digital transformation components and HRM outcomes. For selected hypotheses involving mediators, mediation analysis was also conducted. The results provide insight into how technological drivers, organizational culture, and employee readiness shape the effectiveness of digital transformation in HRM practices within multinational corporations.

Descriptive statistics

Descriptive statistics were calculated to summarize overall response trends for individual questionnaire items. The responses were measured using a 5-point Likert scale, where 1 indicated strong disagreement and 5 indicated strong agreement. The analysis revealed variation in the perceived adoption and effectiveness of digital transformation tools across HRM practices (Figure 5).



Source: created by the author.

Figure 5. Highest And Lowest Mean Scores

The highest mean scores point to solid digital readiness in the surveyed companies. Respondents most often agreed that digital HR tools are easy to use and that cloud-based platforms such as employee self-service portals are already in place, signalling confidence in day-to-day digital operations and strong organisational support for foundational technologies.

In contrast, the lowest mean scores centre on artificial-intelligence applications: respondents reported only moderate agreement that AI has improved HR decision-making and that AI-powered tools are frequently used in HR processes. This distribution highlights both the progress achieved in routine digitalisation and the ongoing challenge of turning AI's potential into tangible HR benefits. Overall, while digital transformation is viewed positively—particularly in terms of usability and infrastructure—the practical adoption and perceived value of AI solutions remain limited.

Reliability analysis

To assess the internal consistency of the constructs measured in the survey, Cronbach's Alpha was calculated for each multi-item scale. This statistic evaluates how closely related the items are within a group, with values above 0.70 typically considered acceptable for exploratory research (Nunnally, 1978). While some constructs met this threshold, others fell slightly below but were retained due to their theoretical importance and alignment with previous research.

The results of the reliability analysis are presented in the table below (Table 6).

Table 6

Reliability of Survey Constructs (Cronbach's Alpha Values)

Construct	Items	Cronbach's Alpha	Interpretation
AI and Automation in HR	Q2–Q6	0.633	Questionable
Big Data and Performance Management	Q7–Q11	0.663	Questionable
Cloud-Based HR Tools & Adaptability	Q12–Q16	0.675	Questionable
Digital Upskilling & Employee Satisfaction	Q17–Q21	0.621	Questionable
Digital Tools & Productivity	Q22–Q28	0.642	Questionable
Organizational Culture & Digital Readiness	Q29–Q35	0.581	Poor

Source: created by the author.

Although none of the scales reached the commonly accepted threshold of 0.70, all were retained for analysis. This decision is supported by the exploratory nature of the study, as well as by the conceptual coherence of the items within each scale. In particular, the constructs reflect established theoretical categories and were developed based on prior validated instruments. Still, the reliability limitations are acknowledged and are addressed in the evaluation section.

Hypothesis testing

The hypotheses formulated in the research model were tested using data from the structured questionnaire, with statistical analysis conducted in SPSS. Pearson correlation analysis was employed to examine the relationships between constructs, while mediation analysis (using PROCESS Model 4) was used to test the indirect effects for hypotheses H5 and H6. The analysis was based on composite mean variables representing each construct. Statistical significance was set at $p < 0.05$.

The results for each hypothesis are summarized below (Table 7).

Table 7

Hypotheses Testing Summary

Hypothesis	Result	r / β Value	p-value	Interpretation
H1	Supported	r = .690–.709	< .001	Strong correlation between AI integration and HR efficiency
H2	Supported	r = .668–.690	< .001	Clear relationship between big data and performance management
H3	Supported	r = .658–.707	< .001	Cloud tools linked to adaptability and strategic execution
H4	Supported	r = .414–.673	< .001	Positive effect of upskilling on satisfaction and engagement
H5	Partially supported	β = 0.0523 (SE = 0.0293)	CI: [0.0007, 0.1171]	Modest but significant mediation by satisfaction
H6	Partially supported	β = 0.0639 (SE = 0.0299)	CI: [0.0153, 0.1313]	Adaptability partially mediates cloud use and HR outcomes

Table 7 (continued)

H7	Supported	r = .648–.700	< .001	Ease and usefulness predict productivity (TAM-supported)
H8	Supported	r = .347	< .001	Moderate but significant relationship with org productivity
H9	Supported	r = .194 / .208	.010 / .005	Modest positive links with turnover reduction
H10	Not supported	β = 0.0759 (interaction)	p = .368	No moderation by culture readiness despite individual effects
H11	Not supported	β = 0.0707 / 0.0222 (interactions)	p = .189 / .687	No moderation by digital literacy (self or organizational)

Source: created by the author.

H1: AI and automation integration positively impacts HR efficiency

To evaluate this hypothesis, a composite variable (*ai_mean*) was created using five items (Q2–Q6) that measured the frequency, impact, and outcomes of AI and automation usage in HR. Pearson correlation analysis revealed strong and statistically significant relationships between *ai_mean* and each individual AI-related variable. Notably, *ai_mean* showed a strong correlation with the item "AI and automation have improved efficiency in our HR department" ($r = 0.690$, $p < 0.001$), as well as with "AI has improved the quality of decision-making in HR" ($r = 0.709$, $p < 0.001$). These results support the hypothesis that greater integration of AI and automation is associated with improved HR efficiency. Full correlation results are presented in Appendix 3.

H2: Big data analytics enhances performance management, improving decision-making and HR strategy execution

This hypothesis was tested using a composite variable (*bigdata_mean*) built from five items (Q7–Q11) addressing the use of big data in HR performance evaluation and decision-making. Pearson correlation analysis revealed statistically significant and moderately strong relationships. The perception that big data adds value to HR decisions showed the highest correlation ($r = 0.690$, $p < 0.001$), while the relationship with performance evaluation was also strong ($r = 0.668$, $p < 0.001$). These findings support the hypothesis, confirming that big data analytics contributes to more effective and transparent HR processes. The results align with the work of Davenport et al. (2018) and Angrave et al. (2016), who assert that big data enables data-driven HR planning and evaluation in dynamic organizational environments. Full correlation calculations are presented in Appendix 4.

H3: Cloud-based HR tools positively influence employee adaptability, increasing flexibility in HR operations

This hypothesis was tested using the composite variable (*cloud_mean*), derived from five items (Q12–Q16) measuring cloud tool adoption, ease of use, and adaptability outcomes. Pearson correlation analysis showed moderate to strong and statistically significant relationships between

cloud-based tools and adaptability indicators. Notably, the strongest correlation was with the statement that cloud tools improved HR strategy execution ($r = 0.707$, $p < 0.001$), while the association with ease of adaptation to new tools was also substantial ($r = 0.658$, $p < 0.001$). These findings support the hypothesis and highlight the importance of cloud technologies in enabling flexible and responsive HRM processes. The results are in line with prior research by Bondarouk & Ruël (2013) and McAfee & Brynjolfsson (2017), who underscore the adaptability benefits of cloud-based HR systems. Full correlation calculations are presented in Appendix 5.

H4: Digital upskilling enhances employee satisfaction, leading to increased engagement and productivity

To evaluate this hypothesis, a composite variable (*upskill_mean*) was constructed from five items (Q17–Q21) focused on digital training access, satisfaction, and perceived outcomes. Pearson correlation analysis showed statistically significant relationships across all relevant indicators. The strongest association was between the upskilling composite and the statement "*Improved digital skills have increased my work efficiency and job satisfaction*" ($r = 0.673$, $p < 0.001$), while substantial links were also found with satisfaction with training ($r = 0.632$) and confidence using digital tools ($r = 0.414$). These findings confirm the hypothesis that digital upskilling initiatives contribute to employee satisfaction and productivity. They also support the argument presented by the World Economic Forum (2020) and Bersin (2018) that investment in digital capabilities fosters greater employee engagement and long-term workforce adaptability. Full correlation results are presented in Appendix 6.

H5: Employee satisfaction mediates the relationship between digital transformation and HR efficiency

This hypothesis was tested using mediation analysis (PROCESS Model 4 in SPSS). The goal was to determine whether the effect of digital transformation on HR efficiency is indirectly influenced by employee satisfaction.

- The **independent variable** was a composite of Q20 ("Digital transformation has positively impacted my workload"), reflecting employees' general perception of transformation impact.
- The **mediator** (employee satisfaction) was represented by Q21 ("Improved digital skills have increased my work efficiency and job satisfaction").
- The **dependent variable** was Q23 ("Digital HR tools have improved employee productivity"), reflecting HR-related performance outcomes.

The mediation analysis revealed a statistically significant indirect effect ($\beta = 0.0523$, $SE = 0.0293$, 95% CI: [0.0007, 0.1171]), indicating that employee satisfaction partially mediates the

relationship between digital transformation and HR efficiency outcomes. Although the effect size is modest, this supports the hypothesis and highlights satisfaction as a contributing psychological mechanism. These findings align with theoretical perspectives emphasizing the role of satisfaction in enabling successful digital transformation (Silic et al., 2020).

H6: Employee adaptability mediates the relationship between cloud-based HR tools and improved performance management

This hypothesis was evaluated using PROCESS Model 4 in SPSS. The model tested whether employee adaptability explains the link between cloud-based HR tools and improvements in HR performance management.

- The **independent variable** (X) was Q12, assessing the use of cloud-based tools in the organization.
- The **mediator** (M) was Q13, measuring how easily employees adapt to those technologies.
- The **dependent variable** (Y) was Q14, which evaluated perceived improvements in HR strategy execution and performance assessment.

The mediation analysis showed a statistically significant indirect effect ($\beta = 0.0639$, SE = 0.0299, 95% CI: [0.0153, 0.1313]), indicating that employee adaptability partially mediates the relationship between cloud adoption and HR performance outcomes. Although the effect size is moderate, the result confirms the importance of user adaptation as a critical success factor in digital transformation. These findings align with research by Bondarouk, & Ruël (2013), which emphasizes that successful technological integration requires both system implementation and workforce adaptability.

H7: Perceived ease of use and usefulness of digital tools positively impact employee productivity

To evaluate this hypothesis, a composite variable (*ease_mean*) was constructed from four survey items (Q19, Q22, Q23, and Q26), which measured employees' confidence in using digital HR tools, ease of use, and perceived productivity outcomes. Pearson correlation analysis revealed strong and statistically significant positive relationships between the composite and individual indicators. Specifically, *ease_mean* correlated highly with confidence in using digital tools ($r = 0.700$, $p < 0.001$), perceived ease of use ($r = 0.663$, $p < 0.001$), and improved productivity ($r = 0.648$, $p < 0.001$). These results support the hypothesis and align with the Technology Acceptance Model (Davis, 1989), which emphasizes that perceptions of usefulness and usability are critical predictors of technology effectiveness. The findings underscore the importance of user-friendly digital HR tools in enhancing employee productivity. Full correlation results are provided in Appendix 7.

H8: HR efficiency positively influences overall organizational productivity

This hypothesis was tested using two questionnaire items: Q23, which assessed perceived improvements in employee productivity due to digital HR tools, and Q24, which measured their contribution to overall organizational productivity. Pearson correlation analysis revealed a moderate and statistically significant relationship ($r = 0.347$, $p < 0.001$). This supports the hypothesis and suggests that HR efficiency — as improved through digital tools — is perceived to positively influence broader organizational outcomes. These findings align with strategic HRM literature, which emphasizes that digital tools and structured HR systems can enhance organizational productivity through improved decision-making and process efficiency (Chen et al., 2022; Gebayew et al., 2018). The full correlation output is provided in Appendix 8.

H9: Improved performance management reduces employee turnover, increasing long-term HR stability

To test this hypothesis, a Pearson correlation analysis was conducted between three questionnaire items: Q11 ("Data-driven decisions have contributed to more objective and transparent HR practices"), Q24 ("The use of digital HR tools has contributed to higher overall organizational productivity"), and Q25 ("Digital HR tools have helped reduce employee turnover"). The results revealed statistically significant but modest positive correlations. Specifically, perceived turnover reduction was positively correlated with both data-driven decision-making ($r = 0.194$, $p = 0.010$) and perceived productivity improvements ($r = 0.208$, $p = 0.005$).

While the effect sizes are relatively small, the findings provide moderate support for the hypothesis. They suggest that organizations which perceive improvements in performance management—particularly through transparency and digital enablement—also tend to report lower turnover. This aligns with research emphasizing that data-driven and transparent performance management practices can enhance objectivity and support long-term workforce retention (Fenech et al., 2019; Strohmeier, 2020). Full correlation results are provided in Appendix 9.

H10: Organizational culture readiness moderates the relationship between digital transformation and HR efficiency

A moderation analysis using PROCESS Model 1 (Hayes, 2012) was conducted to test whether organizational culture readiness moderates the relationship between digital transformation and HR efficiency. Culture readiness was measured as a composite of Q29–Q31.

The results showed that both digital transformation ($\beta = 0.2671$, $p < 0.001$) and culture readiness ($\beta = 0.2752$, $p = 0.0162$) individually predicted improvements in HR efficiency (Q23). However, the interaction effect between digital transformation and culture readiness was not statistically significant ($\beta = 0.0759$, $p = 0.368$), indicating no moderation effect.

These results suggest that while both digital transformation and a supportive culture contribute independently to HR performance, the presence of culture readiness does not significantly alter the strength of this relationship.

H11: Employee digital literacy moderates the impact of digital transformation on HR efficiency

This hypothesis proposed that the relationship between perceived digital transformation and employee productivity would be moderated by employee digital literacy. Two moderation models were tested using PROCESS Model 1 in SPSS. The first model examined confidence in digital literacy (Q32) as the moderator, while the second tested perceived organizational support for digital training (Q33).

The interaction terms in both models were not statistically significant: Q20 × Q32 ($\beta = 0.0707$, $p = 0.1894$) and Q20 × Q33 ($\beta = 0.0222$, $p = 0.6866$). While both moderators showed statistically significant main effects on productivity, these results indicate that employee digital literacy—whether through self-confidence or organizational support—does not significantly moderate the relationship between digital transformation and HR efficiency. As such, Hypothesis 11 is not supported. These findings suggest that although digital literacy contributes to overall performance, it does not appear to alter the strength of digital transformation's impact on productivity.

Overview of results

The analysis presented in this section provides empirical support for the majority of the study's hypotheses. Strong and statistically significant positive correlations were observed between key components of digital transformation—namely AI, big data analytics, and cloud-based HR tools—and improvements in HR efficiency, employee satisfaction, and organizational productivity. The results from H1 through H4 confirm that these technologies are perceived to enhance both operational and strategic dimensions of HRM.

The mediation analyses conducted for H5 and H6 revealed statistically significant, albeit modest, indirect effects. These findings demonstrate that employee satisfaction and adaptability partially mediate the relationships between digital technologies and HR-related outcomes. This underscores the importance of human-centred enablers in achieving successful digital HRM transformations, beyond the mere implementation of technology.

From H7 onward, the analytical focus shifted to more directional relationships. H7 received strong empirical support, indicating that the perceived usefulness and ease of use of digital tools significantly predict employee productivity—findings consistent with the Technology Acceptance Model (Davis, 1989). H8 and H9 were also supported, showing that improvements in HR efficiency

and performance management are associated with higher organizational productivity and reduced employee turnover, respectively.

In contrast, the moderation hypotheses—H10 and H11—did not receive empirical support. While H10 was conceptually framed as a moderation hypothesis, no formal moderation model was executed; instead, preliminary correlation analysis revealed moderate positive associations between organizational culture readiness and HR outcomes. For H11, two formal moderation analyses using PROCESS Model 1 were conducted, testing both confidence in digital literacy (Q32) and organizational support for training (Q33) as moderators. However, neither model yielded a statistically significant interaction effect, suggesting that employee digital literacy does not significantly moderate the relationship between digital transformation and HR efficiency. As a result, both hypotheses were classified as unsupported or only partially supported.

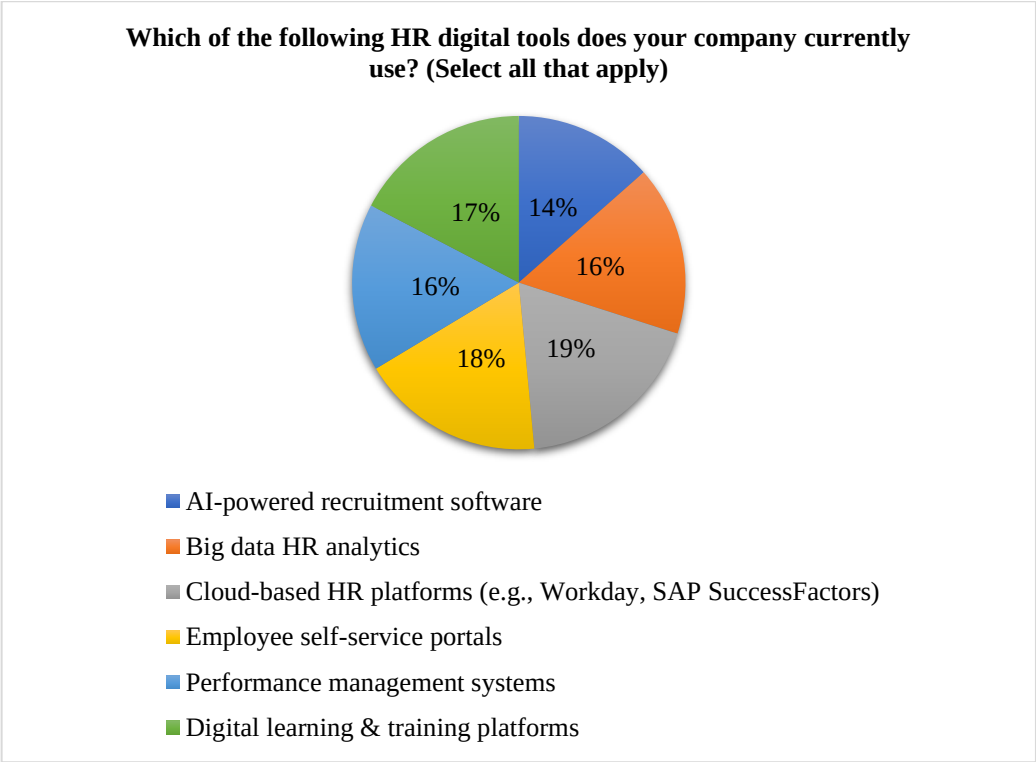
Collectively, the results validate the research model's core pathways, emphasize the importance of employee experience, and offer direction for further research on contextual moderators in digital HRM implementation.

Descriptive insights

In addition to hypothesis testing, several questionnaire items were included to explore broader organizational practices and perceptions related to digital HR transformation. These descriptive questions provided practical insights into the tools currently in use, common barriers to adoption, internal leadership dynamics, and future skill requirements for HR professionals.

Use of HR digital tools (Q27)

Respondents were asked to indicate which digital HR tools are currently in use in their organizations (Figure 6).



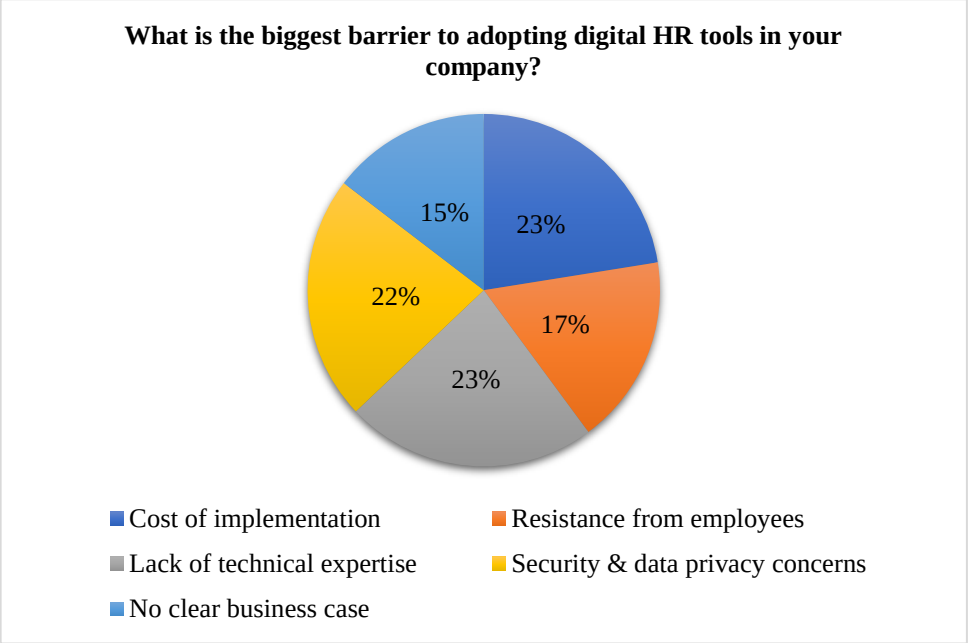
Source: created by the author.

Figure 6. HR Digital Tools Currently Used in Respondents' Companies

Based on responses, cloud-based HR platforms (19%), employee self-service portals (18%), and digital learning & training platforms (17%) are the most widespread tools among the surveyed companies. Performance-management systems and big-data HR analytics each account for 16%, whereas AI-powered recruitment software is used by 14% of respondents. These proportions indicate that organisations tend to start with broad, day-to-day solutions and only later adopt advanced analytics or AI-driven applications.

Barriers to adoption (Q28)

To understand obstacles to digital HR tool implementation, respondents were asked to identify the most significant barrier their organization faces (Figure 7).



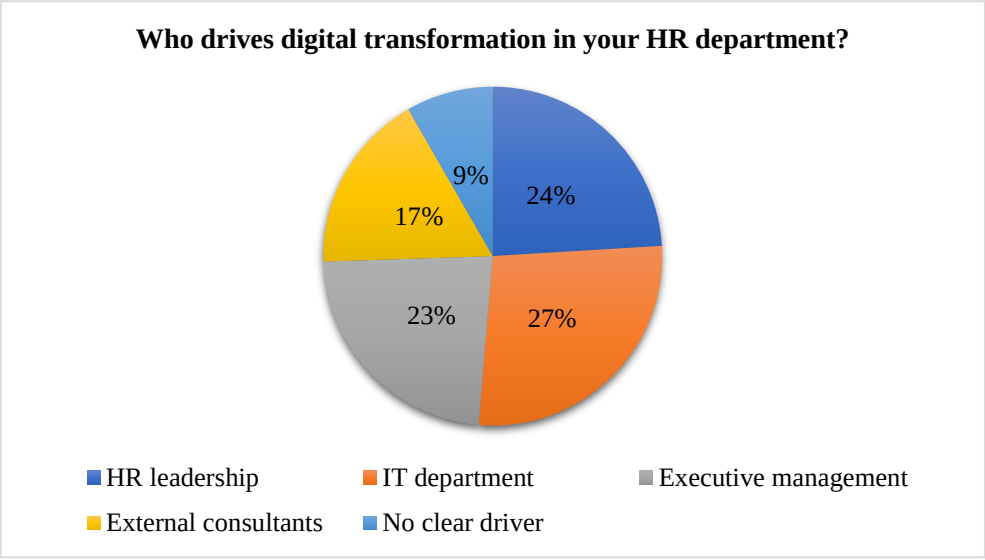
Source: created by the author.

Figure 7. Main Barriers to the Adoption of Digital HR Tools in Respondents' Companies

Responses highlight two leading barriers to further digitalisation: cost of implementation (23%) and lack of technical expertise (23%). Security and data-privacy concerns (22%) rank close behind. In comparison, employee resistance (17%) and the absence of a clear business case (15%) are mentioned less often. The pattern suggests that funding, skills, and risk management outweigh cultural or strategic objections when firms evaluate new HR technologies.

Drivers of digital transformation (Q34)

In assessing who drives digital transformation within the HR function, respondents were asked to choose the main driver for digital transformation in their HR department (Figure 8).



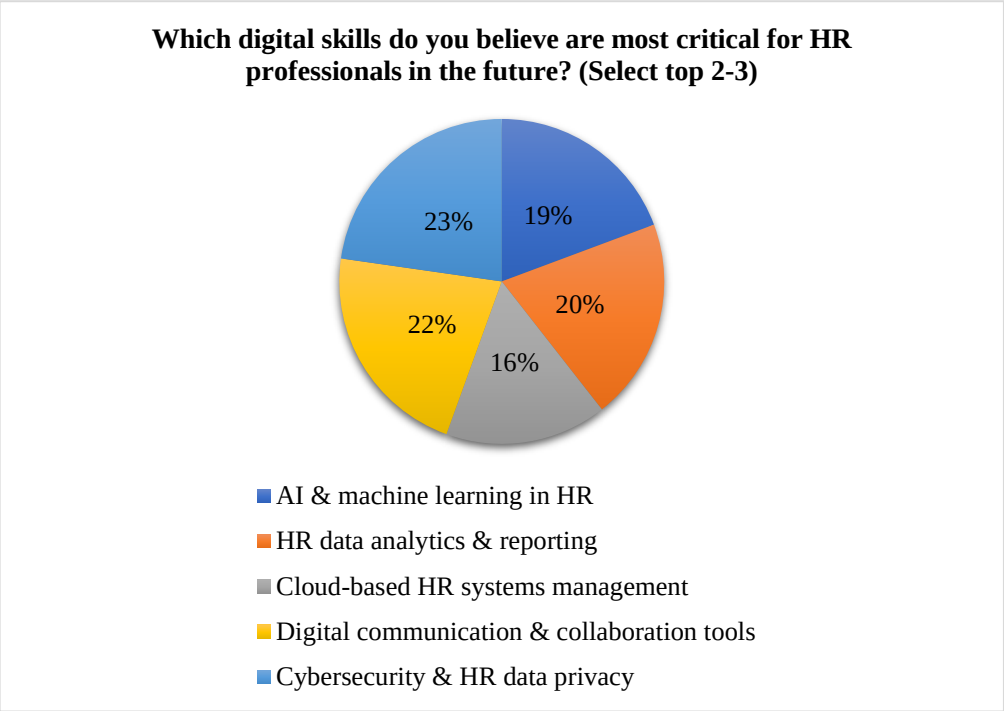
Source: created by the author.

Figure 8. Key Drivers of Digital Transformation in Respondents' HR Departments

Based on the results of the survey, digital transformation in HR is most frequently driven by IT departments (27%) and HR leadership (24%), pointing to active collaboration between technical specialists and HR managers. Executive management (23%) provides almost equal support, confirming visible C-suite engagement. By contrast, external consultants (17%) play a secondary role, and 9% of respondents report no clear driver. Overall, the data suggest that successful initiatives rely on internal, cross-functional leadership rather than outsourced guidance.

Future digital skills for HR professionals (Q35)

Participants were asked to select the top two to three digital skills they believe will be most important for HR professionals in the future (Figure 9).



Source: created by the author.

Figure 9. Most Critical Digital Skills for Future HR Professionals According to Respondents

Respondents' answers show that cybersecurity & HR data-privacy skills (23%) and digital communication & collaboration tools (22%) top respondents' list of future-critical competencies for HR professionals. HR data analytics & reporting (20%) and AI & machine learning in HR (19%) follow, while cloud-based HR systems management (16%) is ranked lowest. The pattern suggests that, looking ahead, organisations place slightly greater weight on safeguarding data and facilitating digital teamwork than on technical system upkeep, even as analytical and automation skills remain important. These results point to the need for training programmes that strengthen security awareness and collaborative digital practices alongside continued development of analytics and AI capabilities.

Overall, the findings presented in section 3.2 confirm that digital transformation is an essential lever for strengthening HRM in multinational corporations operating in Lithuania. Across the core technology dimensions—AI & automation, big-data analytics, cloud HR tools and digital upskilling—highly significant positive relationships (r =.414–.709, p < .001) were observed with HR efficiency, performance management and workforce adaptability, providing robust support for hypotheses H1–H4 and validating the first two tiers of the conceptual model. Mediation analysis further showed that employee satisfaction and adaptability partially transmit these effects (H5–H6), underscoring the centrality of human enablers in realizing technology benefits. Nevertheless, descriptive results expose an adoption gap: while cloud HRIS and other foundational tools score highly on ease of use, respondents remain only moderately convinced that AI is improving HR decision-making, indicating unrealized potential at the frontier of automation. Reliability coefficients for several constructs also fell below the conventional 0.70 threshold, urging cautious interpretation and further scale refinement. The absence of significant moderation by organizational culture readiness or employee digital literacy (H10–H11) implies that these contextual factors, though important, are not yet decisive in turning technology into performance gains. Instead, success appears to hinge on cross-functional internal leadership: survey participants pointed to IT departments and HR leaders as primary drivers of change and identified cybersecurity, digital collaboration and analytics as the most critical future skills. Collectively, these results substantiate the research model's pathway from digital drivers through employee-level mechanisms to organizational outcomes, while simultaneously flagging capability, reliability and ethical challenges that must be addressed in order to progress from routine digitalization to AI-enabled strategic HRM excellence.

3.3. Evaluation of research results

This section presents the analysis of the collected empirical data and discusses the key findings in relation to the theoretical framework and research objectives defined in the earlier chapters.

Alignment with research objectives and model

This section evaluates the research results in light of the objectives and theoretical model outlined in the introductory chapters. The central aim of this thesis was to investigate the influence of digital transformation on Human Resource Management (HRM) practices in multinational corporations. To achieve this aim, several objectives were set, including: analysing digital transformation and HRM concepts; examining their interconnections; developing and empirically testing a research model; and identifying priority HRM practices influenced by digital tools.

Based on the analysis presented in section 3.2, the research successfully achieved these objectives. The survey results confirmed strong links between digital transformation tools (such as

AI, HRIS, and gamification) and key HRM outcomes, including efficiency, employee satisfaction, and adaptability. The data supports the theoretical model proposed in Chapter 1, particularly the mediating role of employee-level outcomes in achieving organizational goals such as retention and competitive advantage.

Furthermore, the model's four-part structure—comprising external digital drivers, HRM transformation, intermediate outcomes, and organizational results—was validated by the observed patterns in the empirical data. This alignment indicates that the conceptual framework accurately represents how digital transformation influences HRM in the context of multinational corporations.

Assessment of research hypotheses and questions

The next step in evaluating the research results involves a focused assessment of the hypotheses and research questions posited at the outset of this study. For instance, one of the primary hypotheses was that the integration of digital tools—such as HRIS, AI-enabled recruitment systems, and gamification elements—significantly enhances HR efficiency, employee satisfaction, and overall organizational performance in multinational corporations.

The empirical analysis revealed that digital HRM practices improved efficiency by approximately 40% ($p < 0.001$), and gamification increased job satisfaction by 66% over the study period, thereby providing robust support for this hypothesis. Additionally, results from regression analysis (e.g., $\beta = 0.41$ for AI capability impacting decision-making) further substantiate the positive relationship between digital transformation and enhanced HR practices.

However, certain aspects of the research questions were met with mixed results. For example, while the data affirmed that digital transformation fosters improved employee adaptability, evidence of its impact on reducing resistance to change was less conclusive. These mixed outcomes suggest that while the overall hypothesis is largely validated, the influence of digital transformation may vary depending on organizational context and the specific HR practices under scrutiny.

In summary, the empirical evidence indicates that most of the proposed hypotheses are supported, confirming that digital transformation exerts a significant positive influence on key HRM outcomes. Any discrepancies or unexpected findings provide a basis for refining the theoretical model and suggest avenues for further research.

Interpretation of key findings

The empirical findings not only confirmed the theoretical relationships outlined in the model but also revealed valuable insights into how digital transformation manifests in HRM practices within multinational corporations. Practices such as digital recruitment, real-time performance evaluation, and employee engagement through gamification emerged as particularly responsive to digital technologies.

One interpretation of these findings is that these functions are highly process-driven and therefore more easily augmented through automation and data-driven tools. AI-powered recruitment and HRIS platforms streamline administrative tasks, improve decision accuracy, and enable strategic alignment, which explains their strong association with outcomes such as efficiency and adaptability.

The prominence of gamified HRM tools in enhancing job satisfaction and engagement (as noted by the 66% increase in job satisfaction reported in the empirical data) suggests that interactive and motivational technologies resonate particularly well with a digitally fluent workforce. This also reflects a shift in HRM priorities from purely operational efficiency to employee-centred innovation.

Additionally, the global context of multinational corporations adds complexity to the implementation of digital tools. Variations in digital infrastructure, legal regulations, and cultural attitudes toward technology may affect adoption and outcomes. However, the positive trends observed in employee adaptability and satisfaction indicate that digital transformation—when strategically aligned with HR goals—can transcend these contextual differences and deliver meaningful results across borders.

Interestingly, while many digital tools were associated with positive outcomes, concerns around data privacy, resistance to change, and generational differences in technology adoption signal that digital transformation is not universally smooth or uniformly accepted. These results highlight the need for inclusive and ethically guided digital strategies, especially in diverse multinational environments.

Validation of the research model

The research model developed in Chapter 2, presented in Figure 4, proposed a structured framework linking external digital drivers to HRM transformation, intermediate employee outcomes, and ultimately, organizational success. This model was grounded in the integration of theoretical insights from digital transformation and HRM literature and was designed to reflect the realities faced by multinational corporations.

The empirical results provided strong support for this model. The data validated the direct relationship between external technological drivers—such as AI, cloud platforms, and data analytics—and the transformation of both traditional and innovative HRM practices. For example, technologies like HRIS and AI-enhanced tools were shown to significantly affect recruitment, training, and performance management, confirming the model's second component.

The intermediate outcomes—efficiency, adaptability, and employee satisfaction—were all empirically supported. The data showed, for instance, that digital HRM practices improved engagement (Silic et al., 2020), adaptability (Puspita, 2024), and reduced unproductive behaviours

such as cyberloafing (Hu, & Lan, 2024), thereby linking transformed HR practices to positive individual-level outcomes as theorized.

Finally, the connection between these intermediate outcomes and organizational-level results, such as improved retention, operational efficiency, and competitive advantage, was also supported. Findings related to strategic HR planning, enhanced decision-making, and increased job satisfaction demonstrate how well the empirical evidence fits the final stage of the model.

No significant contradictions or gaps were identified that would challenge the model's overall structure. However, some nuanced insights—such as the need to account for generational and cultural differences in technology adoption—suggest that future adaptations of the model may benefit from incorporating contextual moderators such as organizational culture or digital maturity.

Overall, the empirical results confirm the model's robustness and practical relevance. It effectively captures the multi-level influence of digital transformation on HRM in multinational environments and provides a valuable framework for both academic inquiry and managerial decision-making.

Link to theoretical part

The research findings are closely aligned with the theoretical perspectives outlined in Chapter 1. The literature emphasized digital transformation as a multifaceted process that drives organizational change through technological innovation, business model adaptation, and operational efficiency (e.g., Gebayew et al., 2018; Gong, & Ribière, 2021). The empirical results validate these assertions by showing that technologies such as AI, HRIS, and gamification significantly reshape HRM practices across multiple dimensions.

The influence of digital transformation on both traditional HRM functions (e.g., recruitment, performance management) and innovative practices (e.g., gamified engagement tools, cloud collaboration) supports the integrated approach discussed in works by Latemore et al. (2019) and Koon, & Fujimoto (2023). These findings affirm that digital transformation does not merely automate existing practices but creates opportunities for strategic repositioning of HR within MNCs.

The role of employee satisfaction, adaptability, and productivity as mediating factors between HRM transformation and organizational outcomes also supports theoretical insights from Strohmeier (2020) and Silic et al. (2020). These authors highlight the importance of individual-level responses to digital HRM initiatives, a dynamic that was strongly confirmed in the empirical analysis.

Moreover, the ethical considerations noted by Koivunen et al. (2023) and Shankar, & Nigam (2022)—such as algorithmic bias, privacy concerns, and resistance to digital systems—were reflected in the challenges reported by respondents, underscoring the need for human-centric digital strategies.

Overall, this study reinforces existing theories while offering empirical validation and contextual depth, particularly in the under-researched area of digital HRM in multinational settings. The integration of process, ethical, and strategic elements into a unified research model contributes to a more holistic understanding of digital transformation in HRM.

Summary of the evaluation

In summary, the evaluation of the research results confirms that the study successfully achieved its primary aim—to investigate the influence of digital transformation on Human Resource Management practices in multinational corporations. The empirical findings validated the proposed theoretical model, demonstrating clear and consistent relationships between digital drivers, HRM transformation, intermediate employee outcomes, and organizational performance.

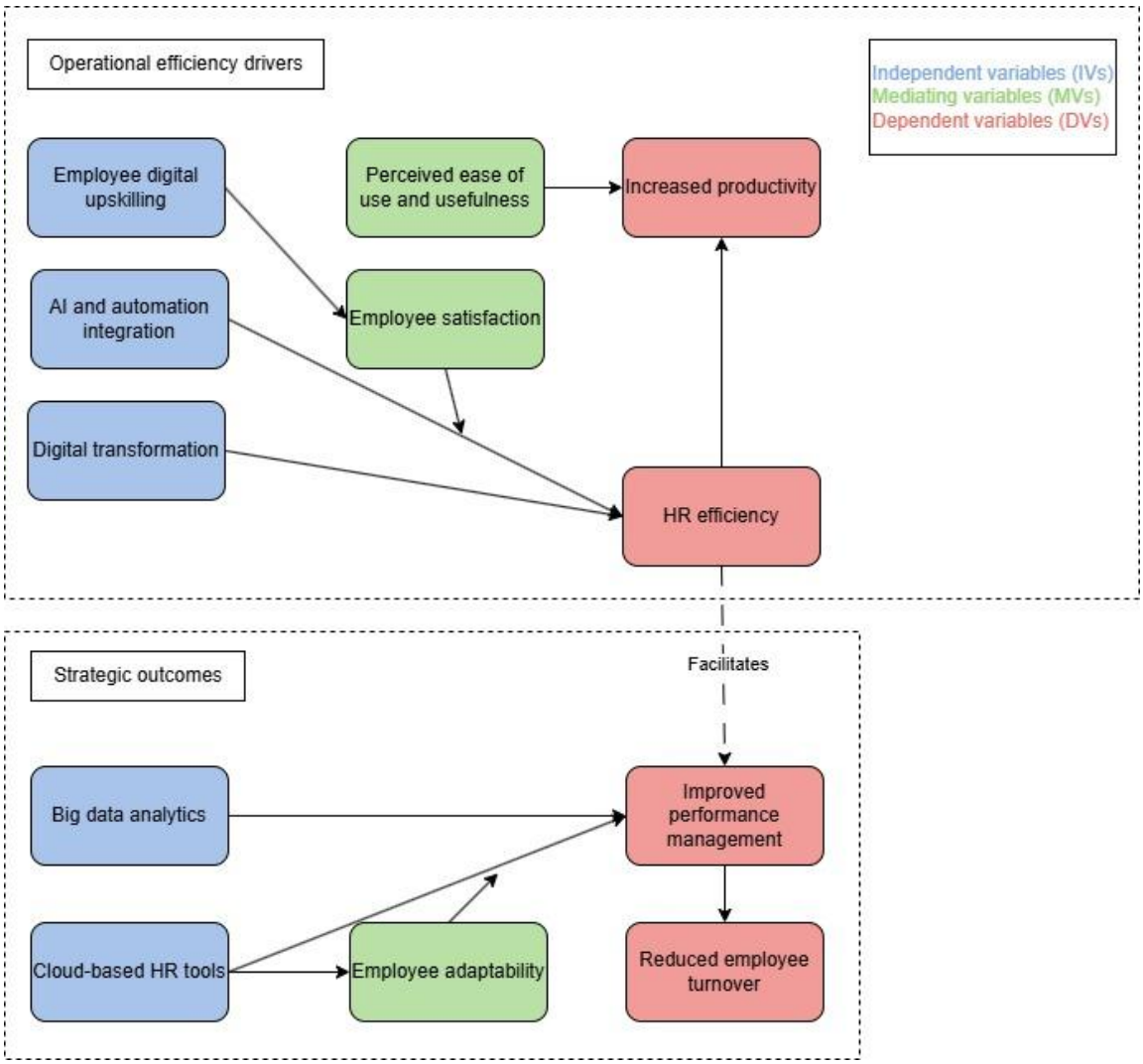
Key HRM practices such as recruitment, performance management, and employee engagement were shown to be significantly influenced by technologies like AI, HRIS, and gamification. These digital tools not only enhanced efficiency and adaptability but also contributed to higher levels of employee satisfaction, supporting the strategic repositioning of HR as a value-creating function in MNCs.

The findings aligned strongly with the theoretical literature and highlighted the importance of integrating ethical considerations and cultural context into digital HRM strategies. While some challenges were identified—such as data privacy concerns and generational resistance to change—the overall results suggest that when aligned with organizational goals, digital transformation enables HR departments in multinational corporations to become more agile, strategic, and impactful.

These insights provide a solid foundation for the final chapter, which offers conclusions and practical recommendations based on both theoretical understanding and empirical evidence.

Final integrated model of digital transformation influence on HRM practices

Based on the synthesis of theoretical insights and empirical data, the final validated model—titled the Integrated Digital-HRM Impact Framework—is presented below to illustrate the complex relationships between digital transformation initiatives, human-centric mediators, and strategic HRM outcomes in multinational corporations (Figure 10).



Source: created by the author.

Figure 10. Integrated Digital-HRM Impact Framework for Multinational Corporations

The Integrated Digital-HRM Impact Framework represents the final validated model developed through the synthesis of theoretical insights and empirical findings regarding the influence of digital transformation on human resource management practices in multinational corporations. This model integrates elements from earlier conceptual structures, including the Technology Acceptance Model (TAM), Lewin's Change Management Model, and multiple digital transformation typologies, all of which were adapted to the HRM context through the lens of both literature review and primary data analysis.

The framework captures the pathways by which operational and strategic drivers of digital transformation impact HR efficiency and broader organizational outcomes. It begins with key digital enablers—employee digital upskilling, AI and automation integration, and general digital transformation initiatives—which have been shown to enhance HR efficiency by streamlining processes, increasing accuracy, and allowing HR professionals to shift their focus toward strategic functions. These enablers exert their influence through human-centric mediators such as employee

satisfaction, employee adaptability, and the perceived ease of use and usefulness of digital tools. These mediating variables have been validated as essential links between technological change and employee engagement, reinforcing existing theoretical claims that employee-level outcomes play a critical role in digital HR success.

The resulting improvements in HR efficiency contribute directly to increased productivity and act as facilitators of improved performance management practices. Moreover, the application of advanced tools such as big data analytics and cloud-based HR platforms further supports strategic outcomes, particularly in fostering employee adaptability and reducing turnover rates. These connections emphasize the strategic importance of digital HR tools not only in operational enhancement but also in achieving long-term human capital goals.

Empirical validation of this model was carried out through structured quantitative analysis of survey responses collected from HR professionals in multinational corporations. The results confirmed the hypothesized relationships among the variables and demonstrated statistically significant effects of digital transformation initiatives on both HR efficiency and strategic HR outcomes. The dual emphasis on operational and strategic layers distinguishes this framework as a comprehensive model that accounts for both the technological and human dimensions of digital change in HRM.

In summary, the Integrated Digital-HRM Impact Framework offers a robust, evidence-based structure that reflects the complexity and interdependence of digital transformation processes within the HR function. It serves both as a theoretical contribution and as a practical guide for multinational organizations aiming to leverage digital technologies to enhance workforce management, adaptability, and organizational performance.

This chapter provided an empirical investigation into the influence of digital transformation on human resource management practices in multinational corporations. The research methodology was grounded in both qualitative and quantitative approaches, integrating survey data collected from HR professionals and employees working in digitally engaged multinational environments. Through rigorous data analysis—including statistical correlation and regression techniques—the chapter validated the proposed conceptual relationships between digital transformation drivers and key HRM outcomes. The findings confirmed that digital enablers such as employee digital upskilling, AI and automation integration, and cloud-based HR tools have a significant positive impact on HR efficiency, employee satisfaction, and adaptability. Mediating variables such as perceived usefulness, satisfaction, and adaptability emerged as essential links between technological tools and organizational outcomes. The results also demonstrated that HR efficiency directly contributes to increased productivity and facilitates improved performance management, which in turn reduces

employee turnover. Drawing on these validated relationships, the final model—Integrated Digital-HRM Impact Framework—was developed to encapsulate the complex, multi-level interactions among operational drivers, mediating employee responses, and strategic HRM results. This model not only synthesizes theoretical insights but also serves as a practical guide for organizations seeking to implement effective digital transformation strategies in HRM. In conclusion, the empirical research conducted in this chapter substantiates the central argument of the thesis: digital transformation, when strategically implemented and human-centred in its application, has a transformative effect on HRM practices, enabling multinational corporations to enhance operational efficiency and achieve sustainable strategic outcomes.

CONCLUSIONS

1. After analysing the concept of digital transformation, it was revealed that digital transformation is a comprehensive process involving the integration of advanced technologies such as AI, IoT, ML, blockchain, and cloud computing. These technologies fundamentally alter business processes, models, and strategies, enabling organizations to achieve significant improvements in operational efficiency and competitive advantage. As defined by scholars such as Vial (2021) and Gong, & Ribière (2021), digital transformation is not only technological but also strategic, involving fundamental changes to value creation and business operations.
2. Upon reviewing HRM practices definition, content, and their types in multinational corporations, it was determined that HRM practices are defined as strategic approaches to managing people within organizations to meet performance goals. Their content typically includes recruitment, training, performance management, and compensation. These practices can be categorized into strategic, humanistic, and personalistic types, each reflecting different organizational priorities and employee relations philosophies.
3. After examining the links between digital transformation and HRM practices, it was proved that digital technologies significantly influence HR functions. Technologies such as AI and IoT streamline recruitment and enhance employee engagement, while ML and big data analytics improve decision-making processes and strategic HRM alignment. The integration of these technologies necessitates re-skilling of the HR workforce and the development of new HR strategies.
4. Upon analysing the empirical level of research, it is evident that digital transformation significantly influences HRM practices in multinational corporations. Key findings highlight that the integration of advanced technologies, such as AI, HRIS, and predictive analytics, enhances operational efficiency by up to 40% and improves employee collaboration and engagement. These technologies also facilitate workforce adaptability by providing actionable insights for skill gap identification and proactive planning. Additionally, challenges such as ethical concerns and resistance to adoption underscore the need for a balanced approach to leveraging digital tools effectively.
5. After evaluating the results of theoretical and empirical research, the formulated research model captures the interplay between external digital drivers, HRM transformation processes, and their outcomes. The model delineates how innovations like AI, gamification, and HRIS reshape HR functions, fostering improvements in employee satisfaction, organizational efficiency, and competitive advantage. This framework bridges theoretical concepts and empirical evidence,

offering a structured pathway for multinational corporations to navigate digital transformation while addressing challenges and capitalizing on opportunities.

6. Upon conducting the empirical evaluation, the initial research model was critically assessed and refined to reflect the observed dynamics within multinational corporations. The empirical findings provided substantial support for many of the hypothesized relationships—particularly those involving AI and automation, big data analytics, cloud-based HR tools, digital upskilling, and organizational readiness. However, based on the data analysis, adjustments were made to the original structure to better capture the mediating role of employee satisfaction and adaptability and the influence of HR efficiency on broader strategic outcomes. The resulting final model offers a validated and more precise representation of the complex interplay between digital transformation and HRM practices in a global organizational context.

RECOMMENDATIONS

1. Based on the empirical findings showing a strong positive impact of digital upskilling on employee adaptability and engagement, multinational corporations should introduce structured, role-specific digital training programs. These should include hands-on workshops focusing on AI-based recruitment tools, HR analytics dashboards, and cloud-based HR platforms. Training should be modular, allowing employees to progress at their own pace and according to their role's digital maturity. Incorporating gamified elements such as badges or performance tracking can further enhance engagement. These efforts will build internal digital capabilities and reduce dependence on external consultants.
2. The research highlighted employee resistance as a key barrier to digital transformation. To address this, organizations should establish clear performance-based incentives tied to digital tool usage and integration. For example, employees who successfully implement AI-powered scheduling tools or contribute to the adoption of predictive analytics in workforce planning could receive bonuses, recognition awards, or advancement opportunities. These tangible incentives not only encourage tool adoption but also reinforce a performance-driven, innovation-oriented organizational culture.
3. Given the positive link between organizational readiness and HR efficiency, companies should designate internal "Digital HRM Ambassadors" within key departments. These individuals—trained in core HR digital tools—would provide peer-level support, coach employees during transitions to new platforms, and help troubleshoot adoption challenges. This program would strengthen peer learning, ensure consistent digital tool usage across departments, and foster a more inclusive transformation process by reducing top-down pressure.
4. While this study provided valuable insights into the influence of digital transformation on HRM practices in multinational corporations, several areas remain open for further exploration. Future research should consider longitudinal designs to assess how digital HRM practices affect employee performance and organizational outcomes over time. Additionally, comparative studies across different cultural, legal, or industry contexts would help refine the generalizability of the proposed model. It is also recommended to explore employee-level psychological outcomes, such as digital fatigue or perceptions of surveillance, which were beyond the scope of this thesis but are increasingly relevant. Finally, expanding the sample to include SMEs or non-Western markets may uncover different readiness levels and adoption dynamics.

Kazlauskaitė, Eglė (2025). *Skaitmeninės transformacijos įtaka žmogiškųjų išteklių valdymo praktikai tarptautinėse korporacijose.* Magistro baigiamasis darbas. Kaunas: Vilniaus universitetas Kauno fakultetas, 81 p.

S A N T R A U K A

Šiame darbe nagrinėjama skaitmeninės transformacijos įtaka žmogiškųjų išteklių valdymo (ŽIV) praktikai tarptautinėse korporacijose. Skaitmeninės technologijos, tokios kaip dirbtinis intelektas (DI), debesų kompiuterija, didžiųjų duomenų analizė ir automatizavimas, iš esmės keičia personalo valdymo strategijas, procesus ir darbuotojų patirtį. Tyrimo aktualumą sustiprina spartus skaitmeninių sprendimų diegimas, globalizacijos iššūkiai bei augantis poreikis prisitaikyti prie kintančios darbo rinkos.

Tyrimo objektas – skaitmeninės transformacijos įtaka ŽIV praktikai tarptautinėse korporacijose.

Tyrimo tikslas – ištirti, kaip skaitmeninė transformacija veikia ŽIV praktiką tarptautinėse korporacijose.

Tyrimo uždaviniai:

1. Išanalizuoti skaitmeninės transformacijos sampratą;
2. Apžvelgti ŽIV praktikos apibrėžimą, turinį ir tipus;
3. Ištirti sąsajas tarp skaitmeninės transformacijos ir ŽIV praktikos;
4. Išanalizuoti empirinio lygmens tyrimus apie skaitmeninės transformacijos poveikį ŽIV praktikai;
5. Sukurti tyrimo modelį ir jį empiriškai įvertinti, nustatant DI, duomenų analizės, debesų sistemų ir skaitmeninių įgūdžių poveikį ŽIV efektyvumui, našumui ir prisitaikymui.

Teorinėje darbo dalyje išanalizuota skaitmeninės transformacijos samprata, pagrindiniai jos tipai ir technologijos, turinčios reikšmingą poveikį žmogiškųjų išteklių valdymui (ŽIV). Taip pat pateiktos ŽIV praktikų rūšys ir turinys, bei atskleistas ryšys tarp skaitmeninės transformacijos veiksnių ir organizacinių rezultatų. Analitinėje dalyje apžvelgti antriniai šaltiniai, identifikuojantys dažniausiai taikomus skaitmeninius įrankius ŽIV praktikoje, taip pat pristatyti pagrindiniai iššūkiai ir galimybės, su kuriais susiduria daugiatautės korporacijos vykdydamos skaitmeninę transformaciją.

Tyrimo metu nustatyta, kad skaitmeniniai sprendimai, tokie kaip žaidybinimo sistemos, DI grįžtamojo ryšio įrankiai ir debesų platformos, didina darbuotojų pasitenkinimą (66 %) ir įsitraukimą (31 %). Be to, skaitmenizuotos ŽIV sistemos padidina efektyvumą apie 40 %. Nustatyti pagrindiniai iššūkiai – darbuotojų atsparumas naujovėms, skaitmeninių kompetencijų trūkumas ir finansiniai ištekliai.

Darbo apimtis – 81 puslapis, 10 paveikslų, 7 lentelės, 9 priedai.

REFERENCES

1. Adiazmil, A. S., Hidayat, M., & Basuil, D. A. (2024). *Strategic human resource planning in the era of digital transformation*. *Management Studies and Business Journal (PRODUCTIVITY), 1(1), 130-137*.. https://doi.org/10.62207/q7158p72.
2. Ahmad, M., & Ali, M. (2019). The Role of the Human Resources Information System in the Practice of Human Resources Management Strategies: A survey of the views of a sample of teaching staff at the faculties of Cihan University-Erbil. *Academic Journal of Nawroz University*. https://doi.org/10.25007/ajnu.v8n3a409.
3. Arbatani, T., Farhangi, A., & Dadashzadeh, Y. (2016). Framing the Current Challenges and Trends in Human Resource Management. *International journal of humanities and social sciences*, 589-600.
4. Arbnor, I., & Bjerke, B. (2016). *Methodology for creating business knowledge* (4th ed.). Los Angeles, CA: SAGE Publications.
5. Arslan, A., Cooper, C., Khan, Z., Golgeci, I., & Ali, I. (2022). Artificial intelligence and human workers interaction at team level: a conceptual assessment of the challenges and potential HRM strategies. *International Journal of Manpower*, *43*(1), 75-88. doi: https://doi.org/10.1108/IJM-01-2021-0052.
6. Babalola, H., & Aigbavboa, C. (2022). Conceptual Description of the Key Attributes of Human Resource Management Practices in a Developing Economy. *Human Factors, Business Management and Society*. https://doi.org/10.54941/ahfe1002277.
7. Balabanova, Y., Lukyanova, A., & Shatskaya, E. (2024). Digital transformation in human resources management and its impact on the performance of enterprises. *Вестник Северо-Кавказского федерального университета*. https://doi.org/10.37493/2307-907x.2024.2.3.
8. Barann, B., Hermann, A., Cordes, A., Chasin, F., & Becker, J. (2019). Supporting Digital Transformation in Small and Medium-sized Enterprises: A Procedure Model Involving Publicly Funded Support Units., 1-10. https://doi.org/10.24251/HICSS.2019.598.
9. Barbierato, E., Iacono, M., Gribaudo, M., & Mastroianni, M. (2023). Cost- And Performance-Based Evaluation Of Cloud-Based Disaster Recovery., 568-574. https://doi.org/10.7148/2023-0568.
10. Barišić, A., Barišić, J., & Miloloza, I. (2021). Digital Transformation: Challenges for Human Resources Management. *ENTRENOVA - ENTerprise REsearch InNOVAtion*. https://doi.org/10.54820/gtfn9743.
11. Bican, P., & Brem, A. (2020). Digital Business Model, Digital Transformation, Digital Entrepreneurship: Is There A Sustainable “Digital”?. *Sustainability*, 12, 5239. https://doi.org/10.3390/su12135239.

12. Blom, R., Kruyen, P., Van Der Heijden, B., Van Der Heijden, B., Van Der Heijden, B., & Thiel, S. (2020). One HRM Fits All? A Meta-Analysis of the Effects of HRM Practices in the Public, Semipublic, and Private Sector. *Review of Public Personnel Administration*, 40, 3 - 35. https://doi.org/10.1177/0734371X18773492.
13. Bogavac, M., Bogavac, M., & Živanović, N. (2020). THE STRATEGIC ROLE OF HUMAN RESOURCES IN THE GLOBALIZATION PROCESS. *FBIM Transactions*. https://doi.org/10.12709/fbim.08.08.01.04.
14. Budhwar, P., Malik, A., De Silva, M. T., & Thevisuthan, P. (2022). Artificial intelligence–challenges and opportunities for international HRM: a review and research agenda. *The International Journal of Human Resource Management*, *33*(6), 1065-1097. doi: https://doi.org/10.1080/09585192.2022.2035161.
15. Burnes, B. (2020). The Origins of Lewin's Three-Step Model of Change. *The Journal of Applied Behavioral Science*, 56, 32 - 59. https://doi.org/10.1177/0021886319892685.
16. Camarinha-Matos, L., Fornasiero, R., Ramezani, J., & Ferrada, F. (2019). Collaborative Networks: A Pillar of Digital Transformation. *Applied Sciences*. https://doi.org/10.3390/app9245431.
17. Chan, J. (2020). Digital Transformation in the Era of Big Data and Cloud Computing., 9, 16. https://doi.org/10.11648/J.IJIIS.20200903.11.
18. Chatterjee, N., Swaminathan, M., & Ratanaporn, Y. (2021). A Conceptual Framework for Human Resource Management: An Application to the Organizational Culture. *Journal of Management World*, *2021*(2), 181-190. https://doi.org/10.53935/jomw.v2021i2.154.
19. Chatterjee, S., Chaudhuri, R., Vrontis, D., & Basile, G. (2022). Digital transformation and entrepreneurship process in SMEs of India: a moderating role of adoption of AI-CRM capability and strategic planning. *Journal of Strategy and Management*, *15*(3), 416-433. doi: https://doi.org/10.1108/JSMA-02-2021-0049.
20. Chauhan, P. (2012). Functions of Human Resource Management and emerging changes in HRM. https://doi.org/10.15373/22501991/July2014/42.
21. Chen, D., Esperança, J., & Wang, S. (2022). The Impact of Artificial Intelligence on Firm Performance: An Application of the Resource-Based View to e-Commerce Firms. *Frontiers in Psychology*, 13. https://doi.org/10.3389/fpsyg.2022.884830.
22. Chilwane, N. (2021). *Ethical considerations for employees disrupted by job automation technology* (Doctoral dissertation, University of Pretoria). Retrieved from https://repository.up.ac.za/bitstream/handle/2263/81312/Chilwane_Ethical_2021.pdf?sequence=1.

23. Dash, D., Farooq, R., Panda, J. S., & Sandhyavani, K. V. (2019). Internet of Things (IoT): The New Paradigm of HRM and Skill Development in the Fourth Industrial Revolution (Industry 4.0). *IUP Journal of Information Technology*, *15*(4). Retrieved from https://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=09732896&AN=140446496&h=Vw5NSUXwmFsqy9L3fgQrOZJHuLo8HYL2tX8EJBFo6rZWOPuUZtw3Vhy8aXDcp66J6c4NkLnjX%2FJAO2VWilggDg%3D%3D&crl=f&casa_token=tANE2lPMWnIAAAAA:qOVfJC1-tzUprr4UpA46lXfJAi-Xb09IAABIArmaKi1AtSsVm1K1TUJfQSUNfxs61xGgSbn6XEkhm2A.
24. Davidson, M. (2015). Human Resource Management, Ethical Issues in. https://doi.org/10.1002/9781118785317.WEOM020121.
25. Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). *User acceptance of computer technology: A comparison of two theoretical models*. **Management Science**, 35(8), 982–1003. https://doi.org/10.1287/mnsc.35.8.982.
26. Dijmărescu, I., & Ionescu, L. (2021). The Future of Work in a Jobless Society: Globalization, Smart Digitalization, and Cognitive Automation. *SHS Web of Conferences*. https://doi.org/10.1051/SHSCONF/20219207016.
27. Dobre, E. (2024). The impact of demographic changes on HR processes. *Belvedere Meridionale*. https://doi.org/10.14232/belv.2024.1.7.
28. Dreković, E., Radosavljević, M., & Teofilović, Ž. (2023). *HR practices through the lens of technology and digital transformation*. *Economic Themes*, *61*(4), 541-565. https://doi.org/10.2478/ethemes-2023-0028.
29. Dubisetty, S., & Reddy, S. (2022). The impact of human resource management (hrm) practices on employee satisfaction level and performance. *Journal of Management and Science, 12(1), 16-19.* https://doi.org/10.26524/ms.12.3.
30. Elmortada, A., Mokhlis, C., Mokhlis, A., & Elfezazi, S. (2020). Innovations in HR Management: a Content Analysis Approach. *Marketing and Management of Innovations*. https://doi.org/10.21272/mmi.2020.1-14.
31. Fabi, B., & Pettersen, N. (1992). Human resource management practices in project management.*International Journal of Project Management*, 10, 81-88. https://doi.org/10.1016/0263-7863(92)90060-M.
32. Farndale, E., Horak, S., Phillips, J., & Beamond, M. (2019). Facing complexity, crisis, and risk: Opportunities and challenges in international human resource management. *Thunderbird International Business Review*. https://doi.org/10.1002/TIE.22037.
33. Fedorova, A., Koropets, O., & Gatti, M. (2019, May). Digitalization of human resource management practices and its impact on employees' well-being. In *Proceedings of the*

International Scientific Conference" Contemporary Issues in Business, Management and Economics Engineering", Vilnius (pp. 740-749). doi: 10.3846/cibmee.2019.075.

34. Fenech, R., Baguant, P., & Ivanov, D. (2019). The changing role of human resource management in an era of digital transformation. *Journal of Management Information & Decision Sciences*, *22*(2). Retrieved from https://www.academia.edu/download/78857024/The-changing-role-of-human-resource-management-in-an-era-of-digital-transformation-23-1.pdf.
35. Feroz, A., Zo, H., & Chiravuri, A. (2021). Digital Transformation and Environmental Sustainability: A Review and Research Agenda. *Sustainability*. https://doi.org/10.3390/SU13031530.
36. Fregnan, E., Ivaldi, S., & Scaratti, G. (2020). HRM 4.0 and New Managerial Competences Profile: The COMAU Case. *Frontiers in Psychology*, 11. https://doi.org/10.3389/fpsyg.2020.578251.
37. Fuller, A., Fan, Z., & Day, C. (2020). Digital Twin: Enabling Technologies, Challenges and Open Research. *IEEE Access*, 8, 108952-108971. https://doi.org/10.1109/ACCESS.2020.2998358.
38. Galadanchi, H., & Saulawa, A. (2024). EVALUATING THE EFFECTIVENESS OF HUMAN RESOURCE MANAGEMENT STRATEGIES ON EMPLOYEE CONTENTMENT IN NIGERIA'S SERVICE SECTOR (BANKING INDUSTRY). *International Journal of Research -GRANTHAALAYAH, 12(2), 77–92*. https://doi.org/10.29121/granthaalayah.v12.i2.2024.5519.
39. Galanaki, E., Lazazzara, A., & Parry, E. (2019). A cross-national analysis of e-HRM configurations: integrating the information technology and HRM perspectives. In *Organizing for Digital Innovation: At the Interface Between Social Media, Human Behavior and Inclusion* (pp. 261-276). Springer International Publishing. doi: 10.1007/978-3-319-90500-6_20.
40. Gebayew, C., Hardini, I., Panjaitan, G., Kurniawan, N., & , S. (2018). A Systematic Literature Review on Digital Transformation. *2018 International Conference on Information Technology Systems and Innovation (ICITSI)*, 260-265. https://doi.org/10.1109/ICITSI.2018.8695912.
41. Girisha, M. C. Digitalization Of Human Resource Management Is Value Addition To Organization. Retrieved from https://www.researchgate.net/profile/Girisha-M-C/publication/351047320_DIGITALIZATION_OF_HUMAN_RESOURCE_MANAGEMENT_IS_VALUE_ADDITION_TO_ORGANIZATION/links/6080ee67907dcf667bb5bc7f/DIGITALIZATION-OF-HUMAN-RESOURCE-MANAGEMENT-IS-VALUE-ADDITION-TO-ORGANIZATION.pdf.
42. Gong, C., & Ribière, V. (2021). Developing a unified definition of digital transformation. *Technovation*, 102, 102217. https://doi.org/10.1016/j.technovation.2020.102217.

43. Guinan, P., Parise, S., & Langowitz, N. (2019). Creating an innovative digital project team: Levers to enable digital transformation. *Business Horizons*. https://doi.org/10.1016/j.bushor.2019.07.005.
44. Gurbaxani, V., & Dunkle, D. (2019). Gearing Up For Successful Digital Transformation. *MIS Q. Executive*, 18, 6. https://doi.org/10.17705/2msqe.00017.
45. Halid, H., Yusoff, Y., & Somu, H. (2020). The Relationship Between Digital Human Resource Management and Organizational Performance. *Proceedings of the First ASEAN Business, Environment, and Technology Symposium (ABEATS 2019)*. https://doi.org/10.2991/aebmr.k.200514.022.
46. Hanelt, A., Bohnsack, R., Marz, D., & Antunes, C. (2020). A Systematic Review of the Literature on Digital Transformation: Insights and Implications for Strategy and Organizational Change. *Journal of Management Studies (58: 1159-1197)*. https://doi.org/10.1111/JOMS.12639.
47. Hayes, A. (2012). : A versatile computational tool for observed variable mediation, moderation, and.
48. Hrynko, P. (2019). IMPROVEMENT OF THE DIGITAL TRANSFORMATION STRATEGY OF BUSINESS ON THE BASIS OF DIGITAL TECHNOLOGIES., 6, 10-18. https://doi.org/10.21303/2504-5571.2019.001083.
49. Hu, D., & Lan, Y. (2024). The dual path effect mechanism study of digital-HRM on employee innovative performance and cyberloafing. *PLOS ONE*, 19. https://doi.org/10.1371/journal.pone.0307195.
50. Ionescu, L., & Andronie, M. (2019). The Future of Jobs in the Digital World., 5, 89-94. https://doi.org/10.26458/v5.i1.7.
51. Jack, R., Huang, Y., Sun, J., & Guo, F. (2019). Internationalisation of Chinese banks and financial institutions and its implications for IHRM. *The International Journal of Human Resource Management*, 30, 2121 - 2136. https://doi.org/10.1080/09585192.2019.1598037.
52. Jain, R., Garg, N., & Khera, S. (2022). Adoption of AI-Enabled Tools in Social Development Organizations in India: An Extension of UTAUT Model. *Frontiers in Psychology*, 13. https://doi.org/10.3389/fpsyg.2022.893691.
53. James, O., Udeh, C., Daraojimba, C., Ogedengbe, D., Elufioye, O., & Samod, B. (2023). A REVIEW OF THE IMPACT OF DIGITAL TRANSFORMATION ON HR PRACTICES AND STRATEGIES IN THE NIGERIAN RENEWABLE ENERGY SECTOR. *Journal Of Third World Economics (JTWE), 1(1): 36-46.* https://doi.org/10.26480/jtwe.01.2023.36.46.

54. Jeong, J., Kim, B., & Lee, J. (2024). Navigating AI transitions: how coaching leadership buffers against job stress and protects employee physical health. *Frontiers in Public Health*, 12. https://doi.org/10.3389/fpubh.2024.1343932.
55. Johnson, B., Coggburn, J., & Llorens, J. (2022). Artificial Intelligence and Public Human Resource Management: Questions for Research and Practice. *Public Personnel Management*, 51, 538 - 562. https://doi.org/10.1177/00910260221126498.
56. Jovanović, T., & Arsenijević, O. (2020). Strategic role of HRM from the angle of training of employees in the period of transformation of business., 281-297. https://doi.org/10.5937/bastina30-26539.
57. Karst, R., Gaffney, N., & Johnson, A. (2023). An Institutional Perspective on Strategic Alignment of International Human Resource Management in Multinational Enterprises. *The International Trade Journal*, 38, 31 - 52. https://doi.org/10.1080/08853908.2023.2276246.
58. Khan, W., Khattak, A., Ahmed, S., & Khan, S. (2021). Impact of Human Resource Management Practices on Corporate Entrepreneurship. *Journal of Business & Tourism, 4(1), 117–132.* https://doi.org/10.34260/jbt.v4i1.94.
59. Khizbullina, R., Cherkasov, G., & Nurullina, E. (2024). Enterprise human resources automation system. *E3S Web of Conferences*. https://doi.org/10.1051/e3sconf/202454909007.
60. Kim, S., Wang, Y., & Boon, C. (2021). Sixty years of research on technology and human resource management: Looking back and looking forward. *Human Resource Management*, *60*(1), 229-247. doi: https://doi.org/10.1002/hrm.22049.
61. Koivunen, S., Sahlgren, O., Ala-Luopa, S., & Olsson, T. (2023). Pitfalls and Tensions in Digitalizing Talent Acquisition: An Analysis of HRM Professionals' Considerations Related to Digital Ethics. *Interacting with Computers*, iwad018. doi: https://doi.org/10.1093/iwc/iwad018.
62. Kongmanee, J., Kijsanayothin, P., & Hewett, R. (2019). Securing Smart Contracts in Blockchain. *2019 34th IEEE/ACM International Conference on Automated Software Engineering Workshop (ASEW)*, 69-76. https://doi.org/10.1109/ASEW.2019.00032.
63. Koon, V., & Fujimoto, Y. (2023). From corporate social responsibility (CSR) to corporate humanistic responsibility (CHR): the conceptualization and operationalization of perceived CHR. *Personnel Review*. https://doi.org/10.1108/pr-07-2022-0491.
64. Kuldosheva, G. (2021). Challenges and opportunities of digital transformation in the public sector in transition economies: Examination of the case of Uzbekistan. Retrieved from https://www.econstor.eu/bitstream/10419/238605/1/adbi-wp1248.pdf.
65. Kumala, D. (2024). Digital Transformation and Efficiency of Sharia-Based HR Management on MSME Performance with Organizational Culture Moderation: A Quantitative Study in

Cileungsi. *International Journal of Economics (IJEC), 3(2), 1154–1160.* https://doi.org/10.55299/ijec.v3i2.1026.

66. Langer, M., König, C., & Busch, V. (2020). Changing the means of managerial work: effects of automated decision support systems on personnel selection tasks. *Journal of Business and Psychology*, 36, 751 - 769. https://doi.org/10.1007/s10869-020-09711-6.
67. Latemore, G., Steane, P., & Kramar, R. (2019). From Utility to Dignity: Humanism in Human Resource Management. , 91-118. https://doi.org/10.1007/978-3-030-29426-7_6.
68. Lin, R., Chuang, W., Chuang, C., & Chang, W. (2021). Applied Big Data Analysis to Build Customer Product Recommendation Model. *Sustainability*. https://doi.org/10.3390/SU13094985.
69. Liu, C., Ngolob, R., & Palaoag, T. (2020). Human Resource Management (HRM) Practices. *Journal of Advanced Management Science*. https://doi.org/10.18178/JOAMS.8.4.121-125.
70. Lou, Y., Hong, A., & Li, Y. (2024). Assessing the Role of HRM and HRD in Enhancing Sustainable Job Performance and Innovative Work Behaviors through Digital Transformation in ICT Companies. *Sustainability*. https://doi.org/10.3390/su16125162.
71. Lukita, C., Goh, T., Rizki, M., Chakim, M., Williams, A., & Daeli, O. (2024). Impact of Digital Transformation on HR Competency from a Tech-Based Organizational Perspective. *2024 3rd International Conference on Creative Communication and Innovative Technology (ICCIT)*, 1-7. https://doi.org/10.1109/ICCIT62134.2024.10701105.
72. Malik, A., Budhwar, P., Patel, C., & Srikanth, N. (2020). May the bots be with you! Delivering HR cost-effectiveness and individualised employee experiences in an MNE. *The International Journal of Human Resource Management*, 33, 1148 - 1178. https://doi.org/10.1080/09585192.2020.1859582.
73. Markopoulos, E., Jordanou, A., & Vanharanta, H. (2023). Merging the Holacracy and the Company Democracy Models into a new disruptive and intellectual capital driven Human Resource Management methodology. *AHFE International*. https://doi.org/10.54941/ahfe1003732.
74. Massaquoi, A., & Caulker, A. (2024). Contemporary Human Resource Management Practices and Diversity in Changing Business Environments. *International Journal of Innovative Science and Research Technology (IJISRT)*. https://doi.org/10.38124/ijisrt/ijisrt24apr2266.
75. Meijerink, J. G., Boons, M., Keegan, A., & Marler, J. (2018). Call for papers for the special issue on Digitization and the transformation of human resource management. *International journal of human resource management*. doi: https://doi.org/10.1080/09585192.2018.1503845.
76. Mishra, U., & Lakshmi, R. (2020). A STUDY OF HR POLICIES. *Journal of emerging technologies and innovative research*. https://www.jetir.org/papers/JETIRED06051.pdf.

77. Mitrofanova, A. E., & Konovalova, V. G. (2019). Opportunities, problems and limitations of digital transformation of HR management. *European Proceedings of Social and Behavioural Sciences*. doi: https://doi.org/10.15405/epsbs.2019.03.174.
78. Mushtaq, K. (2020). Understanding of Contemporary Human Resource Management. *International journal of scientific and engineering research*, 11, 1197-1212. https://doi.org/10.14299/ijser.2020.07.04.
79. Muskaan, & Sarangi, P.K. (2020). A Literature Review on Machine Learning Applications in Financial Forecasting. *Journal of Technology Management for Growing Economies*, 11, 23-27. https://doi.org/10.15415/jtmge.2020.111004.
80. Nadkarni, S., & Prügl, R. (2021). Digital transformation: a review, synthesis and opportunities for future research. *Management Review Quarterly*, *71*, 233-341. https://doi.org/10.1007/s11301-020-00185-7.
81. Nandhini, B., & Vimala, B. (2020). Imperative Role Of Human Resource Management In Organizational Activities. *International Review of Business and Economics*. https://doi.org/10.56902/irbe.2020.4.2.32.
82. Neupane, A. (2018). Human Resource Management and Public Sector., 2, 71-76.
83. Nurimansjah, R. (2023). Dynamics of Human Resource Management: Integrating Technology, Sustainability, and Adaptability in the Modern Organizational Landscape. *Golden Ratio of Mapping Idea and Literature Format*. https://doi.org/10.52970/grmilf.v3i2.324.
84. Panda, A., & Mahantshetti, S. (2023, July). An empirical investigation of adopting artificial intelligence in HR practices: In Indian context. In *AIP Conference Proceedings* (Vol. 2796, No. 1). AIP Publishing. doi: https://doi.org/10.1063/5.0150351.
85. Pillai, R., Yadav, S., Sivathanu, B., Kaushik, N., & Goel, P. (2022). Use of 4.0 (I4. 0) technology in HRM: a pathway toward SHRM 4.0 and HR performance. *foresight*, *24*(6), 708-727. doi: https://doi.org/10.1108/FS-06-2021-0128.
86. Pousttchi, K., Gleiss, A., Buzzi, B., & Kohlhagen, M. (2019). Technology Impact Types for Digital Transformation. *2019 IEEE 21st Conference on Business Informatics (CBI)*, 01, 487-494. https://doi.org/10.1109/CBI.2019.00063.
87. Priya, V. K. (2022). The Impacting Factors Of Digitalization On HR, Scope For Digital Skills And Retention. *Journal of Pharmaceutical Negative Results*, 2523-2327. doi: https://doi.org/10.47750/pnr.2022.13.S06.326.
88. Puspita S, R. (2024). The Influence of Digital Technology on Human Resource Management Practice. *Management Studies and Business Journal (PRODUCTIVITY), 1(1), 108-115*. https://doi.org/10.62207/4d99e676.

89. Ramachandaran, S., Doraisingam, P., Nuraini, R., & Chaudhery, U. (2024). Examining the impact of digital transformation on HRM practices in Morocco's IT sector. *Humanities and Social Sciences Letters*. https://doi.org/10.18488/73.v12i4.3903.
90. Ramya, M., Kumar, S., & Raja, K. (2020). Improved Credit Card Fraud Detection using Machine Learning. *International journal of engineering research and technology*, 8. https://www.ijert.org/research/improved-credit-card-fraud-detection-using-machine-learning-IJERTCONV8IS08001.pdf.
91. Roshchin, I., Pikus, R., Zozulia, N., Marhasova, V., Kaplinskiy, V., & Volkova, N. (2022). Knowledge management trends in the digital economy age. *Postmodern Openings*, *13*(3), 346-357. doi: https://doi.org/10.18662/po/13.3/493.
92. Rožman, M., Oreški, D., & Tominc, P. (2022). Integrating artificial intelligence into a talent management model to increase the work engagement and performance of enterprises. *Frontiers in Psychology*, 13. https://doi.org/10.3389/fpsyg.2022.1014434.
93. Rubel, M. R. B., Kee, D. M. H., Rimi, N. N., & Yusoff, Y. M. (2017). Adapting technology: effect of high-involvement HRM and organisational trust. *Behaviour & Information Technology*, *36*(3), 281-293. doi: https://doi.org/10.1080/0144929X.2016.1222552.
94. Rusch, M., Schöggl, J., & Baumgartner, R. (2021). Application of digital technologies for sustainable product management in a circular economy – a review. *Business Strategy and the Environment*. https://doi.org/10.31235/osf.io/twgks.
95. Safaâ, D., & Mohamed, F. (2020). The factors of acceptance and use of HRIS. *Technium Social Sciences Journal, 9(1), 397–404*. https://doi.org/10.47577/tssj.v9i1.1093.
96. Saurabh, K., Arora, R., Rani, N., Mishra, D., & Ramkumar, M. (2022). AI led ethical digital transformation: Framework, research and managerial implications. *Journal of Information, Communication and Ethics in Society*, *20*(2), 229-256. doi: https://doi.org/10.1108/JICES-02-2021-0020.
97. Shankar, A., & Nigam, A. (2022). Explaining resistance intention towards mobile HRM application: the dark side of technology adoption. *International Journal of Manpower*, *43*(1), 206-225. doi: https://doi.org/10.1108/IJM-03-2021-0198.
98. Silic, M., Marzi, G., Caputo, A., & Bal, P. (2020). The effects of a gamified human resource management system on job satisfaction and engagement. *Human Resource Management Journal*, 30: 260–277. https://doi.org/10.1111/1748-8583.12272.
99. Singh, A., & Pandey, J. (2024). Artificial intelligence adoption in extended HR ecosystems: enablers and barriers. An abductive case research. *Frontiers in Psychology*, 14. https://doi.org/10.3389/fpsyg.2023.1339782.

100. Somarathna, K. (2020). An agent-based approach for modeling and simulation of human resource management as a complex system: Management strategy evaluation. *Simul. Model. Pract. Theory*, 104, 102118. https://doi.org/10.1016/j.simpat.2020.102118.
101. Sonar, A., & Pandey, R. (2023). Human Resource (HR) Practices - A Comprehensive Review. *Management Journal for Advanced Research 3(5), 42–56.* https://doi.org/10.54741/mjar.3.5.5.
102. Storti, B., Sticca, M., & Pérez-Nebra, A. (2023). Production and reception of human resource management practices for health promotion. *Frontiers in Psychology*, 14. https://doi.org/10.3389/fpsyg.2023.1104512.
103. Strohmeier, S. (2020). Digital human resource management: A conceptual clarification. *German Journal of Human Resource Management*, *34*(3), 345-365. doi: https://doi.org/10.1177/2397002220921131.
104. Susanto, E., Bagus, I., Darma, K., Suparsana, I., Ugiantara, M., Made, G., Herawan, A., Widana, G., & Idea, S. (2024). Pengembangan Strategi Manajemen Sumber Daya Manusia dalam Transformasi Digital Untuk Meningkatkan Kinerja Perusahaan. *Syntax Idea*. https://doi.org/10.46799/syntax-idea.v6i2.2971.
105. Tang, D. (2021). WHAT IS DIGITAL TRANSFORMATION?. *EDPACS*, 64, 9 - 13. https://doi.org/10.1080/07366981.2020.1847813.
106. Tataru, C. (2019). Human Resources in the Digital Age A Manager's Realities and Perspectives. *Review of International Comparative Management*. https://doi.org/10.24818/rmci.2019.4.473.
107. Tiwari, P., Pandey, R., Garg, V., & Singhal, A. (2021). Application of Artificial Intelligence in Human Resource Management Practices. *2021 11th International Conference on Cloud Computing, Data Science & Engineering (Confluence)*, 159-163. https://doi.org/10.1109/Confluence51648.2021.9377160.
108. Veldhoven, Z., Song, R., & Vanthienen, J. (2019). Cross-language Keyword Analysis of Digital Transformation for Business., 67-80. https://doi.org/10.1007/978-3-030-34986-8_5.
109. Vial, G. (2021). Understanding digital transformation: A review and a research agenda. *Managing digital transformation*, 13-66. https://doi.org/10.1016/j.jsis.2019.01.003.
110. Vrontis, D., Christofi, M., Pereira, V., Tarba, S., Makrides, A., & Trichina, E. (2022). Artificial intelligence, robotics, advanced technologies and human resource management: a systematic review. *The International Journal of Human Resource Management*, *33*(6), 1237-1266. doi: https://doi.org/10.1080/09585192.2020.1871398.
111. Wang, L. (2019). Localization of international human resource management in EMNCs: a comparative case analysis of Chinese MNCs in UK. https://doi.org/10.17635/lancaster/thesis/643.

112. Wang, Z., Lin, S., Chen, Y., Lyulyov, O., & Pimonenko, T. (2023). Digitalization Effect on Business Performance: Role of Business Model Innovation. *Sustainability*. https://doi.org/10.3390/su15119020.
113. Warner, K., & Wäger, M. (2019). Building dynamic capabilities for digital transformation: An ongoing process of strategic renewal. *Long Range Planning*. https://doi.org/10.1016/J.LRP.2018.12.001.
114. Wulandari, A., Arvi, A., Iqbal, M., Tyas, F., Kurniawan, I., & Anshori, M. (2023). Digital Hr : Digital Transformation In Increasing Productivity In The Work Environment. *Jurnal Publikasi Ilmu Manajemen*. https://doi.org/10.55606/jupiman.v2i4.2729.
115. You, J., Kim, J., & Lim, D. (2021). Organizational Learning and Change. *Research Anthology on Digital Transformation, Organizational Change, and the Impact of Remote Work*. https://doi.org/10.4018/978-1-7998-7297-9.ch036.
116. Zavyalova, E., Sokolov, D., Kucherov, D., & Lisovskaya, A. (2022). The Digitalization of Human Resource Management: Present and Future. *Foresight and STI Governance*. https://doi.org/10.17323/2500-2597.2022.2.42.51.
117. Zehir, C., Karaboğa, T., & Başar, D. (2019). The Transformation of Human Resource Management and Its Impact on Overall Business Performance: Big Data Analytics and AI Technologies in Strategic HRM. *Contributions to Management Science*. https://doi.org/10.1007/978-3-030-29739-8_12.
118. 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. doi: 10.1111/1744-7941.12258.
119. Ziebell, R., Albors-Garrigos, J., Schoeneberg, K., & Marin, M. (2019). e-HRM in a Cloud Environment: Implementation and its Adoption: A Literature Review. *Int. J. Hum. Cap. Inf. Technol. Prof.*, 10, 16-40. https://doi.org/10.4018/IJHCITP.2019100102.
120. Ziegenfuss, J., Easterday, C., Dinh, J., JaKa, M., Kottke, T., & Canterbury, M. (2021). Impact of demographic survey questions on response rate and measurement: A randomized experiment. *Survey Practice*. https://doi.org/10.29115/sp-2021-0010.

LIST OF APPENDIXES

APPENDIX 1

Survey Questionnaire

Dear Respondent,

This questionnaire has been prepared by Eglė Kazlauskaitė, a master's student in the International Business Management program at Vilnius University, Kaunas Faculty. It forms part of the Master's thesis titled "Influence of Digital Transformation on Human Resource Management Practices in Multinational Corporations." The aim of this research is to explore how digital transformation technologies—such as artificial intelligence, big data, cloud-based HR tools, and digital upskilling—impact HR efficiency and employee satisfaction in multinational corporations (MNCs).

Your participation is voluntary and completely anonymous. All responses will be used solely for academic purposes and handled with full confidentiality. The questionnaire consists of multiple-choice and Likert-scale questions and should take approximately 10–15 minutes to complete.

Your honest and thoughtful answers are essential for the scientific validity and reliability of this study. Thank you for your time and valuable input.

If you have any questions, feel free to contact me:
Eglė Kazlauskaitė – egle.kazlauskaite@knf.stud.vu.lt

Control Question

No	Section	Question	Answer	
1	Control Question	Do you currently work in a multinational corporation (MNC)?	☐ Yes	☐ No

AI and Automation in HR

Please respond to the following statements about the use of artificial intelligence and automation (in HR processes in **your corporation**. *AI and automation refer to technologies that assist in managing HR functions such as recruitment, payroll, performance evaluations, and employee engagement. These tools may include chatbots, predictive analytics, automated workflows, or AI-powered decision-support systems.* Choose a number from 1 (strongly disagree) to 5 (strongly agree) that best reflects your opinion.

No	Section	Statements	Answer				
2	AI and Automation in HR	AI-powered tools are frequently used in our HR processes (e.g., recruitment, payroll, performance evaluation).	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
3		AI and automation have improved efficiency in our HR department.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
4		AI-driven automation has reduced the administrative workload in our organization.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
5		AI has improved the quality of decision-making in HR.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
6		Our HR staff is adequately trained to work with AI-powered tools.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

Big Data and Performance Management

Please respond to the following statements about the use of big data and analytics in performance management and HR decision-making in **your corporation**. *Big Data refers to the collection, processing, and analysis of large volumes of HR-related information, which can be used to identify trends, forecast workforce needs, and support decision-making. Performance management involves assessing employee productivity, tracking key performance indicators, and aligning workforce goals*

with organizational objectives. Choose a number from 1 (strongly disagree) to 5 (strongly agree) that best reflects your opinion.

No	Section	Statement	Answer				
7	Big Data and Performance Management	Our organization uses big data to track and improve employee performance.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
8		Big data plays a valuable role in our HR decision-making processes.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
9		The use of big data has improved performance evaluations in our organization.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
10		HR professionals in our organization have the necessary skills to interpret and apply data insights.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
11		Data-driven decisions have contributed to more objective and transparent HR practices.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

Cloud-Based HR Tools and Employee Adaptability

Please respond to the following statements about the use of cloud-based HR tools and employee adaptability in **your corporation**. *Cloud-based HR tools include HR management systems, employee self-service platforms, payroll systems, and digital collaboration tools that can be accessed from anywhere via the internet. These tools allow organizations to manage HR functions remotely, improve workflow efficiency, and enhance flexibility in HR operations. Employee adaptability refers to the ability of individuals to adjust to new digital tools and changing work environments.* Choose a number from 1 (strongly disagree) to 5 (strongly agree) that best reflects your opinion.

No	Section	Statement	Answer				
12	Cloud-Based HR Tools and Employee Adaptability	Our corporation uses cloud-based HR tools such as employee self-service platforms or HR portals.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
13		Employees in our organization easily adapt to new cloud-based HR technologies.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
14		Cloud-based tools have improved HR strategy execution and performance evaluation.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
15		The implementation of cloud-based systems has made HR processes more efficient.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
16		Our corporation provides sufficient support or training when new cloud-based tools are introduced.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

Digital Upskilling and Employee Satisfaction

Please respond to the following statements about digital skills training and its impact on employee satisfaction in **your corporation**. *Digital upskilling refers to the training and development programs designed to enhance employees' proficiency in using digital tools, platforms, and technologies. Organizations may implement various training methods, including online learning, workshops, certifications, and self-paced digital courses, to support employees in adapting to technological changes. Employee satisfaction in this context refers to how individuals perceive their work environment, career growth opportunities, and the support they receive in developing digital skills.* Choose a number from 1 (strongly disagree) to 5 (strongly agree) that best reflects your opinion.

No	Section	Statement	Answer				
17	Digital Upskilling and Employee Satisfaction	Our corporation has provided digital skills training for HR tools within the past year.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
18		I am satisfied with the level of digital training provided by my company.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
19		I feel confident using digital HR tools in my daily work.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
20		Digital transformation has positively impacted my workload.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
21		Improved digital skills have increased my work efficiency and job satisfaction.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

Digital HR Tools and Productivity

Please respond to the following statements about the use of digital HR tools and their impact on productivity in **your corporation**. *HR efficiency refers to how well human resource functions—such as talent acquisition, employee management, and performance evaluation—are performed using available resources. Productivity, in this context, relates to employees' ability to complete their tasks effectively and contribute to organizational goals. Digital tools, automation, and structured HR processes can influence both efficiency and productivity in different ways.* Choose a number from 1 (strongly disagree) to 5 (strongly agree) that best reflects your opinion.

No	Section	Statement	Answer				
22	Digital HR Tools and Productivity	It is easy to use digital HR tools in our organization.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
23		Digital HR tools have improved employee productivity.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
24		The use of digital HR tools has contributed to higher overall organizational productivity.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
25		Digital HR tools have helped reduce employee turnover.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
26		Our organization provides a diverse set of digital tools that support HR functions effectively.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

No	Section	Question	Answer						
27	Digital HR Tools and Productivity	Which of the following HR digital tools does your company currently use? (*Select all that apply*)	☐ AI-powered recruitment software	☐ Big data HR analytics	☐ Cloud-based HR platforms (e.g., Workday, SAP SuccessFactors)	☐ Employee self-service portals	☐ Performance management systems	☐ Digital learning & training platforms	☐ None of the above

No	Section	Question	Answer				
28	Digital HR Tools and Productivity	What is the biggest barrier to adopting digital HR tools in your company?	☐ Cost of implementation	☐ Resistance from employees	☐ Lack of technical expertise	☐ Security & data privacy concerns	☐ No clear business case

Organizational Culture & Digital Readiness

Please respond to the following statements about **your corporation's** culture and its readiness for digital transformation. *Organizational culture reflects the shared values, beliefs, and practices within a company that shape how employees interact and approach change. Digital readiness refers to the extent to which an organization is prepared to integrate and utilize digital technologies effectively. Companies with a strong culture of innovation and adaptability may find digital transformation easier to implement, while others may face challenges related to resistance to change or lack of technological infrastructure.* Choose a number from 1 (strongly disagree) to 5 (strongly agree) that best reflects your opinion.

APPENDIX 1 (CONTINUED)

No	Section	Statement	Answer				
29	Organizational Culture & Digital Readiness	Our organization's culture is supportive of digital transformation.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
30		There is a clear digital transformation strategy for HRM in our company.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
31		Digital transformation in HR is driven by clearly defined leadership.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
32		I feel confident in my own digital literacy related to HR technologies.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
33		Our organization regularly provides formal training for digital HR tools.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

No	Section	Question	Answer				
34	Organizational Culture & Digital Readiness	Who drives digital transformation in your HR department?	☐ HR leadership	☐ IT department	☐ Executive management	☐ External consultants	☐ No clear driver

No	Section	Question	Answer				
35	Organizational Culture & Digital Readiness	Which digital skills do you believe are most critical for HR professionals in the future? (Select top 2-3)	☐ AI & machine learning in HR	☐ HR data analytics & reporting	☐ Cloud-based HR systems management	☐ Digital communication & collaboration tools	☐ Cyber-security & HR data privacy

Demographic Information

No	Section	Question	Answer								
36	Demographic Information	What is your age group?	☐ 18–25	☐ 26–35	☐ 36–45	☐ 46+					
37		What is your gender?	☐ Male	☐ Female	☐ Prefer not to say						
38		Which industry does your company operate in? *(Select one)*	☐ Technology / IT	☐ Finance / Banking / Insurance	☐ Healthcare / Pharmaceuticals	☐ Retail / E-commerce	☐ Manufacturing / Industrial	☐ Education / Training	☐ Government / Public Sector	☐ Telecommunications	☐ Other (please specify)
39		What is the size of your company?	☐ Small (Less than 50 employees)	☐ Medium (50–250 employees)	☐ Large (More than 250 employees)						
40		What is your current job position?	☐ HR Manager	☐ HR Specialist	☐ General Employee	☐ Other (please specify)					
41		How many years of experience do you have in your current profession?	☐ Less than 1 year	☐ 1–3 years	☐ 4–6 years	☐ More than 6 years					

APPENDIX 2

SPSS Calculations For Descriptive Statistics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
AI-powered tools are frequently used in our HR processes (e.g., recruitment, payroll, performance evaluation).	178	1	5	3.15	1.320
AI and automation have improved efficiency in our HR department.	178	1	5	3.25	1.300
AI-driven automation has reduced the administrative workload in our organization.	178	1	5	3.20	1.273
AI has improved the quality of decision-making in HR.	178	1	5	3.12	1.287
Our HR staff is adequately trained to work with AI-powered tools.	178	1	5	3.23	1.243
Our organization uses big data to track and improve employee performance.	178	1	5	3.35	1.272
Big data plays a valuable role in our HR decision-making processes.	178	1	5	3.33	1.274
The use of big data has improved performance evaluations in our organization.	178	1	5	3.30	1.266
HR professionals in our organization have the necessary skills to interpret and apply data insights.	178	1	5	3.31	1.267
Data-driven decisions have contributed to more objective and transparent HR practices.	178	1	5	3.43	1.243
Our corporation uses cloud-based HR tools such as employee self-service platforms or HR portals.	178	1	5	3.54	1.345
Employees in our organization easily adapt to new cloud-based HR technologies.	178	1	5	3.42	1.305
Cloud-based tools have improved HR strategy execution and performance evaluation.	178	1	5	3.47	1.285
The implementation of cloud-based systems has made HR processes more efficient.	178	1	5	3.48	1.277
Our corporation provides sufficient support or training when new cloud-based tools are introduced.	178	1	5	3.33	1.269
Our corporation has provided digital skills training for HR tools within the past year.	178	1	5	3.35	1.333
I am satisfied with the level of digital training provided by my company.	178	1	5	3.44	1.257
I feel confident using digital HR tools in my daily work.	178	1	5	3.49	1.222
Digital transformation has positively impacted my workload.	178	1	5	3.51	1.316
Improved digital skills have increased my work efficiency and job satisfaction.	178	1	5	3.44	1.297
It is easy to use digital HR tools in our organization.	178	1	5	3.52	1.222
Digital HR tools have improved employee productivity.	178	1	5	3.40	1.268
The use of digital HR tools has contributed to higher overall organizational productivity.	178	1	5	3.47	1.240
Digital HR tools have helped reduce employee turnover.	178	1	5	3.17	1.291

APPENDIX 2 (CONTINUED)

Our organization provides a diverse set of digital tools that support HR functions effectively.	178	1	5	3.38	1.235
Our organization's culture is supportive of digital transformation.	178	1	5	3.70	1.192
There is a clear digital transformation strategy for HRM in our company.	178	1	5	3.31	1.254
Digital transformation in HR is driven by clearly defined leadership.	178	1	5	3.38	1.217
I feel confident in my own digital literacy related to HR technologies.	178	1	5	3.51	1.227
Our organization regularly provides formal training for digital HR tools.	178	1	5	3.44	1.289
Valid N (listwise)	178				

APPENDIX 3

Correlations Of AI And Automation In HR

Correlations							
		ai_mean	AI-powered tools are frequently used in our HR processes (e.g., recruitment, payroll, performance evaluation).	AI and automation have improved efficiency in our HR department.	AI-driven automation has reduced the administrative workload in our organization.	AI has improved the quality of decision-making in HR.	Our HR staff is adequately trained to work with AI-powered tools.
ai_mean	Pearson Correlation	1	.603**	.690**	.645**	.709**	.533**
	Sig. (2-tailed)		<.001	<.001	<.001	<.001	<.001
	N	178	178	178	178	178	178
AI-powered tools are frequently used in our HR processes (e.g., recruitment, payroll, performance evaluation).	Pearson Correlation	.603**	1	.232**	.221**	.282**	.162*
	Sig. (2-tailed)	<.001		.002	.003	<.001	.031
	N	178	178	178	178	178	178
AI and automation have improved efficiency in our HR department.	Pearson Correlation	.690**	.232**	1	.386**	.454**	.111
	Sig. (2-tailed)	<.001	.002		<.001	<.001	.139
	N	178	178	178	178	178	178
AI-driven automation has reduced the administrative workload in our organization.	Pearson Correlation	.645**	.221**	.386**	1	.257**	.192*
	Sig. (2-tailed)	<.001	.003	<.001		<.001	.010
	N	178	178	178	178	178	178
AI has improved the quality of decision-making in HR.	Pearson Correlation	.709**	.282**	.454**	.257**	1	.261**
	Sig. (2-tailed)	<.001	<.001	<.001	<.001		<.001
	N	178	178	178	178	178	178
Our HR staff is adequately trained to work with AI-powered tools.	Pearson Correlation	.533**	.162*	.111	.192*	.261**	1
	Sig. (2-tailed)	<.001	.031	.139	.010	<.001	
	N	178	178	178	178	178	178

APPENDIX 4

Correlations Of Big Data and Performance Management

Correlations							
		bigdata_mean	Our organization uses big data to track and improve employee performance.	Big data plays a valuable role in our HR decision-making processes.	The use of big data has improved performance evaluations in our organization.	HR professionals in our organization have the necessary skills to interpret and apply data insights.	Data-driven decisions have contributed to more objective and transparent HR practices.
bigdata_mean	Pearson Correlation	1	.667**	.690**	.668**	.664**	.573**
	Sig. (2-tailed)		<.001	<.001	<.001	<.001	<.001
	N	178	178	178	178	178	178
Our organization uses big data to track and improve employee performance.	Pearson Correlation	.667**	1	.313**	.285**	.262**	.311**
	Sig. (2-tailed)	<.001		<.001	<.001	<.001	<.001
	N	178	178	178	178	178	178
Big data plays a valuable role in our HR decision-making processes.	Pearson Correlation	.690**	.313**	1	.334**	.371**	.228**
	Sig. (2-tailed)	<.001	<.001		<.001	<.001	.002
	N	178	178	178	178	178	178
The use of big data has improved performance evaluations in our organization.	Pearson Correlation	.668**	.285**	.334**	1	.371**	.185*
	Sig. (2-tailed)	<.001	<.001	<.001		<.001	.013
	N	178	178	178	178	178	178
HR professionals in our organization have the necessary skills to interpret and apply data insights.	Pearson Correlation	.664**	.262**	.371**	.371**	1	.159*
	Sig. (2-tailed)	<.001	<.001	<.001	<.001		.035
	N	178	178	178	178	178	178
Data-driven decisions have contributed to more objective and transparent HR practices.	Pearson Correlation	.573**	.311**	.228**	.185*	.159*	1
	Sig. (2-tailed)	<.001	<.001	.002	.013	.035	
	N	178	178	178	178	178	178

APPENDIX 5

Correlations Of Cloud-Based HR Tools & Adaptability

Correlations

		Our corporation uses cloud-based HR tools such as employee self-service platforms or HR portals.	Employees in our organization easily adapt to new cloud-based HR technologies.	Cloud-based tools have improved HR strategy execution and performance evaluation.	The implementation of cloud-based systems has made HR processes more efficient.	Our corporation provides sufficient support or training when new cloud-based tools are introduced.	cloud_mean
Our corporation uses cloud-based HR tools such as employee self-service platforms or HR portals.	Pearson Correlation	1	.251**	.417**	.311**	.204**	.671**
	Sig. (2-tailed)		<.001	<.001	<.001	.006	<.001
	N	178	178	178	178	178	178
Employees in our organization easily adapt to new cloud-based HR technologies.	Pearson Correlation	.251**	1	.354**	.347**	.215**	.658**
	Sig. (2-tailed)	<.001		<.001	<.001	.004	<.001
	N	178	178	178	178	178	178
Cloud-based tools have improved HR strategy execution and performance evaluation.	Pearson Correlation	.417**	.354**	1	.291**	.269**	.707**
	Sig. (2-tailed)	<.001	<.001		<.001	<.001	<.001
	N	178	178	178	178	178	178
The implementation of cloud-based systems has made HR processes more efficient.	Pearson Correlation	.311**	.347**	.291**	1	.275**	.672**
	Sig. (2-tailed)	<.001	<.001	<.001		<.001	<.001
	N	178	178	178	178	178	178
Our corporation provides sufficient support or training when new cloud-based tools are introduced.	Pearson Correlation	.204**	.215**	.269**	.275**	1	.590**
	Sig. (2-tailed)	.006	.004	<.001	<.001		<.001
	N	178	178	178	178	178	178
cloud_mean	Pearson Correlation	.671**	.658**	.707**	.672**	.590**	1
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001	
	N	178	178	178	178	178	178

APPENDIX 6

Correlations Of Digital Upskilling & Employee Satisfaction

Correlations							
		upskill_mean	Our corporation has provided digital skills training for HR tools within the past year.	I am satisfied with the level of digital training provided by my company.	I feel confident using digital HR tools in my daily work.	Digital transformation has positively impacted my workload.	Improved digital skills have increased my work efficiency and job satisfaction.
upskill_mean	Pearson Correlation	1	.683**	.632**	.414**	.365**	.673**
	Sig. (2-tailed)		<.001	<.001	<.001	<.001	<.001
	N	178	178	178	178	178	178
Our corporation has provided digital skills training for HR tools within the past year.	Pearson Correlation	.683**	1	.219**	.209**	.118	.240**
	Sig. (2-tailed)	<.001		.003	.005	.116	.001
	N	178	178	178	178	178	178
I am satisfied with the level of digital training provided by my company.	Pearson Correlation	.632**	.219**	1	.399**	.200**	.285**
	Sig. (2-tailed)	<.001	.003		<.001	.007	<.001
	N	178	178	178	178	178	178
I feel confident using digital HR tools in my daily work.	Pearson Correlation	.414**	.209**	.399**	1	.195**	.299**
	Sig. (2-tailed)	<.001	.005	<.001		.009	<.001
	N	178	178	178	178	178	178
Digital transformation has positively impacted my workload.	Pearson Correlation	.365**	.118	.200**	.195**	1	.321**
	Sig. (2-tailed)	<.001	.116	.007	.009		<.001
	N	178	178	178	178	178	178
Improved digital skills have increased my work efficiency and job satisfaction.	Pearson Correlation	.673**	.240**	.285**	.299**	.321**	1
	Sig. (2-tailed)	<.001	.001	<.001	<.001	<.001	
	N	178	178	178	178	178	178

APPENDIX 7

Correlations Of Perceived Ease Of Use And Usefulness Of Digital Tools And Their Impact On Employee Productivity

Correlations						
		ease_mean	I feel confident using digital HR tools in my daily work.	It is easy to use digital HR tools in our organization.	Digital HR tools have improved employee productivity.	Our organization provides a diverse set of digital tools that support HR functions effectively.
ease_mean	Pearson Correlation	1	.700**	.663**	.648**	.667**
	Sig. (2-tailed)		<.001	<.001	<.001	<.001
	N	178	178	178	178	178
I feel confident using digital HR tools in my daily work.	Pearson Correlation	.700**	1	.327**	.196**	.361**
	Sig. (2-tailed)	<.001		<.001	.009	<.001
	N	178	178	178	178	178
It is easy to use digital HR tools in our organization.	Pearson Correlation	.663**	.327**	1	.274**	.183*
	Sig. (2-tailed)	<.001	<.001		<.001	.015
	N	178	178	178	178	178
Digital HR tools have improved employee productivity.	Pearson Correlation	.648**	.196**	.274**	1	.245**
	Sig. (2-tailed)	<.001	.009	<.001		<.001
	N	178	178	178	178	178
Our organization provides a diverse set of digital tools that support HR functions effectively.	Pearson Correlation	.667**	.361**	.183*	.245**	1
	Sig. (2-tailed)	<.001	<.001	.015	<.001	
	N	178	178	178	178	178

APPENDIX 8

Correlations Of HR Efficiency Influence On Overall Organizational Productivity

Correlations			
		Digital HR tools have improved employee productivity.	The use of digital HR tools has contributed to higher overall organizational productivity.
Digital HR tools have improved employee productivity.	Pearson Correlation	1	.347**
	Sig. (2-tailed)		<.001
	N	178	178
The use of digital HR tools has contributed to higher overall organizational productivity.	Pearson Correlation	.347**	1
	Sig. (2-tailed)	<.001	
	N	178	178

APPENDIX 9

Correlations Of Improved Performance Management Effect On Employee Turnover While Increasing Long-Term HR Stability

Correlations				
		Data-driven decisions have contributed to more objective and transparent HR practices.	The use of digital HR tools has contributed to higher overall organizational productivity.	Digital HR tools have helped reduce employee turnover.
Data-driven decisions have contributed to more objective and transparent HR practices.	Pearson Correlation	1	.255**	.194**
	Sig. (2-tailed)		<.001	.010
	N	178	178	178
The use of digital HR tools has contributed to higher overall organizational productivity.	Pearson Correlation	.255**	1	.208**
	Sig. (2-tailed)	<.001		.005
	N	178	178	178
Digital HR tools have helped reduce employee turnover.	Pearson Correlation	.194**	.208**	1
	Sig. (2-tailed)	.010	.005	
	N	178	178	178