

ORIGINAL RESEARCH PAPER

Strengthening human resource management system with digital practices, transformation, and task interdependence

H.R. Nematollahi <sup>1</sup>, H. Mohammadi <sup>2</sup>, A. Gholipour<sup>1,\*</sup>, N. Mohammad Esmaeili <sup>1</sup>

<sup>1</sup> Department of Leadership and Human Capital, Faculty of Management, University of Tehran, Tehran, Iran

<sup>2</sup> Department of Business Management, School of Business and Economics, Persian Gulf University, Bushehr, Iran

ARTICLE INFO

Article History:

Received 24 December 2023

Revised 24 March 2024

Accepted 27 April 2024

Keywords:

DHRM practices

Digital transformation

Digital task interdependence

HRM system strength

ABSTRACT

**BACKGROUND AND OBJECTIVES:** Given the new cost pressures, hybrid work models, and evolving needs of employees and customers, organizations are increasingly realizing the importance of digital workforce management practices and digital transformation in achieving success. This is especially critical for government organizations, including local governments, as digitalization plays a crucial role in streamlining human resource activities, reducing costs, improving data management, and strengthening human resource management systems. As local governments strive to become more agile and adapt to changing needs and expectations, digitalization enables them to respond quickly and foster innovation. Therefore, the objective of this study is to examine the impact of digital human resource management practices and digital transformation on the strength of the human resource management system, with a specific focus on the mediating role of digital task interdependence within the Tehran municipality.

**METHODS:** technique. The collected data was then subjected to statistical analysis. University professors and local government experts confirmed the content validity of the survey instrument. To evaluate the reliability and validity of the questionnaire, this study utilized average variance extracted, Cronbach's alpha, and composite reliability, all of which produced satisfactory outcomes. The data analysis was carried out using Analysis of Moment Structures, and SPSS26 software.

**FINDINGS:** The study emphasizes the importance of implementing digital human resources management practices and digital transformation to strengthen the human resource management system in Tehran municipality. This enables human resource processes to be faster, smarter, and more efficient. Additionally, the successful integration of both old and new human resource systems, along with the effective implementation of digitalization in Tehran municipality, relies on coordination and collaboration among employees through digital platforms.

**CONCLUSION:** The present study demonstrates that the implementation of digital human resource management practices and the process of digital transformation can effectively enhance human resource management systems and align the activities of human resources with strategic objectives. By embracing digital transformation and adopting digital human resource management practices, organizations can elevate the significance of human resource management and effectively communicate their intentions to employees. Furthermore, the analysis reveals that digital task interdependence fosters collaboration and coordination among geographically dispersed employees, reducing communication costs and improving access to diverse knowledge sources. Consequently, this enhances the efficiency of municipal operations and decreases response times.

DOI: [10.22034/IJHCUM.2024.04.03](https://doi.org/10.22034/IJHCUM.2024.04.03)



NUMBER OF REFERENCES

87



NUMBER OF FIGURES

4



NUMBER OF TABLES

8

\*Corresponding Author:

Email: [agholipor@ut.ac.ir](mailto:agholipor@ut.ac.ir)

Phone: +98 9126233268

ORCID: [0000-0003-1962-3665](https://orcid.org/0000-0003-1962-3665)

Note: Discussion period for this manuscript open until January 1, 2025 on IJHCUM website at the "Show Article."

## INTRODUCTION

Human Resources Management (HRM) plays a critical role in the success of any organization. It encompasses a wide range of practices and strategies aimed at maximizing the potential of a company's workforce (Udekwe et al., 2021). In today's age of digital transformation, the impact of HRM practices combined with digital information has proven to be a significant strength in managing human resources effectively (Samuel and Moagi, 2022). For instance, with the implementation of digital HR systems, employee data can be stored and managed electronically. This eliminates the need for physical files, making information easily accessible and reducing the risk of data loss. Furthermore, digital HR systems can automate routine tasks like payroll processing, leave management, and performance appraisals, freeing up HR professionals to focus on strategic initiatives (Nadim Khan, 2022). With the rise of digital communication channels such as email, instant messaging, and video conferencing, employees can connect and share information regardless of their geographical locations. This has eradicated communication barriers, allowing companies to tap into a global talent pool and embrace remote work arrangements (Samuel and Moagi, 2022). Another significant impact of digital HRM practices is the ability to leverage data analytics for decision-making. With digital HR systems capturing vast amounts of employee data, organizations can gain valuable insights into their workforce (Blau and Shamir-Inbal, 2017). HR professionals can analyze this data to identify trends, predict employee behavior, and make informed decisions about talent acquisition, performance management, and employee engagement initiatives. Furthermore, the integration of Artificial Intelligence (AI) and machine learning algorithms in HRM has the potential to transform the field further. AI-powered HR chatbots can handle employee queries and provide real-time assistance, minimizing the need for human intervention (Shamout et al., 2022). Recent findings from Accenture indicate a significant technological transformation taking place globally, characterized by the evolution of AI and other disruptive technologies into being "Human by Design"—increasingly resembling human behavior and becoming more user-friendly and intuitive. This shift is expected to bring about a new phase of

unparalleled productivity and innovation. The study also proposes that with the advancement of human-centric technologies, which possess enhanced capabilities and are simpler to engage with, there will be a seamless integration of these technologies into every facet of our lives. Consequently, we are progressing toward a future where technology will be omnipresent yet inconspicuous (Basole and Major, 2024). These findings, along with other related survey results, prompted researchers to direct their attention toward digital HRM practices. Scholars argue that digital HRM serves as an organizational capability that yields positive outcomes by utilizing traditional statistics, sentiment analysis, and algorithms, all of which are based on accumulated data (Minbaeva, 2018). The implementation of digital HRM has been proven to enhance the quality of decision-making (Gal et al., 2020; Van Esch et al., 2020), enable organizations to adapt swiftly in a dynamic environment to attain a competitive edge (Wolfe et al., 2006), foster greater involvement of the HRM department in strategic matters (Lawler et al., 2004; Levenson, 2018), enhance employee performance and experience (Schiemann et al., 2018), and ultimately contribute to the overall financial performance of the organization (Malik et al., 2022). The digitalization of HR processes has streamlined operations, enhanced communication, and provided valuable insights for decision-making. As organizations continue to embrace digital transformation, the importance of leveraging digital tools and platforms in HRM practices will only grow, ensuring a more efficient and productive workforce (Ruel et al., 2019). As a result, digital transformation has brought significant changes in the field of HRM. With the advent of Digital Human Resource Management (DHRM) practices and digital transformation, there has been a profound impact on the strength of the HRM system (Belakang et al., 2019). Numerous research studies have revealed that digital HRM and digital transformation are positively correlated with the strength of the HRM system (Ranjan et al., 2008; Madhavi Lakshmi and Siva Pratap, 2016; Berry and Linoff, 2000; Zhou et al., 2021; Prikshat et al., 2023). The literature encompasses various conceptualizations regarding how individuals perceive the strength of the HRM system. In their seminal paper, Bowen and Ostroff (2004) focus on the design and administration of human resource management systems to enhance

effectiveness. e-HRM functions as a means of communication between a company and its employees (Hutchinson, 2014). Consequently, it can potentially enhance the effectiveness of HR policies in various ways. Firstly, it empowers employees to independently access and familiarize themselves with the HRM system's policies through web-based platforms. Secondly, it ensures that consistent messages regarding desired behaviors, which are tied to employee outcomes, are conveyed to all employees (Bowen and Ostroff, 2004). Additionally, it provides insights into the internal coherence of HR practices. For instance, the e-HRM system can furnish employees with comprehensive information regarding the allocation of rewards and how they are connected to performance evaluations. Lastly, as e-HRM is utilized by all employees, it facilitates the dissemination of consistent messages, fostering a shared understanding and agreement among employees regarding the fairness of the HRM system (Obeidat, 2016). The influence of digital transformation and DHRM practices on the strength of HRM systems may be more effectively elucidated by examining digital task interdependence, which denotes the interconnectivity of tasks within the organization enabled by digital technologies (Chen *et al.*, 2021; Shamout *et al.*, 2022). Digital Task Interdependence (DTI) refers to the extent to which different tasks within an organization are interconnected and rely on digital technology for seamless execution. Moreover, DTI combined with HRM practices, has also facilitated seamless communication and collaboration within organizations (Aibinu and Papadonikolaki, 2020). With the advent of digital tools and platforms, tasks that were once carried out independently can now be coordinated effortlessly, leading to improved efficiency and productivity (Honorita Samson and Vinita Agrawal, 2020). The integration of digital information in HRM practices has revolutionized the way organizations manage their workforce. Traditional HRM practices relied heavily on manual processes, such as filing cabinets and paperwork, consuming valuable time and resources (Nayak *et al.*, 2022). The digitalization of Human Resource (HR) processes has not only eliminated these manual tasks but has also enhanced the efficiency of HRM practices (Yu *et al.*, 2023). The impact of HRM practices combined with digital information, particularly in the context of

digital task interdependence, has strengthened the management of human resources (Honorita Samson and Vinita Agrawal, 2020). Despite the considerable scholarly interest in digital transformation extending beyond information systems, there remains a lack of clarity regarding the ability of traditional organizations to undergo digital transformation independently. Understanding this phenomenon is crucial, as traditional organizations face the risk of failing to successfully achieve digital transformation due to their limited comprehension of digitalization. Moreover, to thrive in a digitally disrupted environment, organizations must persistently innovate and adapt their work practices, particularly in the realm of HR processes (Siachou *et al.*, 2020; Bansal *et al.*, 2023), fortunately, Local governments have the potential to combine government, private, and citizen data to offer new digitally enhanced public services. However, progress in realizing these benefits has come to a standstill in many cases. This is primarily due to a lack of managerial expertise required to oversee the implementation and operation of integrated enterprise systems aimed at enhancing public service delivery processes, a key component of the digital transformation journey (Pittaway and Montazemi, 2020). Despite the initiation of ambitious projects such as digital and smart city initiatives by local governments, there exists a knowledge gap regarding the influence of these projects on HRM systems within traditional organizations, particularly in Municipalities that are embarking on such endeavors. Traditional organizations often lack a comprehensive comprehension of the complexities associated with digital transformation, particularly about HRM systems. The extent to which these projects positively or negatively affect HRM systems remains uncertain in the absence of managerial expertise. Furthermore, there is a limited understanding of how digital task interdependence within these projects contributes to the strength of HRM systems in such organizations. Gaining insight into these dynamics is crucial for the effective implementation of digital transformation and digital HRM practices in municipal settings like Tehran. The success of digital initiatives heavily relies on managers' ability to comprehend these intricacies, recognize their interplay, and effectively integrate these practices while managing task interdependence. To achieve these results this study was conducted in

Tehran Municipality in 2023.

#### Literature review

#### *Digital HRM practices, digital transformation, and HRM system strength*

Thanks to the pervasive use of computers and digital technologies, some of the most common and talked-about concepts are “digitalization,” “digital transformation,” “digital disruption,” and “digitization.” This is true about human resource management as well; it has transformed traditional HRM into DHRM. And now terms like digitalization, digital transformation, and digital disruption are progressively used in HRM (Pantelidis, 2019; Thite, 2019; Dixit, 2017; Parry and Strohmeier, 2014; Spitzer, 2014; Bondarouk and Ruël, 2009; Ruël and Bondarouk, 2014), and though digital HRM has been going on for more than 50 years and has been meeting its performance expectations, the performance, and its continuation is taken for granted (Theres and Strohmeier, 2023). The adoption of new technologies and the growing trend of corporations introducing e-HRM processes carry with them several benefits and drawbacks that are anticipated by the company, particularly by the HR department and its staff (Ismail et al., 2017; Nikolaou, 2021). The recruitment, selection, and appraisal of employees are some of the most crucial HRM procedures, and these are all immediately impacted by technology, either favorably or unfavorably (Thompson et al., 2008; Nikolaou, 2021). DHRM is a great contributor to the effectiveness of HRM strategy and practices in various organizations (Ruël et al., 2004; Bondarouk and Ruël, 2009; Theres and Strohmeier, 2023). Research findings show that it has a significant positive impact on organization performance and digital innovation (Yusuf et al., 2023), Helps in improving HR’s administrative efficiency, but barely adds anything to assist the advancement of employee competencies, and this is due to the slight disinclination of HR professionals for adopting new technologies (Ruël et al., 2004; Mazurchenko and Maršíková, 2019), and its contribution in helping organizations to gain competitive advantage is based on a change in working style and HR’s competencies (Mazurchenko and Maršíková, 2019). Although it is widely believed that e-HRM deployment will increase organizational productivity, there isn’t much empirical support for this claim. Therefore, further study is needed to

understand better how e-HRM affects organizational productivity and provide measures to evaluate that impact (Poisat and Mey, 2017). Though the constant development of HR digitalization and the pursuit of new avenues for HR excellence and sustainable business performance as necessary conditions for its success is still improving (Sharma et al., 2022), researchers have identified five factors (i.e. internal customer digital needs, industry digital innovation, competitor challenges, digital innovation governance, and digital era needs) that drive the transformation of digital human resource management (Zhang and Chen, 2023). According to Bilgeri et al. (2017) and Heilig et al. (2017), digital transformation is defined as a significant organizational transition that is enabled, established, or maintained by digital technologies that change how company activities are conducted. It will eventually use digital initiatives to accomplish significant business management reforms, which will have a major impact on an organization or an industry as a whole. Digital transformation alters the whole organization, particularly job duties and business processes (Amit and Zott, 2001). The significance of digital transformation and how it may support companies in maintaining their competitiveness in the market have been brought to light by the growing digitalization of economies. Disruptive innovations, in addition to the business level, have an impact on the environment, society, and institutions (Kraus et al., 2021). Numerous studies have discovered and indicated that digital HRM and digital transformation have a positive association with HRM system strength (Ranjan et al., 2008; Madhavi Lakshmi and Siva Pratap, 2016; Berry and Linoff, 2000; Zhou et al., 2021; Prikshat et al., 2023). The literature contains a variety of conceptualizations on how people perceive the strength of the HRM system. First, Bowen and Ostroff (2004), In their landmark paper focus on the question of How human resource management systems should be designed and administered in a way that would be effective. They offered a distinction between the HRM process and content. While the process refers to the procedures and structural support that the HR department uses, the content refers to the specific HR practice or collection of practices used to accomplish particular goals. They contend that by taking into consideration the robustness of the HRM system, the relationship between HRM and performance can be better understood. Due to its

duty for the creation and execution of HR policy, the HR department plays a crucial role in this regard (Gues *et al.*, 2013). High degrees of distinctiveness, consistency, and consensus in the messages the HR department communicates are characteristics of a strong system (Bowen and Ostroff, 2004; Hewett *et al.*, 2018; Delmotte *et al.*, 2012), and a strong HRM system is well associated to the psychological concept of strong situation (Cooper and Withey, 2009). The second way that the strength of the HRM system is conceptualized is as an employee's view of the collection of practices that have been put in place. A large number of procedures suggests that the HR division is communicating with an employee about their performance more frequently. This is guided by the theory of motivation which teaches that investing in some forms of HRM practice, which help to achieve intrinsic company values and consequently influence workers' views about their job and the firm is one way by which firms can deliver greater results (White and Bryson, 2013). Third, the quality of HR content, e.g. specific human resource practices, must be taken into account as a criterion for determining the strength of an HR system. A good rating on a particular practice must be accompanied by a strong system, as ratings provide a suggestion of the common view that enhanced systems have been put in place between employees (Stumpf *et al.*, 2010; Veld *et al.*, 2010). Researchers have shown that HRM system strength has a strong positive association with affective commitment (Sanders *et al.*, 2008), and plays a crucial role in shaping the behaviors of employees in the workplace (Dust *et al.*, 2013; Bowen and Ostroff, 2004). While existing studies have shed light on the potential impact of digital HRM practices and digital transformation on HRM system strength (Ranjan *et al.*, 2008; Madhavi Lakshmi and Siva Pratap, 2016; Berry and Linoff, 2000; Zhou *et al.*, 2021; Prikshat *et al.*, 2023), however, these studies primarily concentrated on local context, thus, fail to address cultural nuances, hence, there remains a shortage of cultural nuances of the acceptance of digital transformation and digital HRM practices in the Iranian context particularly in governmental organization and their impact on HRM system strength. Therefore, against this background, the two initial hypotheses are postulated.

*H1: digital HRM practices have a significant positive impact on HRM system strength*

*H2: digital transformation has a significant positive impact on HRM system strength*

#### *Digital HRM practices, digital transformation, and digital task interdependence*

Increased interactions among coworkers and external stakeholders have led to a greater interdependence in work arrangements. This has resulted in individuals actively participating in the co-designing of work processes to adapt to environmental changes (Kinnie and Swart, 2020). In response to this shift, organizations have begun to explore various work designs, encompassing the structure and organization of work tasks, activities, relationships, and responsibilities (Parker, 2014). This experimentation is not limited to start-ups and technology companies like Spotify and Zappos but extends to other industries and throughout the lifespan of organizations (Laloux, 2014; Lee and Edmondson, 2017). Despite the extensive discussions and debates among scholars and the general public regarding this matter, organizations are inadequately prepared to confront the profound transformations brought about by the emerging work landscape. With the growing trend of breaking down work into individual tasks and projects that can be performed by both machines and contingent workers, organizations are confronted with the challenge of reevaluating their approaches to coordinating and managing work processes (Boudreau and Donner, 2021). It has been argued in current discussions that organizations that fail to recognize the importance of digitalization in shaping the nature of work may become irrelevant in the long run (Li *et al.*, 2020). Salvi *et al.* (2021) emphasize that digitalization has become a widespread global phenomenon that continues to drive changes in job requirements. Notably, the use of AI and augmented reality systems enables organizations to digitally enhance various complex tasks, and core digital tasks that are managed by different interdependent teams can be more efficiently and effectively accomplished (Masood and Egger, 2020). Digitalization not only challenges the way jobs are performed but also enables teams to work interdependently through digital platforms, thereby expediting organizational objectives. Embracing digital leadership strategies is recommended for businesses seeking success in the digital era (Stoldt *et al.*, 2018; Arabiun *et al.*, 2024; Tajpour and Razavi, 2023). HRM practices necessitate

thorough consideration to guarantee their continuous alignment, adjustment, and integration with ever-changing technology, commonly referred to as “smart” HRM (Bondarouk and Brewster, 2016, Strohmeier, 2018). Although traditional HRM approaches retain their viability, however, companies must recognize that the swift evolution of technology is revolutionizing HRM practices. Therefore, its adoption is recommended to retain competitive advantage and cater to the evolving needs of the modern marketplace (Halid et al., 2022), especially from the point of view of teams, in modern organizations, the use of distributed teams made possible by the use of digital technology, and the challenges posed by technology-enabled distributed teams due to digital task interdependence and those of co-located teams are considered to be different (Wong et al., 2019). While the impact of technology on a team’s interdependent tasks is studied, the empirical evidence of the impact of individual digital HRM practices as well as digital transformation on digital task interdependence is scarce. Therefore, it is intended to extend the literature on these concepts and empirically study the impact of digital transformation and digital HRM practices on digital task interdependence, hence, against this ground the formulated hypotheses are:

*H3: digital HRM practices have a significant positive impact on digital task interdependence*

*H4: digital transformation has a significant positive impact on digital task interdependence*

#### *Digital task interdependence as a mediator*

Task interdependence is a way that people on a team work together. It is all about how much they need to coordinate and share things to get the work done and reach their goals (Liden et al., 2006; Vegt and Vliert, 2005). From a group’s point of view, when tasks are more interdependent, team members need to work together and help each other more to finish the tasks. On the other hand, if the tasks do not depend on each other much, then there is less need for collaboration and it shows that team members can work on their own (Hu and Liden, 2015), in multi-stage programs, the success of the programs and project is dependent upon the association of the team members (Shen et al., 2022), therefore, to enhance linkage and improve organizations’ efficiency and effectiveness,

especially in distributed teams companies are becoming more reliant on technology (Colbert et al., 2016), still, with the increasing use of digital labor and computer-mediated technology, organizations have not yet fully understood how to effectively leverage the benefits of technology and determine the impacts of digitalization on organization’s outcome (Colbert et al., 2016; Alsufyani and Gill, 2022). To leverage the benefits of digitalization and avoid failure BCG recommended inculcating digital transformation in the culture of the organization. Arguing digital transformation without digital culture is doomed to fail (Halid et al., 2022). Consistent with the surge of advancement in digitalization in the companies, digital task interdependence is gaining relevancy as it holds the level to which distinct teams digitally communicate and accomplish their parts as per the shared contribution of data from all teams involved in specified projects (Salvi et al., 2021; Sarc et al., 2019). As a leading digital strategy, digital task interdependence shows new avenues by which diverse teams irrespective of their geographical locations can evaluate, exchange, utilize, and execute defined initiatives digitally to attain specified goals and objectives of the organization (Stoldt et al., 2018), researchers argue that by promoting digital task interdependence across digital platforms this possibly boosts performance, increases speed and lessens the complexity of challenging tasks (Antikainen et al., 2018; Stoldt et al., 2018). The process of digitalization, while advantageous for the overall organizational outcome, may inadvertently impact employee retention rate when they are threatened and become aware that they are in danger of losing their job and therefore start to look for a new job outside their current organization (Salvi et al., 2020), therefore, there is a long way to go to strengthen the relationship between tasks interdependence and turnover intention in the fields of digitization and human resource management, even with the abundance of studies that are available so far (Mahlasela and Chinyamurindi, 2020; Ngo-Henha, 2017; Ogebeibu et al., 2021; Ogebeibu et al., 2022). Against this background, the impact of digitalization can go both ways, as such, digital task interdependence is highly likely to influence HRM system strength, and the study expects that influence to be positive on HRM system strength. Therefore, the suggested hypotheses are:

Table 1: Demographics of respondents

Variables		Percentage
Gender	Man	71/4
	Woman	28/6
Age	Bellow 30 years	35/2
	30 to 40 years	47/3
	41 to 50 years	13/1
	Above 50	4/4
Level of education	Associate degree and below	15/1
	Bachelor	30/4
	Masters and above	50/5
Position	Senior manager	19/1
	Middle manager	51
	Lower-level manager	29/9

*H5: digital task interdependence has a significant positive impact on HRM system strength*

*H6: digital task interdependence mediates the impact of digital HRM practices and digital transformation on HRM system strength.*

#### MATERIAL AND METHOD

This research is classified as applied research based on its purpose. In terms of data collection criteria, it falls under the survey group category. Furthermore, due to the nature of the data, it can be categorized as quantitative research. The research was centered around employees of Tehran municipality as the main focus. The statistical population included the employees of Tehran city municipalities. The selection criteria for municipal organizations in Tehran province were based on the advantages of digital transformation and electronic services, as well as the researchers' accessibility to these organizations. Questionnaires were then distributed among units and individuals knowledgeable about the research topic. To determine the sample size, the researcher utilized SPSS Sample Power, a software that considers research hypotheses and important statistical assumptions related to sampling. The study had impact-based hypotheses. The software examined various scenarios, including 2 independent variables, 1 dependent variable, 1 mediating variable, and 5 basic assumptions. These assumptions included a maximum probability of 5% for the first type of error (Alpha value), a maximum probability of 20% for

the second type of error (Beta value), a test power of 80%, a confidence level of 95%, and a sample size large enough to accurately identify at least 4% of the coefficient of determination (R<sup>2</sup>) in the statistical population. Based on these considerations, the initial sample size for the research was determined to be 266 individuals. In this study, a total of 300 questionnaires were distributed among the statistical population. The aim was to ensure that the final sample size would be proportional to the sample size calculated by the SPSS SAMPLE POWER software, which recommended a sample size of 266 individuals. Out of the 280 individuals who cooperated in the study, 14 questionnaires were deemed unsuitable for statistical analysis and were therefore excluded. The remaining 266 questionnaires, as suggested by SPSS SAMPLE POWER, were analyzed. It is worth noting that no unanswered data was observed in any of the final 266 questionnaires of the study. Four standard questionnaires with a 5-point Likert scale were utilized as the primary instrument for data collection. The scale ranged from "1" representing "strongly disagree" to "5" representing "strongly agree". The questionnaires for digital human resource management practices were sourced from [Patel et al., \(2013\)](#), while the digital task interdependence questions were obtained from [Ogbeibu et al., \(2021\)](#). The digital transformation questions were based on [Verhoef et al., \(2021\)](#), and the human resource management system strength questions were adopted from [Hauff et al., \(2017\)](#). The collected data was analyzed using SPSS26 and AMOS.

The demographic information of the respondents revealed that 82.5 percent of the employees were below the age of 40 years, and over 50 percent held a master's degree as indicated in Table 1. The results of the sampling method are presented in Figs. 1 and 2. To assess the relationship between variables and draw conclusions from a sample to a larger population, various models such as simple regression, mediator, and path models were utilized to test research hypotheses and the conceptual framework. Ethical considerations were also integrated into the study through several measures, including ensuring

participant confidentiality, using trustworthy sources, and emphasizing voluntary participation.

*Conceptual framework*

The current study and its theoretical framework have been developed using scientific references and prior research with a fresh structure. As a result, no research has been carried out in Iran on digital transformation, digital HRM practices, and the strength of the HRM system with the mediating role of digital task interdependence based on the studies conducted thus far. Hence, the research's theoretical

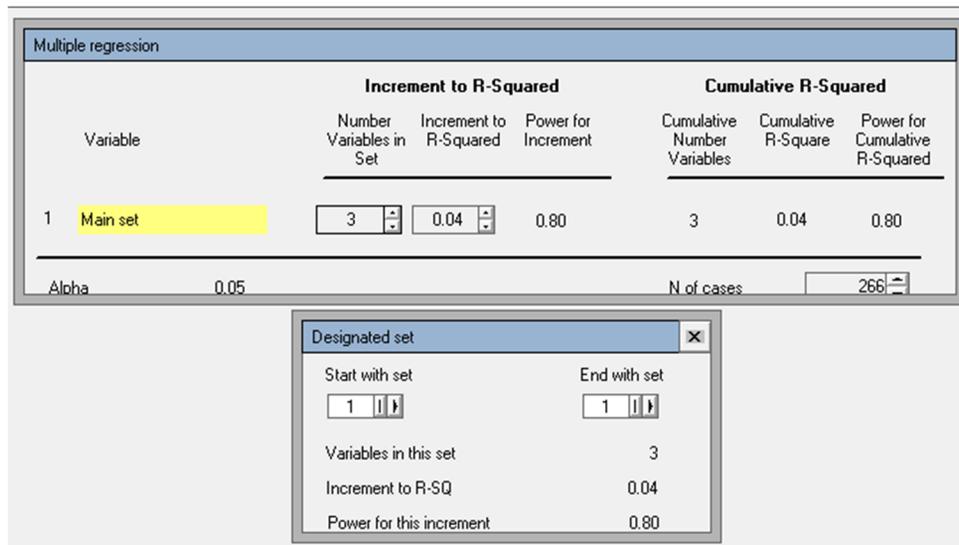


Fig. 1: SPSS sample power sample size estimation output

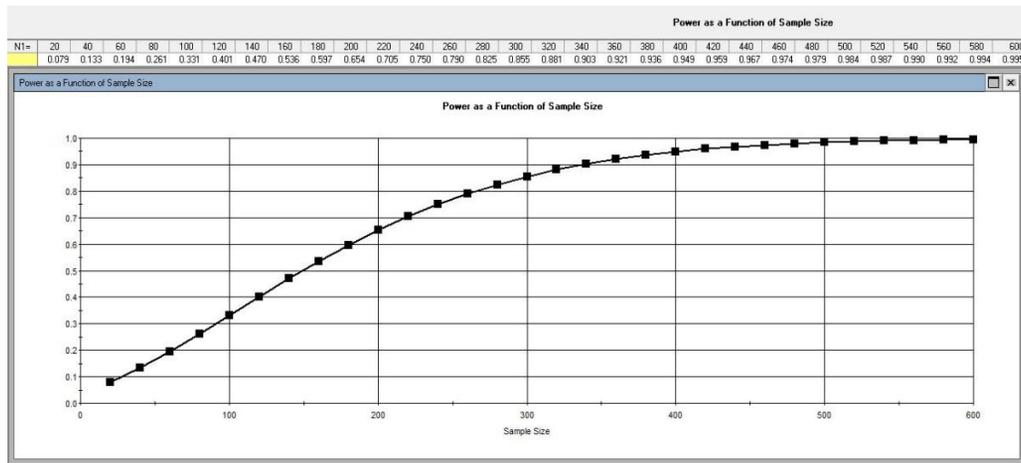


Fig. 2: Estimated sample size

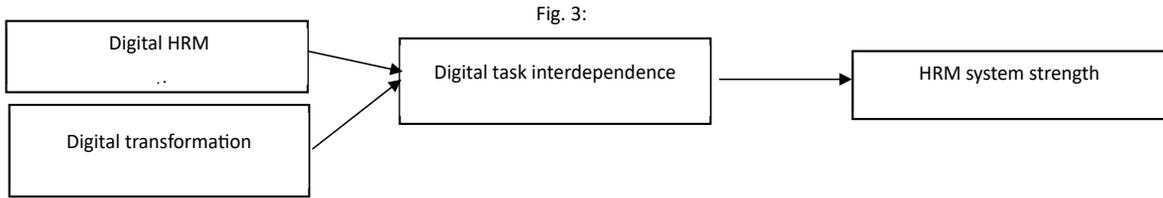


Fig. 3: Conceptual framework

Table 2: Mean and Standard deviation

Variables	mean	Standard dev.
digital human resource management practices	3/98	0/65
digital transformation	3/44	0/78
digital task interdependence	3/60	0/84
human resource management system strength	3/71	0/80

Table 3: Kolmogorov-Smirnov test of normality

Variables	Sig. level	Test Result
digital human resource management practices	0/30	Normal distribution of data
digital transformation	0/18	Normal distribution of data
digital task interdependence	0/12	Normal distribution of data
human resource management system strength	0/16	Normal distribution of data

Table 4: Standardised output of regression weights

Measures	Standardized values	Critical points	Significance level
The impact of digital human resource management practices on human resource management system strength	0/23	5/73	0/0001
The impact of digital human resource management practices on digital task interdependence	0/29	5/37	0/0001
The impact of digital transformation on human resource management system strength	0/16	3/04	0/002
The impact of digital transformation on digital task interdependence	0/33	6/54	0/0001
The impact of digital task interdependence on the strength of the human resource management system	0/12	2/67	0/007

framework has been chosen in line with the existing literature (Fig. 3).

**RESULTS AND DISCUSSION**

The acquisition criteria of changes in digital human resources management practices, digital transformation, digital tasks interdependence, and human resource management system strength from the average and standard deviation of the population

reported as (3) the highest, which indicates the optimal level.

As per the above test and the significance levels of all variables which are reported to be greater than 0.05, it can be concluded that all variables follow the normal distribution, and parametric tests should be used in this research. To infer the normal distribution of the variables, the Sig. level test was used, which for the variables digital human resource management

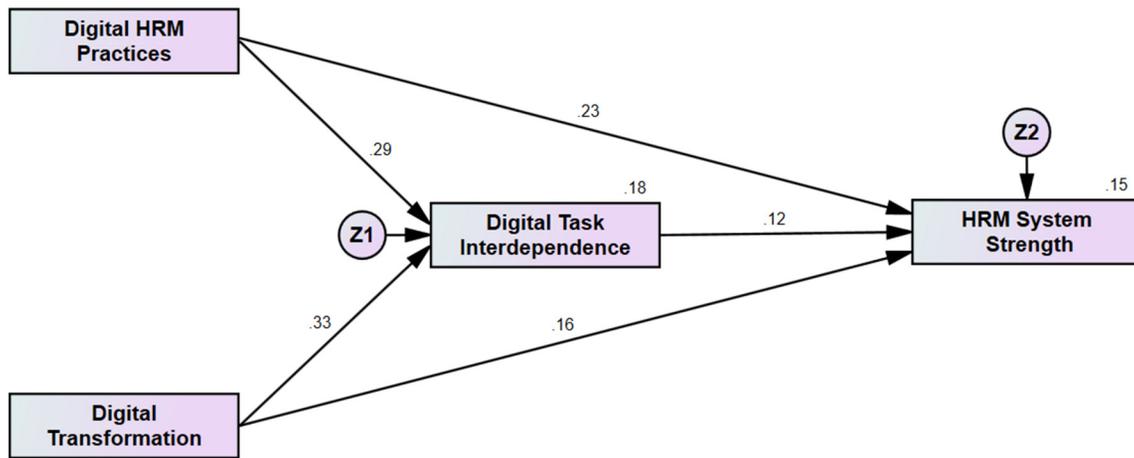


Fig. 4: Research model software output

Table 5: Indirect analysis significance level

Measures	Indirect impact	total effect
The impact of digital human resource management practices on human resource management system strength through the mediating role of digital task interdependence	0/006	0.001
The impact of digital transformation on human resource management system strength through the mediating effect of digital task interdependence	0/003	0.001

practices, 0/30; digital transformation, 0/18; digital task interdependence, 0/12 and for human resource management system strength, 0/16 reported.

*Test of hypotheses*

Investigating the effect of mediation using a regression model with a hidden variable

“In the effect of digital human resource management practices and digital transformation on the power of the human resource management system, the interdependence of digital tasks has a mediating role”

According to the above model and the output of the regression weights and the values of the significance levels of direct and indirect effects, it can be concluded that the direct effect of digital human resources management practices on the strength of the human resources management system is equal to 0.23 and its significance level is equal to 0.0001. This value is smaller than the error level of 0.05 with confidence of 0.05 and is reported to be significant. Also, the significance level of its indirect effect considering the mediating role of the interdependence variable of digital tasks is reported

to be 0.006 and significant) according to Table 5(. The direct effect of digital transformation on the strength of the human resource management system is equal to 0.16 and its significance level is equal to 0.002, which is smaller than the error level of 0.05 with a confidence of 0.95 and has been reported to be significant. Its indirect effect, taking into account the mediating role of digital task interdependence, is reported to be 0.003 and significant) according to Table 5). In the mediation model, if both the direct and indirect effects are statistically significant, it can be concluded that the mediation is partial. According to the above model and the output of the regression weights and the values of the significance levels of direct and indirect effects, it can be concluded that the indirect effect of digital human resources management practices and digital transformation on the strength of the human resources management system is significant. According to the bootstrap or self-management test that has been used for this model, and also according to the principles governing the discussion of mediation in structural equation modeling in general, it can be concluded that in this model, as both direct and indirect effects of digital

Table 6: Coefficient of determination (R2)

Indicators	R2	Sig. lev.
The impact of digital human resource management practices and digital transformation on human resource management system strength with the mediation of digital task interdependence	0/21	0/02

Table 7: Results of confirmatory factor analysis

Measures	CMIN	CMIN/DF	RMSEA	CFI	TLI	PCFI
Critical value	975.3	1<5	<0/05	>0/90	>0/90	>0/5
Reported value	DF	98/3	04/0	0/92	0/93	0/53
Adjusted value	245	**	**	**	**	**
Measures	PNFI	GFI	AGFI	NFI	NNFI	IFI
Critical value	0/05<	>0/90	>0/90	>0/90	>0/90	0<1
Reported value	0/51	0/93	0/92	0/94	0/91	0/68
Adjusted value	**	**	**	**	**	**
Model fitness	Model is fit					

human resource management practices and digital transformation have been reported to be significant on the strength of human resources management system, it can be concluded that there is mediation and the variable of digital task interdependence in the effect of digital human resources management practices and digital transformation on the strength of human resources management system has a partial mediating role, so The above hypothesis is confirmed.

The results of the confirmatory factor analysis are as follows:

The reliability and validity of the constructs are demonstrated in Table 8. According to Table 8, the AVE values exceed 0.5, thus confirming convergent validity. Additionally, the reliability of the constructs is deemed acceptable based on the composite reliability and Cronbach’s alpha, both of which are above 0.7. This research was conducted to address 6 hypotheses. The first hypothesis examined the degree of influence of the independent variable (digital human resource management practices) on the dependent variable, with a reported value of 5.73. This indicates a suitable level of intensity, and the coefficient of determination (R2) is 0.23, signifying that 23% of the variance in the dependent variable can be explained by the independent variables. Consequently, digital human resource management practices have an impact on the strength of the human resource management system. In general, the results of this hypothesis suggest that the strength of the human resource management system can be predicted based on digital human

resource management practices. These findings align with the studies conducted by Kellogg *et al.* (2020), Bondaruk *et al.* (2017), Levenson (2018), and Garcia-Arroyo and Osca (2021). Moving on to the second hypothesis, the impact of digital transformation on the strength of the HRM system is confirmed. Therefore, digital transformation can enhance the strength of the human resource management system, thus validating this hypothesis. This result is consistent with the studies conducted by Strohmeier (2020), Garcia-Arroyo and Osca (2021), and Cheng and Hackett (2021). The integration of digital technologies into HRM processes can lead to increased efficiency, improved communication, and enhanced employee engagement. This can result in faster and more efficient processes, reducing the time and resources required for HR tasks. For example, digital recruitment platforms can help municipalities quickly identify and attract suitable candidates, while online training programs can provide employees with the skills they need to perform their jobs effectively. Digital transformation, on the other hand, involves the broader adoption of digital technologies across an organization, including HRM systems. This can lead to a more integrated and data-driven approach to HRM, allowing municipalities to make more informed decisions about their workforce. For example, data analytics can be used to identify trends in employee performance, which can inform decisions about training and development. The use of digital technologies in HRM can also improve communication between HR and employees. For example, digital platforms can facilitate more regular and effective communication between managers and

Table 8: Reliability and validity analysis

Variables	Dimensions	Cronbach's alpha	Convergent validity	Composite reliability
Digital human resource management practices	Employees' selection	0/74	0/60	0/79
	Comprehensive education			
	Performance appraisal			
	Fair reward system			
	Flexibility of human resources			
Digital transformation	Organizational ambivalence	0/78	0/65	0/83
	Stages of digital transformation			
	Digital resources			
	Organizational Structure			
	Digital growth strategy			
Criteria and objectives				
human resource management system strength	-	0/77	0/68	0/85
digital task interdependence	-	0/73	0/60	0/80

their teams, leading to increased engagement and job satisfaction. Furthermore, digital tools can help to reduce the administrative burden on HR staff, allowing them to focus on more strategic tasks. In conclusion, digital HRM practices and digital transformation can have a significant positive impact on HRM system strength in municipalities. The confirmation of the third and fourth hypotheses, which examine the influence of digital HRM practices on digital task interdependence and the impact of digital transformation on the interdependence of digital tasks, aligns with the findings of previous studies conducted by [Bondarouk et al. \(2017\)](#), [Levenson \(2018\)](#), [Esch et al. \(2019\)](#), and [Shin and Konrad \(2017\)](#). The impact of digital HRM practices on digital task interdependence and the effect of digital transformation on the interdependence of digital tasks have been studied in the realm of Human Resource Management (HRM) and organizational dynamics. Results have shown that digital HRM practices, such as the use of technologies like Chatbots, QR codes for job applications, mobile HR applications, data-driven analysis through dashboards, and the integration of artificial intelligence in recruitment processes, play a significant role in transforming how tasks are interconnected in a digital environment. as a result Digital HRM practices have significantly impacted the interdependence of digital tasks in municipalities. The use of digital tools and platforms has enabled employees to work more collaboratively and efficiently, even in the context of task interdependence. Moreover,

the broader scope of digital transformation within organizations, driven by the rapid evolution of technology, has reshaped the landscape of human capital management. The adoption of digital technologies has led to changes in how organizations function, communicate, and compete, ultimately impacting the interdependence of tasks within digital frameworks. Strategies focusing on enhancing employees' digital competencies, cultural shifts, leadership changes, talent management, effective communication, and risk management have been identified as crucial elements in leveraging DHRM practices to optimize task interdependence and achieve competitive advantage in the digital era. as a result The digital transformation has also influenced the nature of tasks within municipalities. For instance, the use of digital tools and platforms has allowed for more efficient and effective communication among team members, which can lead to better task coordination and completion. Moreover, DHRM practices have been found to improve creativity and innovation by bolstering creativity willingness through digital task interdependence. This can be particularly beneficial for municipalities, where creativity and innovation are essential for addressing complex challenges and improving public services. However, digital transformation also presents challenges for HRM practices. For example, the use of digital tools and platforms can lead to changes like HRM tasks, which may require new skills and competencies from HR professionals. The positive and significant direct

impact of digital task interdependence on the strength of the human resource management system (H5) has been reported. Similar findings have been observed in the studies conducted by [Shin and Conrad \(2017\)](#), [Ahmed et al. \(2021\)](#), and [Min et al. \(2022\)](#). This is because digital task interdependence fosters collaboration, communication, and knowledge sharing among employees, which in turn enhances the overall effectiveness of the human resource management system. Digital task interdependence refers to the interconnectedness of tasks within an organization that is facilitated by digital technologies. This interconnectedness can lead to increased collaboration and communication among employees, as they can work together more effectively and efficiently. For example, digital task interdependence can enable employees to work on the same project simultaneously, even if they are located in different physical locations. This can lead to improved decision-making, increased innovation, and a more agile workforce. In the context of municipalities, digital task interdependence can have a significant impact on the delivery of public services. For example, digital task interdependence can enable employees in different departments to work together more effectively to provide integrated services to citizens. This can lead to improved customer satisfaction, increased efficiency, and better outcomes for the community as a whole. In conclusion, By fostering collaboration, communication, and knowledge sharing among employees, digital task interdependence can enhance the overall effectiveness of the human resource management system and contribute to the delivery of high-quality public services. Furthermore, the significant indirect impact of digital human resource management practices and digital transformation on the strength of the human resource management system (H6) has been established. The significance levels, which are lower than the standard level of 0.05, confirm that a portion of the impact of digital HRM practices and digital transformation on HRM system strength is mediated by digital task interdependence (DTI). Therefore, DTI plays a role as a mediator in the relationship between digital HRM practices, digital transformation, and the strength of the human resource management system. These findings are consistent with the studies conducted by [Naqvi et al. \(2021\)](#), [Strohmeier \(2020\)](#), [Levenson \(2018\)](#), and [Esch et al. \(2019\)](#). The digitalization of HRM practices and the implementation

of digital transformation strategies can significantly influence the strength of HRM systems in municipalities. However, the impact of digital HRM practices and digital transformation on HRM system strength is not solely determined by these factors. The role of digital task interdependence is also crucial. Digital task interdependence refers to how tasks and processes are interconnected in a digital environment. By understanding the interconnections between tasks and processes in a digital environment, organizations can more effectively implement digital HRM practices and ensure that their HRM systems are strong and adaptable in the face of changing circumstances.

#### *Discussion*

Based on the research conducted by [Kellogg et al. \(2020\)](#), [Strohmeier \(2020\)](#), [Garcia-Arroyo and Osca \(2021\)](#), and [Cheng and Hackett \(2021\)](#), the objective and elements of digital human resources management, as indicated by the dimensions of the questionnaire employed, encompass employee selection. This involves utilizing digitalization methods in the selection and recruitment process to ensure the selection of competent employees with enhanced speed of action and a broader pool of candidates. Additionally, the utilization of digital tools for sourcing, screening, and selecting candidates, such as applicant tracking systems and recruitment platforms based on artificial intelligence, is also being considered. Furthermore, comprehensive training is a key aspect, which entails leveraging digital learning platforms and tools to provide continuous and personalized learning experiences to employees. This includes online courses, micro-training, and virtual training sessions, as well as the design of online and virtual training processes at all levels, thereby enhancing learning outcomes while saving time and resources. Concerning performance evaluation, the utilization of digital performance management systems is incorporated to provide continuous feedback, real-time performance tracking, and data-driven insights. This encompasses the use of performance analysis software and continuous performance evaluation methods. By aligning the collection of performance evaluation indicators with improvement efforts, conclusions can be reached more efficiently while minimizing human error. Additionally, incorporating personal opinions into the performance evaluation process can be facilitated through digital human resources

management systems within the realm of digital performance evaluation. To establish a fair reward system, the aforementioned provisions, which encompass comprehensive performance evaluation and measured indicators, are employed. Furthermore, the implementation of reward and benefits management systems, such as digital payroll systems and total reward platforms, ensures transparency and equity in the distribution of rewards. Concerning workforce flexibility, it encompasses the utilization of digital tools for managing the workforce to facilitate flexible work arrangements. These tools include technologies for remote work, digital communication platforms, and software for employee scheduling. It is worth mentioning that in today's ever-changing and turbulent organizational environment, flexibility plays a crucial role in all aspects of the organization. Similarly, the flexibility of the human resources department is considered the most vital resource for the organization when employing electronic human resources methods. This flexibility aims to enhance operational processes and provide greater freedom of action. Organizational ambidexterity also involves addressing the challenges and opportunities brought about by digital transformation. This is achieved through strategic alignment, change management, and fostering an innovative and adaptive culture. The role of human resource practices in implementing digital transformation is emphasized, as it helps to overcome bureaucratic processes and significantly reduce them through the use of digital human resource management. Furthermore, it is important to consider various dimensions related to digital transformation, such as the stages of digital transformation, digital resources, organizational structure, and digital growth strategy. Digital resources encompass a wide range of tools and resources that are crucial for supporting digital transformation. These resources include collaborative collections, communication tools, CRM systems, and next-generation intranet platforms. The success of digital transformation is also heavily influenced by the organizational structure. It is important to emphasize the significance of a strong organizational structure, effective leadership, and a healthy corporate culture in maximizing the impact of digital transformation. Additionally, insights on the appropriate organizational structure for digital transformation should be provided, along with a focus on creating a digital culture and addressing

organizational elements. In terms of digital growth strategy, it is essential to have a well-defined plan for planning, indexing, and forecasting. This involves identifying the digital areas that provide the most value, profiling online audiences, selecting deployment channels, and aligning the strategy with growth needs and goals. Furthermore, the criteria and goals of digital transformation may vary depending on the specific needs and objectives of each organization. These factors can include enhancing customer experience, improving operational efficiency, and gaining a competitive advantage. Moreover, digital human resource management practices and digital transformation are closely intertwined. Additionally, research has shown that different forms of task interdependence can impact the performance of distributed teams, particularly in digital and asynchronous work environments. Therefore, it is important to integrate digital HRM practices and effectively manage the interdependence of digital tasks. Therefore, The Municipality of Tehran can significantly benefit from implementing digital human resource management practices and undergoing digital transformation. These initiatives can have a significant impact on the strength of human resource management in the organization, particularly concerning the mediation of digital task interdependence. By adopting digital human resource management practices, the Municipality of Tehran can streamline its HR processes, enhance efficiency, and improve data management and analysis. Digital technologies such as HR management systems, applicant tracking systems, and performance management tools can automate manual tasks, reduce paperwork, and provide real-time access to important HR information. This automation and digitization of HR processes can lead to greater accuracy, quicker decision-making, and improved employee experience. Furthermore, digital transformation in human resource management can enable the Municipality of Tehran to leverage advanced analytics and automation to gain valuable insights from HR data. These insights can help in predicting workforce needs, identifying skill gaps, and developing targeted training programs. Digital tools can also facilitate effective communication and collaboration between HR departments and employees, leading to better employee engagement and satisfaction. In terms of mediation on digital task interdependence, digital HR practices can enable

better coordination and collaboration among employees and departments by providing a centralized platform for sharing information, assigning tasks, and tracking progress. This can be particularly beneficial for the Municipality of Tehran, which deals with a wide range of tasks and projects in various sectors such as transportation, infrastructure, and urban planning. By digitizing task management and fostering digital task interdependence, the Municipality can ensure better communication, smooth workflow, and effective resource allocation. Overall, the impact of digital human resource management practices and digital transformation on human resource management strength for the Municipality of Tehran is substantial. It can enhance efficiency, improve decision-making, and foster collaboration and coordination across departments. Digital transformation and digital human resources management practices have a significant impact on the productivity, efficiency, and effectiveness of organizations, including those in urban municipalities like Tehran. The implementation of digital technologies and systems can streamline processes, improve communication, and enhance decision-making, leading to increased productivity and efficiency. In the context of human resources management, digital transformation can facilitate the development and management of human capital, which is a strategic resource for any organization. Digital tools can be used to improve the productivity of human capital by providing training and development opportunities, enhancing communication and collaboration, and enabling more effective performance management. The use of digital technologies in urban management can also help to address challenges related to the provision of infrastructure and social services, as well as to promote sustainable development. For example, digital platforms can be used to improve the coordination of services among different offices and to better respond to the needs of citizens. However, the successful implementation of digital transformation in urban municipalities requires careful planning and management. Challenges such as system integration, data management, and organizational coordination must be addressed to ensure the effective deployment of digital services. Additionally, the role of human resources in the digital transformation process is crucial, as they are responsible for managing and implementing the new technologies and systems. In summary, digital transformation and digital human

resources management practices can have a positive impact on the productivity, efficiency, and effectiveness of urban municipalities like Tehran. However, careful planning and management are necessary to ensure the successful implementation of these technologies and to address the challenges associated with digital transformation in the urban context. The study on the feasibility of an e-learning management system for the staff of Tehran Municipality indicates that electronic learning courses can be an effective method for educating staff in specialized and general qualifications fields, which is required for urban management organizations. This suggests that digital human resources management practices can contribute to the overall productivity and effectiveness of the organization by empowering employees and improving their qualifications. Moreover, the use of digital city concepts has been proposed to enhance human resource performance management, with a focus on the digital city and the prioritization of factors in the Municipality of Tehran. This indicates that digital transformation strategies can play a crucial role in the overall performance of Tehran's urban municipalities. Therefore, the implementation of digital transformation strategies and digital human resources management practices has a positive impact on the productivity, efficiency, and effectiveness of Tehran's urban municipalities. The use of e-learning systems and the adoption of digital city concepts can further enhance the performance of these organizations. The mediation on digital task interdependence further strengthens the overall HR management capabilities, enabling the Municipality to effectively meet its goals and deliver efficient services to its residents. The municipality of Tehran has experienced a significant impact on its human resource management practices due to the implementation of digital technologies. This digital transformation has brought about substantial improvements in the efficiency and effectiveness of HR processes, consequently strengthening the overall human resource management function. One of the critical impacts of digital human resource management practices is the automation of routine HR tasks. This has allowed the HR department to streamline processes such as recruitment, onboarding, payroll management, and performance evaluation. With the integration of digital tools, the municipality can now process these tasks faster, reducing manual errors and enhancing the overall productivity of HR teams. Digital

transformation has also facilitated the collection and analysis of HR data, enabling evidence-based decision-making. The municipality of Tehran can now leverage digital analytics tools to gain insights into various HR metrics, such as employee engagement, turnover rates, and training effectiveness. This data-driven approach strengthens HR management by providing valuable insights for strategic workforce planning, talent development, and retention strategies. Additionally, digital task interdependence has been positively mediated by these practices. By implementing digital tools such as cloud-based collaboration platforms, project management software, and virtual communication tools, HR teams in Tehran's municipality can now collaborate and work on tasks remotely. This has increased flexibility and reduced dependency on physical presence, enabling employees to work together efficiently despite geographical barriers. Digitalizing HR processes has also facilitated communication and engagement between HR and employees. Through the implementation of digital platforms such as employee self-service portals, mobile HR apps, and social media groups, the municipality can now interact with employees on a real-time basis. This improved communication has strengthened the relationship between HR and employees, resulting in increasing employee satisfaction, motivation, and productivity. In conclusion, the impact of digital human resource management practices and digital transformation on the municipality of Tehran has been significant. Implementing digital tools and technologies has improved HR efficiency, decision-making, collaboration, and employee engagement. These improvements have ultimately strengthened the overall human resource management function, bringing positive outcomes for the municipality's workforce.

#### *Implications*

The study highlights the significance of digital human resources management practices and digital transformation in enhancing HRM system strength in Tehran municipality by enabling faster, smarter, and more efficient HR processes which ultimately results in greater performance and productivity. The implications of these findings are significant for both researchers and practitioners in the field of HR management. From a theoretical standpoint, it adds to the existing literature by highlighting the

transformative impact of digital technologies on HR systems. It emphasizes the need for organizations to embrace digital HR practices and undergo digital transformation to ensure a more effective HR management system. Additionally, the findings support the notion that digital task interdependence plays a crucial mediating role in strengthening the HR system, suggesting that fostering a collaborative digital work environment is essential. Practically, the findings of this study have several implications for the Tehran municipality. First and foremost, these organizations must invest in digital HR practices and develop capabilities to support their implementation. This involves integrating HR processes with digital tools, providing training and development opportunities for employees to adapt to digital technologies, and making HR information and services accessible through digital platforms. Additionally, Tehran municipality should prioritize digital transformation efforts to optimize its HR systems. This involves utilizing advanced HR technologies, such as AI-powered recruitment software, HR analytics tools, and mobile-based employee management applications. By implementing these technologies strategically, HR departments can streamline their processes, enhance data accuracy, and improve decision-making, all of which contribute to a stronger HR system. Furthermore, the findings emphasize the importance of promoting digital task interdependence among employees. Tehran municipality should encourage a collaborative work environment by utilizing digital collaboration tools, providing opportunities for cross-functional teams, and fostering a culture of knowledge sharing. This will not only strengthen the HR system but also enhance overall organizational performance. In conclusion, the impact of digital human resource management practices and digital transformation on the strength of the human resource management system is evident in Tehran municipality. The study highlights the significant role of digital HR practices, digital transformation, and digital task interdependence in enhancing the effectiveness and efficiency of the HR system. To leverage these benefits, Tehran municipality should invest in digital HR practices, prioritize digital transformation efforts, and foster a collaborative digital work environment.

#### *Practical suggestion*

Therefore, the practical procedures provided below for a successful digital transformation and

digital HRM practices implementation are worth considering.

*1. Conduct a baseline assessment*

Before implementing DHRM practices or embarking on a digital transformation, it is crucial to conduct a comprehensive assessment of the current HRM system. This will help identify existing strengths, weaknesses, and areas for improvement. Gathering feedback from employees and managers through surveys or interviews can provide valuable insights into the organization's needs.

*2. Develop a roadmap for digital HRM implementation*

Craft a detailed plan outlining the specific steps and timeline for implementing digital HRM practices and digital transformation initiatives. This roadmap should align with the organization's goals and address identified weaknesses. Prioritize the implementation of technologies that have the potential to enhance HRM system strength, such as talent acquisition and development, performance management, and employee engagement tools.

*3. Emphasize change management and training*

Introduce change management practices to help employees embrace digital transformation. Train HR personnel and other staff members on the effective utilization of digital HRM tools, ensuring they are well-versed in the software, platforms, and processes associated with the adopted technologies. Encourage ongoing learning and professional development to maximize the benefits of digital HRM practices.

*4. Foster a culture of collaboration and teamwork*

Digital task interdependence plays a significant role in leveraging the benefits of digital HRM practices. Encourage collaboration and teamwork among employees by implementing cross-functional teams, establishing transparent communication channels, and promoting knowledge-sharing. Emphasize the importance of digital task interdependence to ensure the efficient utilization of digital HRM tools. Because Digital task interdependence facilitated by technology promotes collaboration among HR teams and other departments, fostering a more cohesive and integrated work environment

Digital tools can enhance communication, feedback mechanisms, and employee development, leading to higher engagement and satisfaction levels among employees.

*5. Monitor and measure the impact of digital HRM practices*

Continuously monitor and evaluate the impact of digital HRM practices and digital transformation initiatives on HRM system strength. Utilize key performance indicators (KPIs) and feedback mechanisms to measure progress. Regularly collect and analyze data related to employee satisfaction, productivity, retention rates, and overall HR operational efficiency. Identify areas for improvement and make necessary adjustments to further enhance the HRM system.

*6. Encourage employee feedback and participation*

Engage employees by seeking their opinions and actively involving them in the decision-making process related to digital HRM practices and digital transformation. Create channels for employees to provide feedback, suggestions, and concerns regarding the implemented technologies, allowing for iterative improvements. Incorporate employee feedback into the continuous improvement cycle of the HRM system.

*7. Data-driven decision-making*

Digital transformation enables the collection and analysis of HR data, providing insights for strategic decision-making and improving overall HR performance.

*8. Improve HR system strength*

The adoption of digital HRM practices and digital transformation initiatives can strengthen the overall human resource management system within Tehran city municipalities. This can result in increased agility, responsiveness, and innovation in HR processes, ultimately contributing to organizational success and employee satisfaction. Also Implementing digital HRM practices can enhance the efficiency and effectiveness of HR processes within Tehran city municipalities. This can include the use of digital tools for recruitment, training, performance management, and employee engagement.

### 9. Using technological advances and technological capabilities at different levels of Tehran Municipality

welcome technological advances to improve human resource performance management with a focus on digital tools and systems. Also, this feature of Hel should be implemented at all levels and in all municipalities in an integrated manner as a digital network.

### 10. Developing a model

Designing a human resource performance management model appropriate to the requirements of a digital city, emphasizing the philosophy of digital human resource management. Also, under the design of this digital model, the design of salary payment and digital training models should be done.

### 11. Prioritizing factors

Identifying and prioritizing factors affecting the implementation of electronic human resources management and digital transformation, such as technological, organizational, behavioral, and environmental factors, focusing on the impact of technology.

### 12. Implementation of digital age approaches

Explain and implement HR performance management models with a Digital Age approach and ensure compatibility with the Digital City framework.

### 13. Leverage digital transformation

Embrace digital transformation to streamline HR processes, improve communication, and facilitate data-driven decision-making. Utilize technologies such as AI, data analytics, and automation to optimize HR functions.

### 14. Compliance with regulations

Ensure that all digital HRM practices comply with legal regulations and standards to maintain ethical and legal integrity in managing human resources.

### 15. Share success stories and best practices

Highlight success stories and best practices that showcase the positive impact of digital HRM practices on HRM system strength. Share these examples through internal communication channels, such as newsletters, intranets, or workshops. This will inspire employees, generate enthusiasm, and contribute to a

culture of innovation and continuous improvement. The impact of digital human resource management practices and digital transformation on human resource management system strength can be observed through the mediation of digital task interdependence, as evidenced in the case study of Tehran municipality. Digital human resource management practices, such as the use of digital technologies in recruitment, training, and performance appraisal, can enhance the efficiency and effectiveness of HR processes, leading to a stronger HR management system. The role of digital task interdependence in this context is significant. Digital task interdependence refers to the interconnectedness of tasks in a digital environment, which can lead to increased collaboration and coordination among employees. This can result in improved performance and productivity, as well as a more agile and responsive HR system. In the case study of Tehran municipality, the implementation of digital technologies in HR practices has led to a more efficient and effective HR system, as well as increased collaboration and coordination among employees. This has contributed to the overall strength of the HR management system and has facilitated the city's digital transformation.

## CONCLUSION

One significant impact of DHRM practices and digital transformation on the strength of the HRM system is improved efficiency and effectiveness. Digital technologies enable the automation of various HR tasks such as recruitment, onboarding, performance management, and training. This automation saves time, reduces errors, and allows HR professionals to focus on strategic activities rather than administrative tasks. As a result, the HRM system becomes more potent in its ability to deliver HR services efficiently and effectively. Digital transformation also enhances the quality of HRM data and analytics. Digital tools enable the collection, storage, and analysis of vast HR-related data. This data can be used to gain insights into employee performance, engagement, and satisfaction. By leveraging data analytics, HR professionals can make data-driven decisions, identify trends, and predict future needs. The availability of accurate and timely data strengthens the HRM system's ability to provide evidence-based recommendations and support strategic decision-making. Furthermore, DHRM practices and digital transformation promote

collaboration and communication within the HR function and organization. Digital tools such as collaboration platforms, instant messaging, and video conferencing enable HR professionals to connect and collaborate with ease, irrespective of geographical boundaries. This facilitates knowledge sharing, cross-functional collaboration, and effective teamwork, strengthening the HRM system. Digital task interdependence plays a mediating role in the impact of DHRM practices and digital transformation on the strength of the HRM system. Digital task interdependence refers to the interconnectivity of HR tasks and processes facilitated by digital technologies. It enables seamless integration of various HR functions, promotes cross-functional collaboration, and enhances agility in responding to changing business needs. Reducing task interdependence, digital technologies improve the synergy and coordination among different HR activities, resulting in a stronger HRM system. In conclusion, the impact of DHRM practices and digital transformation on the strength of the HRM system is significant and mediated by digital task interdependence. DHRM practices and digital transformation improve efficiency, effectiveness, data quality, collaboration, and communication within HRM. These benefits are further amplified by digital task interdependence, which enhances integration, coordination, and agility within the HRM system. By leveraging digital technologies and promoting digital task interdependence, organizations can strengthen their HRM systems and improve overall HR effectiveness. Also, electronic government is one of the necessities of today's world, which many countries seek to establish. The innovative municipality is based on the development of digitalization in municipalities and the electronicisation of human resource management measures based on using advanced software and hardware technologies based on networks and telecommunications to exchange resources and financial information electronically, which does not require physical presence. There are no customers, employees, or clients in the branch. According to the findings of the research, it can be stated that municipalities with an approach aligned with the organization's strategy, the dimensions of human resource management, and the benefits of digital transformation can provide the basis for the optimal implementation of electronic human resource management to strengthen the overall human resource

management system. Municipalities must be aware of digital transformation, implement digital human resource management that encourages employee behaviors, and strengthen the power of the HRM system in search of superior performance by establishing the interdependence of digital tasks between different organizational units. One of the most critical parts that can contribute to the strength of Tehran's municipal systems is its human resources management system. Therefore, along with the electronic management of human resources, it is critical to create a platform for digital transformation in terms of preparing the fields needed for digitalization. In addition, while achieving a powerful human resource management system can be designed to facilitate communication between different departments of municipalities and thus make daily work easy, in a city with a traditional structure, this is doomed to failure. Therefore, the need for the requirements of digital transformation is doubly felt. Also, considering the interdependence of digital tasks, performing tasks and affairs electronically in municipalities can play an important role in the connection between digital transformation and electronic human resources management.

#### **AUTHOR CONTRIBUTIONS**

A. Gholipour reviewed and supervised the article; H.R. Nematollahi carried out the software part and methodology; N. Mohammadesmaeili performed editing and interpretation of the results; H. Mohammadi did the literature review and collaboratively with H.R. Nematollahi conceptualized the model and wrote the entire manuscript.

#### **ACKNOWLEDGEMENT**

This study is conducted in Tehran Municipality. The authors are sincerely grateful to the employees of Tehran Municipality.

#### **CONFLICT OF INTEREST**

The authors declare no potential conflict of interest regarding the publication of this work. In addition, the ethical issues including plagiarism, informed consent, misconduct, data fabrication and, or falsification, double publication and, or submission, and redundancy have been completely witnessed by the authors.

#### **OPEN ACCESS**

©2024 The author(s). This article is licensed under

a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution, and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made. The images or other third-party material in this article are included in the article's Creative Commons license unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this license, visit: <http://creativecommons.org/licenses/by/4.0/>

#### PUBLISHER'S NOTE

Tehran Urban Research & Planning Centre (TURPC) takes a neutral position about claims on disputed territories, place names, international boundaries, jurisdiction in published maps, and institutional affiliations. TURPC is committed to retracting the paper after it is published if it becomes apparent that there are serious problems in terms of research and publication ethics in its content (<https://www.ijhcum.net/journal/process?ethics>)

#### ABBREVIATIONS (NOMENCLATURE)

AI	Artificial Intelligence
AMOS	Analysis of Moment Structures
AVE	Average Variance Extracted
CR	Composite Reliability
DHRM	Digital Human Resource management
DT	Digital Transformation
DTI	Digital Task Interdependence
HR	Human Resources
HRM	Human Resources Management
HRMSS	Human Resources Management System Strength

#### REFERENCES

Alsufyani, N.; Gill, A. Q., (2022). Digitalisation performance assessment: A systematic review. *Technol. Soc.*, 68(1): 101-123 (23 pages).  
 Arabiun, A.; Tajpour, M.; Zahedi, M. R., (2024). The effect of digital leadership on the performance of businesses: the mediating role of organizational entrepreneurship. *Int. J. Hum. Capital Urban Manage.*, 9(1): 17-28 (12 pages).

Antikainen, M.; Uusitalo, T.; Kivikytö-Reponen, P., (2018). Digitalisation as an Enabler of Circular Economy. *Procedia CIRP*, 73(7): 45-49 (5 pages).  
 Bansal, A.; Panchal, T.; Jabeen, F.; Mangla, S. K.; Singh, G., (2023). A study of human resource digital transformation (HRDT): A phenomenon of innovation capability led by digital and individual factors. *J. Bus. Res.*, 157(5): 113611 (17 pages).  
 Belakang, L.; Ruel, H.; Njoku, E.; Balakrishnan, B.; Duraipandian, R.; Myllymäki, D.; Bondarouk, T.; Harms, R.; Lepak, D.; Strohmeier, S.; Ziebell, R. C.; Albors-Garrigos, J.; Schoeneberg, K. P.; Perello-Martin, R. M.; Martini, M.; Cavenago, D.; Marafioti, E.; Manivannan, S. K.; Valliammal, M.; ... Ahsyar, T. K., (2019). Sistem Electronic-Human Resource Management (e-HRM) Menggunakan Metode Rapid Application Development. *Int. J. Hum. Resour. Manag.*, 7(3): 126-135 (10 pages).  
 Bilgeri, D.; Wortmann, F.; Fleisch, E., (2017). How digital transformation affects large manufacturing companies' organization. *ICIS 2017 proceedings.*, 1-9 (9 pages).  
 Blau, I.; Shamir-Inbal, T., (2017). Re-designed flipped learning model in an academic course: The role of co-creation and co-regulation. *Comput. Educ.*, 115 (12): 69-81 (13 pages).  
 Bondarouk, T. V.; Ruël, H. J., (2009). Electronic Human Resource Management: challenges in the digital era. *Int. J. Hum. Resour. Manag.*, 20 (3): 505-514 (10 pages).  
 Bondarouk, T.; Parry, E.; Furmueller, E., (2017). Electronic HRM: four decades of research on adoption and consequences. *The International Journal of Human Resource Management.*, 28 (1): 98-131 (34 pages).  
 Boudreau, J.; Donner, J., (2021). Are you ready to lead work without jobs? *MIT SMR*, 62 (4): 1-5 (5 pages).  
 Chen, C. M.; Chen, L. C.; Horng, W. J., (2021). A collaborative reading annotation system with formative assessment and feedback mechanisms to promote digital reading performance. *Interact. Learn. Environ.*, 29 (5): 848-865 (18 pages).  
 Cheng, M. M.; Hackett R. D., (2021). A critical review of algorithms in HRM: Definition, theory, and practice. *Hum. Resour. Manag. Rev.*, 31 (1) (14 pages).  
 Colbert, A.; Yee, N.; George, G., (2016). The digital workforce and the workplace of the future. *Acad. Manag. Ann.*, 59 (3): 731-739 (9 pages).  
 Cooper, W. H.; Withey, M. J., (2009). The strong situation hypothesis. *Pers. Soc. Psychol. Rev.*, 13 (1): 62-72 (11 pages).  
 David, E. B.; Cheri, O., (2004). Understanding HRM-Firm Performance Linkages: The Role of the "Strength" of the HRM System. *Acad. Manag. Rev.*, 29 (2): 203-221 (19 pages).  
 Delmotte, J.; De Winne, S.; Sels, L., (2012). Toward an assessment of perceived HRM system strength: scale development and validation. *Int. J. Hum. Resour. Manag.*, 23 (7): 1481-1506 (26 pages).  
 Duckjung, Sh.; Alison, M. K., (2017). Causality Between High-Performance Work Systems and Organizational Performance. *Journal of Management.*, 43 (4): 973-997 (25 pages).  
 Dixit, P., (2017). Digitalisation-an emerging trend in human resource practices. *IJIR.*, 3 (4): 2134-2138 (5 pages).  
 Garcia-Arroyo, J.; Osca, A., (2021). Big data contributions to human resource management: A systematic review. *The International Journal of Human Resource.*, 32 (20), 4337-4362 (26 pages).  
 Gal, U.; Jensen, T. B.; Stein, M. K., (2020). Breaking the vicious cycle of algorithmic management: A virtue ethics approach to people analytics. *Information and Organization.*, 30 (2): 100301 (26 pages).  
 Guest, D. E.; Bos-Nehles, A. C., (2013). HRM and performance: The role of effective implementation. In *HRM and performance:*

- Achievements and challenges. Wiley-Blackwell.
- Hauff, S.; Alewell, D.; Katrin Hansen, N., (2017). HRM system strength and HRM target achievement—Toward a broader understanding of HRM processes. *Hum. Resour. Manag.*, 56 (5): 715–729 **(15 pages)**.
- Basole, R. C.; Major, T., (2024). Generative AI for Visualization: Opportunities and Challenges. *IEEE Computer Graphics and Applications*, 44 (2): 55-64 **(10 pages)**.
- Halid, H.; Halim, S.N.A.; Ravesangar, K., (2022). Human Resource Management Practices in the Digital Era. In: Machado, C. (eds) *Technological Challenges. Manag. and Ind. Eng. Springer*, Cham. 109-158 **(50 pages)**.
- Heilig, L.; Schwarze, S.; Voß, S., (2017). An analysis of digital transformation in the history and future of modern ports **(11 pages)**.
- Hewett, R.; Shantz, A.; Mundy, J.; Alfes, K., (2018). Attribution theories in human resource management research: A review and research agenda. *Int. J. Hum. Resour. Manag.*, 29 (1): 87-126 **(40 pages)**.
- Samson, H.; Agrawal, V., (2020). Effectiveness of Digitalization in Hrm: an Emerging Trend. *J. Crit. Rev.*, 7 (4): 4082-4088 **(7 pages)**.
- Ismail, M.H.; Khater, M.; Zaki, M., (2017). Digital Business Transformation and Strategy: What Do We Know So Far? *CSA*, 10 (1): 1–35 **(35 pages)**.
- Kraus, S.; Jones, P.; Kailer, N.; Weinmann, A.; Chaparro-Banegas, N.; Roig-Tierno, N., (2021). Digital Transformation: An Overview of the Current State of the Art of Research. *SAGE Open*, 11 (3), 1-15 **(15 pages)**.
- Kinnie, N.; Swart, J., (2020). Cross-boundary working: Implications for HRM theory, methods, and practice. *Hum. Resour. Manag. J.*, 30 (1): 86–99 **(14 pages)**.
- Kellogg K. C.; Valentine M. A.; Christin, A., (2020). Algorithms at work: The new contested terrain of control. *Academy of Management Annals*, 14(1): 366-410 **(45 pages)**.
- Levenson, A., (2018). Using workforce analytics to improve strategy execution. *Hum. Resour. Manag.*, 57 (3): 685-700 **(16 pages)**.
- Lawler III, E. E.; Levenson, A.; Boudreau, J. W., (2004). HR metrics and analytics—uses and impacts. *Hum. Resour. Plan. J.*, 27 (4): 27-35 **(9 pages)**.
- Li, X.; Nosheen, S.; Haq, N.U.; Gao, X., (2020). Value creation during fourth industrial revolution: use of intellectual capital by most innovative companies of the world. *Technol. Forecast. Soc. Change*, 163 (2): 1-10 **(10 pages)**.
- Laloux, F., (2014). *Reinventing organizations: A guide to creating organizations inspired by the next stage of human consciousness*. Nelson Parker.
- Lee, M. Y.; Edmondson, A. C., (2017). Self-managing organizations: Exploring the limits of less-hierarchical organizing. *Res. Organ. Behav.*, 37 (1), 35–58 **(24 pages)**.
- Malik, A.; Budhwar, P.; Patel, C.; Srikanth, N. R., (2022). May the bots be with you! Delivering HR cost-effectiveness and individualised employee experiences in an MNE. *Int. J. Hum. Resour. Manag.*, 33 (6): 1148-1178 **(31 pages)**.
- Minbaeva, D. B., (2018). Building credible human capital analytics for organizational competitive advantage. *Hum. Resour. Manag.*, 57 (3): 701-713 **(13 pages)**.
- Masood, T.; Egger, J., (2020). Adopting augmented reality in the age of industrial digitalisation. *Comput. Ind.*, 115 (2): 1-14 **(14 pages)**.
- Manninen, K.; Koskela, S.; Antikainen, R.; Bocken, N.; Dahlbo, H.; Aminoff, A., (2018). Do circular economy business models capture intended environmental value propositions?. *J. Clean. Prod.*, 171 (5): 413-422 **(10 pages)**.
- Mazurchenko, A.; Maršíková, K., (2019). Digitally-powered human resource management: Skills and roles in the digital era. *Acta Inform.*, 8 (2): 72-87 **(16 pages)**.
- Nadim Khan, H. M., (2022). *Electronic Human Resource Management: A Contemporary Overview*. *Asian j. economics, bus., account.*, 22 (9): 51-68 **(18 pages)**.
- Naqvi, R.; Soomro, T. R.; Alzoubi, H. M.; Ghazal, T. M.; Alshurideh, M. T., (2021). The Nexus Between Big Data and Decision-Making: A Study of Big Data Techniques and Technologies. *Proceedings of The International Conference on Artificial Intelligence and Computer Vision*, 838-853 **(16 pages)**.
- Nayak, S.; Budhwar, P.; Pereira, V.; Malik, A., (2022). Exploring the dark-side of E-HRM: a study of social networking sites and deviant workplace behavior. *Int. J. Manpow.*, 43 (1): 89-115 **(27 pages)**.
- Nikolaou, I., (2021). What is the Role of Technology in Recruitment and Selection? *Span. J. Psychol.*, 24 (2): 1-6 **(6 pages)**.
- Ogbeibu, S.; Senadjki, A.; Gaskin, J., (2018). The moderating effect of benevolence on the impact of organisational culture on employee creativity. *Journal of Business Research*, 90 (5): 334-346 **(13 pages)**.
- Patel, P.C.; Messersmith, J.G.; Lepak, D.P., (2013). Walking the tightrope: An assessment of the relationship between high-performance work systems and organizational ambidexterity. *Acad. Manag. J.*, 56 (5): 1420–1442 **(23 pages)**.
- van Esch, P.; Stewart Black, J.; Ferolie J., (2019). Marketing AI recruitment: The next phase in job application and selection. *Computers in Human Behavior*, 90: 215-222 **(8 pages)**.
- Parker, S. K., (2014). Beyond motivation: Job and work design for development, health, ambidexterity, and more. *Annu. Rev. Psychol.*, 65 (1): 661–691 **(31 pages)**.
- Pantelidis, I., (2019). Digital human resource management. In *Human Resource Management in the Hospitality Industry*. Routledge., 337-352 **(16 pages)**.
- Poisat, P.; Mey, M. R., (2017). Electronic human resource management: Enhancing or entrancing?. *SA J. Hum. Resour. Manag.*, 15 (1): 1-9 **(9 pages)**.
- Pittaway, J. J.; Montazemi, A. R., (2020). Know-how to lead digital transformation: The case of local governments. *Government Information Quarterly*, 37(4): 101474 **(41 pages)**.
- Ruël, H.; Bondarouk, T., (2014). e-HRM Research and Practice: Facing the Challenges Ahead. In: Martínez-López, F. (eds) *Handbook of Strategic e-Business Management*. Progress in IS. Springer, Berlin., Heidelberg.
- Ruël, H.; Bondarouk, T.; Looise, J. K., (2004). E-HRM: Innovation or Irritation. An Explorative Empirical Study in Five Large Companies on Web-based HRM. *Manag. Rev.*, 15 (3): 364–380 **(17 pages)**.
- Salvi, A.; Vitolla, F.; Rubino, M.; Giakoumelou, A.; Raimo, N., (2020). Online information on digitalisation processes and its impact on firm value. *J. Bus. Res.*, 124 (3): 437-444 **(8 pages)**.
- Samuel, O. M.; Moagi, T., (2022). The emerging work system and strategy for skills transition in South Africa. *Manag. Res. Rev.*, 45 (11): 1503-1523 **(21 pages)**.
- Sanders, K.; Dorenbosch, L.; de Reuver, R., (2008). “The impact of individual and shared employee perceptions of HRM on affective commitment: Considering climate strength”, *Pers. Rev.*, 37 (4): 412-425 **(14 pages)**.
- Sarc, R.; Curtis, A.; Kandlbauer, L.; Khodier, K.; Lorber, K.; Pomberger, R., (2019). Digitalisation and intelligent robotics in value chain of circular economy oriented waste management – A review. *Waste Management*, 95 (3): 476-492 **(17 pages)**.
- Shamout, M. D.; Elayan, M. B.; Rawashdeh, A. M.; Al Kurdi, B.; Alshurideh, M., (2022). E-HRM practices and sustainable competitive advantage from HR practitioner’s perspective: A mediated moderation analysis. *Int. J. Data Netw. Sci.*, 6 (1): 165-

- 178 (14 pages).
- Sharma, A.; Tyagi, R.; Verma, A.; Paul, A., (2022). Review on Digitalisation and Artificial Intelligence in human Resource function of Energy sector. *Water Energy Int.*, 65 (2): 38-46 (9 pages).
- Shen, W.; Wang, Y.; Lee, S., (2022). Formation of inter-project ties from the sender–recipient perspective: Roles of task interdependence and functional interdependence. *J. Proj. Manag.*, 40 (5): 577-586 (10 pages).
- Spitzer, B., (2014). HR in the Digital Age, CapGemini Consulting, Wrk. Sol. Rev., 5 (1): 15-17 (3 pages).
- Schiemann, W. A., Seibert, J. H., Blankenship, M. H., (2018). Putting human capital analytics to work: Predicting and driving business success. *Hum. Resour. Manag.*, 57 (3): 795-807 (13 pages).
- Siachou, E.; Vrontis, D.; Trichina, E., (2020). Can traditional organizations be digitally transformed by themselves? The moderating role of absorptive capacity and strategic interdependence. *J. Bus. Res.*, 124 (3): 408-421 (14 pages).
- Salvi, A.; Vitolla, F.; Rubino, M.; Giakoumelou, A.; Raimo, N., (2021). Online information on digitalisation processes and its impact on firm value. *J. Bus. Res.*, 124 (3): 437-444 (8 pages).
- Stoldt, J.; Trapp, T.U.; Toussaint, S.; Sube, M.; Schlegel, A.; Putz, M., (2018). Planning for digitalisation in SMEs using tools of the digital factory. *Procedia CIRP*, 72 (37): 179-184 (6 pages).
- Strohmeier, S., (2020). Digital human resource management: A conceptual clarification. *German Journal of Human Resource Management: Zeitschrift für Personalforschung.*, 34 (3): 345-365 (21 pages).
- Strohmeier, S., (2014). "HRM in the digital age – digital changes and challenges of the HR profession", *Empl Relat.*, 36 (4) (18 pages).
- Parry, E.; Strohmeier, S., (2014). "HRM in the digital age – digital changes and challenges of the HR profession", *Empl Relat.*, 36 (4): 27-36 (10 pages).
- Stumpf, S. A.; Doh, J. P.; Tymon Jr, W. G., (2010). The strength of HR practices in India and their effects on employee career success, performance, and potential. *Hum. Resour. Manag.*, 49 (3): 353-375 (23 pages).
- Theres, C.; Strohmeier, S., (2023). Met the expectations? A meta-analysis of the performance consequences of digital HRM. *Int. J. Hum. Resour. Manag.*, 34 (20): 3857-3892 (36 pages).
- Tajpour, M.; Razavi, S., (2023). The effect of team performance on the internationalization of Digital Startups: the mediating role of entrepreneurship. *International Journal of Human Capital in Urban Management*, 8 (1): 17-30 (14 pages).
- Thite, M., (2019). Electronic/digital HRM: a primer. In: Thite M (ed.) *e-HRM: Digital Approaches, Directions & Applications*. New York: Routledge.
- Thompson, L.F.; Braddy, P.W.; Wuensch, K.L., (2008). E-recruitment and the benefits of organizational web appeal. *Computers in Human Behavior*, 24 (5): 2384–2398 (15 pages).
- Udekwe, E.; Iwu, C. G.; De la Harpe, A. C.; Daramola, J. O., (2021). A systematic literature review of Human Resource Information System (HRIS) usage in the health system of South Africa. *IJBSSR.*, 10 (7): 87- 115 (29 pages).
- Veld, M.; Paauwe, J.; Boselie, P., (2010). HRM and strategic climates in hospitals: does the message come across at the ward level?. *Hum. Resour. Manag. J.*, 20 (4): 339-356 (18 pages).
- Verhoef, P.C.; Broekhuizen, T.L.; Bart, Y.; Bhattacharya, A.; Qi Dong, J.; Fabian, N.E.; Haenlein, M., (2021). Digital transformation: A multidisciplinary reflection and research agenda. *Journal of Business Research.*, 122 (4): 889-901 (13 pages).
- White, M.; Bryson, A., (2013). Positive employee attitudes: How much human resource management do you need? *Hum. Relat.*, 66 (3): 385-406 (22 pages).
- Van Esch, P.; Black, J. S.; Ferolie, J., (2019). Marketing AI recruitment: The next phase in job application and selection. *Computers in Human Behavior*, 90: 215-222 (8 pages).
- Wolfe, R.; Wright, P. M.; Smart, D. L., (2006). Radical HRM innovation and competitive advantage: The Moneyball story. *Hum. Resour. Manag.*, 45 (1), 111-145 (35 pages).
- Wong, S. I.; Berntzen, M. N., (2019). Transformational leadership and leader–member exchange in distributed teams: The roles of electronic dependence and team task interdependence. *Comput. Hum. Behav.*, 92: 381-392 (12 pages).
- Yu, G.; Meng, Y.; Zhou, C., (2023). How does family-supportive supervision influence work-family conflict in China? The role of boundary control and empowerment-focused HRM. *Asia Pac. Bus. Rev.*, 29 (1): 11-27 (17 pages).
- Yusuf, M.; Satia, H. M. R.; Bernardianto, R. B.; Nurhasanah, N.; Irwani, I.; Kurniasih, D.; Setyoko, P. I., (2023). Investigating the Effect of Digital HRM and Digital Innovation and the SMEs Performance in Indonesia. *Int. J. Prof. Bus. Rev.*, 8 (6): 1-14 (14 pages).
- Zhang, J.; Chen, Z., (2023). Exploring Human Resource Management Digital Transformation in the Digital Age. *J. Knowl. Econ.*, 1-17 (17 pages).

#### COPYRIGHTS

©2024 The author(s). This is an open access article distributed under the terms of the Creative Commons Attribution (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, as long as the original authors and source are cited. No permission is required from the authors or the publishers.



#### HOW TO CITE THIS ARTICLE

Nematollahi, H.R.; Mohammadi, H.; Gholipoor, A.; Mohammad Esmaili, N., (2024). Strengthening human resource management system with digital Practices, transformation, and task interdependence. *Int. J. Hum. Capital Urban Manage.*, 9(4): 579-600.

DOI: 10.22034/IJHCUM.2024.04.03

URL: [https://www.ijhcum.net/article\\_712869.html](https://www.ijhcum.net/article_712869.html)

