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# Digitalization of HRM for strategic human resource management orientation – logistic regression and dominance analysis approach<sup>1</sup>

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most relevant one for SHRM orientation?

### Abstract

**Background**: According to the contemporary HRM theory, strategic human resource management (SHRM) orientation, as a company's philosophy of aligning human resource management (HRM) policies and practices with an organizational strategy for maximizing organizational results, is considered the highest level of a company's HRM development. At the same time, one of the trends in HRM is the digitalization of HRM activities, following the global trend of adopting digital tools for increasing individual and organizational efficiency and effectiveness. The question that consequently arises is whether the digital component entered the SHRM perspective, in other words, whether SHRM orientation could exist without digitalization of HRM endeavours. **Purpose:** The paper strives to provide answers, both theoretically and empirically, to the following central and three supporting research questions: CRQ = Is digitalization of HRM contributing to the strategic HRM orientation of a company?, SRQ1 = Are digital HRM practices positively related to the SHRM orientation?, SRQ2 = Are some digital HRM practices more relevant for the SHRM orientation than others?, and SRQ3 = If the relationship between digital HRM practices and SHRM orientation does exist, which digital HRM practice is the

Study design/methodology/approach: To provide empirically based answers to research questions, we utilized the CRANET 2021 dataset, covering 4495 organizations with more than 200 employees from 38 countries worldwide. We used nine indicators for revealing the existence of digital HRM (manager self-service, employee self-service, HRIS, algorithm-based HRM, HR analytics, telework, digital learning, social media recruitment, social media selection) and five indicators for determining the SHRM orientation (HR manager's membership in the management board or equivalent; involvement of HR manager in the development of business strategy; existence of written HRM strategy; HR to employee ratio, the level of HR department performance evaluation). SHRM orientation was determined using K-Means cluster analysis, and relationships between variables were analysed using correlation analysis, multiple logistic regression and dominance analysis (DA).

**Findings/conclusions:** Correlation analysis revealed that all indicators of digitalization of HRM processes have a positive and a significant relationship with SHRM orientation, implying that digital HRM practices are relevant for SHRM orientation. The results of logistic regression indicated that the usage of manager self-service, algorithm-based HRM, HR analytics, telework, digital learning and social media selection increase the probability of organizations' SHRM orientation more than other explored indicators. The results of DA demonstrate that the most important digital HRM practices for the SHRM orientation is digital learning. **Limitations/future research:** As CRANET dataset is limited in its variables of digital HRM and indicators of SHRM orientation, further research is needed to confirm our findings.

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### **Keywords**

strategic HRM, strategic HRM orientation (SHRM), digitalization of HRM, digital HRM practices, CRANET, logistic regression, dominance analysis (DA)

### Introduction

Strategic human resource management (SHRM), as the alignment of human resource management (HRM) goals, strategies and activities with organizational strategy to achieve organizational goals, is considered to be the ultimate stage in the evolution of HRM according to the contemporary theory (Poloski Vokic, 2016). Namely, the contribution of well-designed and implemented HRM activities to organizational performance has been documented numerous times (e.g., Collins & Clark, 2003; Jackson et al., 2014; Schuler & Jackson, 2005). In other words, managers today face the challenge of balancing the demands of achieving organizational goals and enhancing employee-centric outcomes (Malik et al., 2023). Consequently, HRM combined with the strategic orientation should be more successful in achieving organizational strategic goals (e.g., Chow et al., 2013).

At the same time, technological development and information and communications technology (ICT), as components of the modern business environment, influence the development of many business areas, including the HRM function which is "not 'spared' by new ways of performing activities and tasks" (Berber et al., 2018, p. 22). Nowadays, there is almost no HRM activity that has not been digitalized. The digitalization of HRM has evolved significantly over the years, starting with the digitalization of HR administration, data collection and data analysis, which has been facilitated by the implementation of human resource information systems (HRISs). The subsequent phase involved the digitalization of HR planning and job analysis, and the use of digital tools for recruitment and e-learning. As the digitalization of HRM progressed, the more advanced functionalities were included, such as online testing and video interviewing, online performance goal setting and evaluation, as well as manager and employee self-service. Today, HRM digitalization is advancing towards algorithmbased HRM and the usage of artificial intelligence (AI) in HRM (Prikshat et al., 2023).

On the one hand, the SHRM literature emphasizes the importance of the integration between HRM and strategy to attain superior performance (Chow et al., 2013), and on the other

hand digital economy has become a matter for HRM (Febrianti & Jufri, 2022). Therefore, it is interesting to analyse whether digitalization of HRM is an important element of SHRM orientation. As Lepak and Snell (1998, p. 229) indicated two decades ago, "as firms continue to push the limits of IT to achieve organizational objectives, we would encourage researchers to examine how IT can function not only as a cost-reducing tool but as an asset that helps better control and coordination across organizational boundaries". Similarly, Meijerink et al. (2021) recently suggested that future research should answer the question of what will happen to organizations that are still in the process of becoming digital. Accordingly, the question that needs to be answered is whether SHRM orientation could exist without digitalization of HRM endeavours – in other words, whether the digital component is essential for the SHRM perspective. Therefore, our central research question is: CRQ = Is digitalization of HRM contributing to the strategic HRM orientation of a company?, while three supporting research questions are: SRQ1 = Are digital HRM practices positively related to the SHRM orientation?, SRQ2 = Are some digital HRM practices more relevant for the SHRM orientation than others? and SRQ3 = If the relationship between digital HRM practices and SHRM orientation does exist, which digital HRM practice is the most relevant one for the SHRM orientation?

Moreover, studies on the consequences of digital HRM are limited and mainly focused on its influence on users' attitudes and behaviours or on HRM-related outcomes such as HRM service quality and HRM effectiveness (Zhou et al., 2021). Studies on the role of digital HRM for the SHRM orientation are even scarcer. Therefore, we strive to fill this research gap. Answers to our research questions are rooted in the theory comprehensive SHRM perspective that integrates best from universalistic, contingency, configurational and contextual approach to SHRM (e.g., Martin-Alcazar et al., 2005). Namely, Martin-Alcazar et al. (2005) suggest that the integrative explanation of SHRM could be useful as a reference framework for future research in the field of SHRM as it could foster the analysis of concrete HRM topics, such as certain policies or practices, in this case digital HRM practices.

In the theoretical background part of our paper, we shortly define concepts of SHRM orientation and HRM digitalization, as well as present the existing reflections and findings on the relationship between digital HRM and SHRM. In the empirical part of our paper, we explore the aforementioned relationship using variables from the CRANET 2021 database.

### 1. Theoretical background

## 1.1. Strategic human resource management orientation

According to Marler (2009), there are two overarching strategic perspectives related to SHRM. The first perspective indicates that SHRM contributes to an organization's competitive advantage when it fits or is in vertical alignment with firm-level business strategies. In this context, achieving a competitive advantage is contingent on whether HRM policies and practices fit the firm's overall business strategy. The second perspective is rooted in the well-known Resource-Based View (RBV) which focuses on strategic resources and capabilities within the firm as sources of competitive advantage (e.g., Barney 1991; Prahalad & Hamel, 1994). According to this view, the HR function holds the potential to produce human resources and organizational capabilities achieving maintaining a pivotal for and competitive edge of an organization.

As Chow et al. (2013) explain, not only is an organization's strategic orientation a vehicle that transforms the value of human capital into superior firm performance, but it also plays a critical role in linking HRM to performance. Consequently, the SHRM orientation encompasses three aspects needed for achieving coordination and integration between HRM systems and organizational goals achievement. It usually starts with HRM practices being designed to be strategic, meaning that they are critical for organizational outcomes. According to Wright and McMahan (1992), HRM practices are strategic when the pattern of planned human resource deployments and activities enables an organization to achieve its goals. The second aspect implies that HR professionals are becoming more aware and focused on strategic issues (Bissola & Imperatori, 2014). It is they who have to master the theory and practice of formulating and implementing organizational strategies. In other words, they need to possess the knowledge and skills that enable them to engage in discussions of organizational vision, values, purpose and intent

(Ulrich, 1998). The final aspect points towards the strategic role of the HR department in the company, referring to its mandatory participation in strategic decision-making. As strategic partners, as Ulrich named this potential role of the HRM function back in 1997 (Ulrich, 1997), HR professionals have 'a seat at the table' when any kind of business decision is made (Jackson et al., 2014).

Already a decade ago, researchers accentuated that the environmental turbulence increased the importance of SHRM, which positioned the HR department as a potent powerhouse for strategic management (e.g., Azmi, 2014), and demanded from HR practitioners both functional and strategic competences (e.g., Lo et al., 2015). Moreover, unlike some topics (e.g., total quality management, business process reengineering etc.) that have obtained faddish status in HRM over the years, SHRM has achieved staying power (Lengnick-Hall et al., 2009). It has also been a prominent area of research in the HRM field for over three decades (Cooke et al., 2021). Today, researchers disclose SHRM practices decrease employees' emotional exhaustion (Mansour, 2023). Next, they are considered crucial for fostering employees' learning orientation and enhancing their learning competences (Arunprasad et al., 2023), which are recognized as vital capabilities for the Knowledge age we live in. Moreover, the SHRM approach has the potential to improve dynamic capabilities and promote greater innovation of enterprises (Ho et al., 2023). Consequently, it is nowadays widely accepted that the SHRM orientation is a relevant stakeholder in an organization's success (e.g., Chawla et al., 2023; Haque, 2021).

# 1.2. Human resource management digitalization

HRM digitalization refers to the usage of digital technologies for supporting or conducting HRM activities. Lepak and Snell (1998) were the first to write about the role and impact of IT on structural integration within HRM, and developed their famous three-part typology: (1) operational aspect – IT streamlining HRM operations and alleviating much of the administrative burden, (2) relational aspect – IT increasing the timeliness and service levels by providing managers and employees with remote access to HR databases and information, and increasing their ability to connect with other parts of the corporation as well as outside service providers, and (3) transformational aspect – IT enabling people to communicate across geographic

boundaries and share information, eliminating barriers of time and space. Afterwards, researchers (e.g., Berber et al., 2018; Bissola & Imperatori, 2014; Parry & Strohmeier, 2014; Ruël et al., 2004; Strohmeier & Kabst, 2014) used this typology as the basis for writing about different types of HRM processes that can be ICT-based, resulting in the terminology of operational, relational and transformational e-HRM. In this context, it is important to note that although the term e-HRM is

largely used as a synonym for digital HRM, the concept of digital HRM is broader as it refers to any kind of digitalization of HRM, while e-HRM involves the use of web-based technologies for providing services regarding HRM (Berber et al., 2018).

Today, many transactional (processing, controlling) and transformational (motivational, developmental) digital HRM solutions are employed, as systematized in Table 1.

Table 1 Standard transactional and transformational HRM activities supported by digital HRM solutions

	HRM activities	Examples					
Transactional HRM activities	HRM data collection	attendance registers, electronic work diaries					
	HRM data recording	personal data databases, work performance data databases					
	HRM data computing	payroll/benefits processing					
	HRM data analysing	HR analytics					
	HR planning	workforce modelling					
	job analysis	job analysis software					
	recruitment	online recruitment through specialized and organizational websites, social media platforms, online applications					
	selection	online testing, video interviewing, chatbot interviewing, applicant tracking system, algorithmic selection decisions					
Transfermational	performance management	online performance goal setting, online performance evaluation, digital career management systems, digital talent management systems, onboarding chatbots					
Transformational	training and development	video learning, online learning, e-learning, online assessment					
HRM activities	work design	algorithmic work distribution, remote work solutions, online communication and collaboration, manager self-service, employee self-service					
	internal communication	digital information provision, electronic newsletters, Intranet					
	employee well-being	online attitudes assessment, online psychological support, online workout programs					

Source: the authors

As already revealed a decade ago (e.g. Parry, 2011; Parry & Tyson, 2010), a large proportion of activities is delivered transactional HRM exclusively or greatly by software solutions rather than HR administrators, making the transactional HRM 'technology-intensive' compared to its 'labour-intensive' characteristic from the past. Nowadays, digital work platforms, virtual HRM assistants, automated HRM decision making, algorithmic HRM, and the usage of big data and AI in HRM (e.g., Kurek, 2021; Meijerink et al., 2021; Ulatowska et al., 2023; Waldkirch et al., 2021; Walkowiak, 2023) make the transformational HRM even more 'technology-intensive'. Eventually, all this leads to either reducing the number of employees in HR departments or to reducing HR department's role into a strategic partner one.

The abovementioned applications of HRM digital solutions imply that organizational investments in the digitalization of HRM processes could be grouped into efficiency- and

effectiveness-based ones. Firstly, ICT was used for accelerating, simplifying and monitoring HRM activities, reducing HR administration costs and errors, as well as improving internal information sharing. Moreover, soon it became evident that the usage of ICT in HRM results in a better quality of services provided, improved work collaboration and smarter HRM decisions. It is digital HRM solutions that reduce administrative burden, increase the speed of realization, optimize procedures and lower costs (e.g., Berber et al., 2018; Strohmeier & Kabst, 2014). They also support HRM operations which leads to productivity increases (e.g., Berber et al., 2018; Parry, 2011; Parry & Tyson, 2010; Strohmeier & Kabst, 2014) and generates insights into crucial HRM issues that improve the quality of HR-related decisions (e.g., Bissola & Imperatori, 2014; Meijerink et al., 2021; Strohmeier & Kabst, 2014; Zhou et al., 2021). Positive outcomes of the adoption of digital HRM systems are as well increased transparency of HRM policies and greater trust in the HR department (e.g., Bissola & Imperatori, 2014; Burbach & Royle, 2014). As the final outcome, the digitalization of HRM processes supports organizational strategy, and consequently has an effect on organizational performance (e.g., Bondarouk & Ruel, 2013; Febrianti & Jufri, 2022; Parry & Tyson, 2010; Parry & Strohmeier, 2014; Ruel et al., 2007; Strohmeier & Kabst, 2014; Zhou et al., 2021). It can be summarized that "HRM digitalization has the potential to simplify and enrich, steer and support, and shorten and speed up the pursuit of organizational and employee goal accomplishment" (Bondarouk et al., 2017, p. 114).

# 1.3. Human resource management digitalization for the strategic leverage

already mentioned, studies digitalization of HRM to SHRM are rare, especially empirical and quantitative ones. To date, studies have not yet provided solid evidence that digital HRM solutions have a part in the SHRM orientation of an organization. For example, upon the literature, Ruel et al. (2004) highlight that improving HRM's strategic orientation is one of the three types of e-HRM goals, together with improving administration and efficiency, and improving client orientation and service. However, after exploring five large international companies they concluded that links between the e-HRM content and the overall HRM strategy are not clear. Nevertheless, authors stressed that the most important e-HRM effect seemed to be the strategic integration of HRM with the company strategy, structure and culture.

Afterwards, Ruel et al. (2007) analysed the relationship between e-HRM assessment and HRM effectiveness through a quantitative conducted in the Ministry of Internal Affairs of the Netherlands. Their e-HRM assessment included job relevance, quality of applications and ease of use, while HRM effectiveness was measured by more efficient HRM processes, higher level of service delivery and better strategic contribution. The results showed that the quality aspect of an e-HRM application has a positive and significant effect on HRM effectiveness, which, according to authors, will lead to decreased costs, improved HRM service level and the elevation of the HR department to the role of a strategic partner. However, this study has been conducted in one public organization, and it is debatable if HRM effectiveness can be used as a proxy of SHRM orientation.

By composing a theoretical model, Marler (2009) concluded that a primarily administrative HR function is unlikely to become more strategic with the addition of e-HRM. However, only one year after, using ten case studies from a range of UK organisations, Parry and Tyson (2010) provided some evidence for the strategic impact of e-HRM through enabling HRM to support the organisation in achieving its strategic goals by improving efficiency and effectiveness. As the evidence of the transformational impact of e-HRM, they offer the finding that the usage of e-HRM allows HR staff to have more time and information to support the organisation in achieving its strategic objectives. One year after, Parry (2011), using 2003 CRANET data, supported the hypothesis that organizations where HR function plays a more strategic role are more likely to implement e-HRM. However, this was supported for the 'use of e-HRM' but not for the 'sophistication of e-HRM'. Based on previous research, she argues that the use of e-HRM is associated with the transformation of the HR function into a more strategic one, allowing more time to be dedicated to delivering organizational strategy by changing the focus from administrative to HRM activities that have a strategic relevance. However, her empirical data were not suitable for testing this premise.

Results from the exploratory study conducted by Bondarouk and Ruel (2013) in a governmental organization indicated that e-HRM alone is not sufficient to transform the HR function into a strategic partner. The research revealed that e-HRM could lead to strategic reorientation if certain conditions such as the integration of modules and the willingness and readiness of users to acquire new skills are met. Though, the research was conducted as a single case study in which HRIS has been implemented only 15 months before the analysis. Additionally, the strategic orientation was measured only by the perception of HR roles by different employee groups, not by any objective SHRM indicator.

Newer research is neither without limitations. For example, L'Ecuyer and Raymond (2023) demonstrated that the firm's e-HRM capabilities are strategic capabilities which determine its competitiveness. However, research they conducted involved only industrial small and medium-sized enterprises (SMEs). Theres and Strohmeier (2023) conducted a meta-analysis, and found no more than medium-sized associations digital between HRM and organizational performance as the ultimate SHRM goal. Moreover, although authors provided some evidence that digital HRM constitutes a successful endeavour which could meet performance expectations, they underlined that the research in the area should be continued and intensified.

Presented findings signal that there is still much to be revealed about the role of digitalized HRM processes in the SHRM orientation of an organization, especially through the field research, which encouraged us to empirically assess the issue on a large-scale data set.

### 2. Methodology

### 2.1. Data and sample

In our analysis we used global data from the 2021 CRANET research. The CRANET research is the largest and most representative research of HRM practices in the world. It is a multi-country, multitime-point survey undertaken regularly over the past 30 years by a collaborative network of scholars from over 40 countries (Parry et al., 2021). It analyses developments in HRM in a national, cross-national, and quasi-longitudinal way to extend the range of internationally comparable evidence about policies and practices in the field (Parry et al., 2011). The CRANET research enables the comparison of HRM policies and practices in a large number of countries across the globe and allows the examination of trends and changes in HRM over the years (Lazarova et al., 2008).

In the CRANET research, a unit of analysis is an organization, and the highest-positioned individual in the HR department is responsible for answering the questionnaire. The CRANET questionnaire explores HRM policies and practices through a set of common questions and covers all important areas – general HRM characteristics, resourcing practices, employee development, compensation and benefits, and employee relations and communication. For this analysis, parts of the questionnaire related to the digital HRM and SHRM orientation were used.

Our analysis includes 4,495 organizations with more than 200 employees from 38 countries worldwide. 67.4% of organizations in the sample are from the private sector, 20.5% from the public sector, 4.8% from the non-for-profit sector and 3.5% with mixed ownership. Regarding the number of employees, 37.8% of organizations in the sample have between 200 and 500 employees, 22.5% from 500 to 1000 employees, 18.7% from

1000 to 2500 employees, and 21.0% have more than 2500 employees.

### 2.2. Measures

Digital HRM indicators. To assess the existence of digital HRM in the organization, all indicators that exist in the CRANET database related to the digitalized way of performing HRM activities were considered. The following nine indicators are used: (1) usage of manager self-service, (2) usage of employee self-service, (3) usage of HRIS, (4) usage of algorithm-based HRM, (5) usage of HR analytics, (6) presence of telework, (7) existence of digital learning, (8) social media recruitment and (9) social media selection. All digital HRM variables were ordinal (variables 1 to 5 and variable 7 were measured on a scale from 0 = 'not at all used' to 3 = 'used to a very great extent'; variable 6 was measured on a scale from 0 = 'not used' to 4 = 'used for more than 50% of employees; variables 8 and 9 were recoded to the scale from 0 = 'not used for any group of employees' to 2 = 'used for both managers/professionals and clericals').

SHRM orientation indicators. In order to assess the organization's SHRM orientation, we extracted variables from the CRANET database using three criteria: that it is a typical SHRM indicator (e.g., Fitz-enz, 1998; Ulrich et al., 2017), that the indicator has already been used in previous SHRM research (e.g., Parry, 2011; Poloski Vokic, 2016.), and that, of course, it is available in the CRANET database. The following nine indicators are used: (1) membership of HR manager in the management board or equivalent, (2) involvement of HR manager in the development of business strategy, (3) existence of written HRM strategy, (4) HR to employee ratio, and (5) existence of HR department performance evaluation. All SHRM variables were binary variables (0 = not the case) not present, 1 = the case / present), including the HR to employee ratio (1 = if the value was 1% orhigher).

### 2.3. Data analysis

The first step of the analysis was the cluster analysis, which was performed by using SHRM indicators to differentiate two groups of organizations according to their SHRM orientation. K-means clustering was used, as one of the most common non-hierarchical, partitioning techniques which attempts to minimize the withincluster sums-of-squares error and finds clusters that are externally isolated and internally cohesive

(Cormack, 1971; Steinley & Brusco, 2008). Cluster analysis resulted in 56.3% of organizations in cluster 1 (organizations which do not have the SHRM orientation) and 43.7% of organizations in cluster 2 (organizations which do have the SHRM orientation). Clusters were used as a binary variable of SHRM orientation. Next, correlation analysis (Spearman's rank correlation coefficients), multiple logistic regression and dominance analysis were performed for revealing the relationship between various digital HRM

indicators and the SHRM orientation. Statistical analysis was performed with IBM SPSS Statistics 25.

### 3. Results

Table 2 presents correlations between nine indicators of digital HRM and the existence of SHRM orientation within the organization.

Table 2 Correlations between digital HRM practices and SHRM orientation

	1	2	3	4	5	6	7	8	9	10
Manager self- service		.658**	.427**	.408**	.390**	.244**	.319**	.080**	.144**	.247**
Employee self- service	.658**		.440**	.380**	.359**	.282**	.345**	.094**	.155**	.229**
HRIS	.427**	.440**		.394**	.504**	.221**	.318**	.036*	.127**	.204**
Algorithm-based HRM	.408**	.380**	.394**		.571**	.163**	.290**	023	.226**	.224**
HR analytics	.390**	.359**	.504**	.571**		.164**	.328**	.004	.188**	.261**
Telework	.244**	.282**	.221**	.163**	.164**		.340**	.132**	.105**	.237**
Digital learning	.319**	.345**	.318**	.290**	.328**	.340**		.122**	.156**	.281**
Social media recruitment	.080**	.094**	.036*	023	.004	.132**	.122**		.198**	.077**
Social media selection	.144**	.155**	.127**	.226**	.188**	.105**	.156**	.198**		.157**
SHRM orientation	.247**	.229**	.204**	.224**	.261**	.237**	.281**	.077**	.157**	

Source: the authors

The correlation analysis revealed that all indicators of digital HRM processes are positively and significantly related with the existence of SHRM orientation. In other words, digital HRM practices are more present in organizations with the SHRM orientation compared to organizations without it.

To investigate which digital HRM practices predict the SHRM orientation better, we conducted a multiple logistic regression, and the results are presented in Table 3.

 Table 3
 Logistic regression analysis of digital HRM practices as predictors of SHRM orientation

β (SE)	Wald	Exp (β)	Model summary	
-1.08 (0.12)	13.387	0.341**	Omnibus test of model coefficients – $\chi^2$ ,	498.62**, 9
			df	
0.22 (0.06)	0.877	1.247**	Hosmer and Lemeshow test – $\chi^2$ , df	14.69, 8
0.06 (0.06)	1.281	1.057	Cox and Snell R <sup>2</sup>	0.17
0.06 (0.05)	8.283	1.061	Nagelkerke R <sup>2</sup>	0.24
0.19 (0.07)	36.297	1.214**	-2 log likelihood	2679.70
0.36 (0.06)	39.779	1.433**		
0.24 (0.04)	40.716	1.277**		
0.32 (0.05)	1.128	1.379**		
-0.06 (0.06)	15.256	0.942		
0.28 (0.07)	80.276	1.318**		
	-1.08 (0.12)  0.22 (0.06)  0.06 (0.06)  0.06 (0.05)  0.19 (0.07)  0.36 (0.06)  0.24 (0.04)  0.32 (0.05)  -0.06 (0.06)	-1.08 (0.12) 13.387 0.22 (0.06) 0.877 0.06 (0.06) 1.281 0.06 (0.05) 8.283 0.19 (0.07) 36.297 0.36 (0.06) 39.779 0.24 (0.04) 40.716 0.32 (0.05) 1.128 -0.06 (0.06) 15.256	-1.08 (0.12)	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$

Source: the authors

The Omnibus test of model coefficients and the Hosmer and Lemeshow test indicate a good model fit. The Omnibus test of model coefficients indicates that the logistic regression model performed to determine the effects of various HRM digitalization indicators on the likelihood that an organization has a SHRM orientation was statistically significant ( $\chi^2 = 498.68$ ; df = 8; p <

.01). The Hoshmer and Lemeshow test that assesses whether predictions made by the model fit with observed group memberships was insignificant ( $\chi^2 = 14.69$ , df = 8; p = .066), which indicates that the data fit the model well. Cox and Snell  $R^2$  and Nagelkerke  $R^2$  reveal that the model is explaining between 17.0% and 24.5% of the variance in the SHRM orientation. Finally, the -2 log likelihood for the model is high (2679.70), which as well indicates that the model fits a dataset.

Results of the logistic regression, more precisely, significant odds ratio values (1.247 < Exp  $(\beta)$  < 1.433 p < .01), demonstrate that manager self-service, algorithm-based HRM, the usage of HR analytics, telework, digital learning and social media selection predict an organization's SHRM orientation more than other digital HRM indicators explored. When looking at odds ratios, it is visible that according to the results of logistic regression, digital HRM practices most important for the SHRM orientation are the usage of HR analytics (Exp  $(\beta) = 1.433$ ), digital learning (Exp  $(\beta) =$ 1.379) and social media selection (Exp  $(\beta)$  = 1.318). In other words, organizations which use HR analytics to a greater extent have 43.3% more probability of having a SHRM orientation, those

that use digital learning to a greater extent have 37.9% more probability of having a SHRM orientation and those that use social media selection for selecting a wider range of employees have 31.8% more probability of having a SHRM orientation.

However, when determining the importance of predictors, the most precise approach is to determine the relative importance of predictors. Dominance analysis (DA) reveals the individual contributions of the predictors in relation to each other within a selected model (Azen & Budescu, 2006), and predictors are compared in pairwise fashion across all subset model, which establishes a hierarchy of levels of dominance (Budescu, 1993). DA is particularly useful when there is a large number and a high level of multicollinearity among predictors, as well as when the predictors collectively explain a medium or large proportion of the variance in the dependent variable (Kumar et al., 2009).

The results of the average contribution of independent variable on SHRM orientation by level and its general dominance are presented in Table 4.

Table 4 Dominance analysis of digital HRM practices as predictors of SHRM orientation

Level	Manager self- service	Employee self- service	HRIS	Algorithm- based HRM	HR analytics	Telework	Digital learning	Social media recruitment	Social media selection
0	0.069	0.062	0.127	0.064	0.076	0.101	0.214	0.005	0.022
1	0.038	0.032	0.099	0.036	0.046	0.080	0.187	0.003	0.014
2	0.022	0.017	0.085	0.021	0.030	0.068	0.171	0.002	0.010
3	0.014	0.009	0.079	0.013	0.022	0.060	0.160	0.001	0.008
4	0.009	0.005	0.075	0.009	0.017	0.054	0.152	0.000	0.007
5	0.006	0.003	0.074	0.007	0.014	0.048	0.145	0.000	0.005
6	0.005	0.002	0.073	0.005	0.012	0.043	0.139	0.000	0.005
7	0.004	0.001	0.072	0.004	0.010	0.039	0.133	0.000	0.004
8	0.003	0.001	0.071	0.003	0.009	0.034	0.128	0.000	0.004
General dominance	0.019	0.015	0.084	0.018	0.026	0.059	0.159	0.001	0.009

Source: the authors

DA revealed the dominant role of digital learning in its association with the SHRM orientation compared to other predictors. First, the average dominance of digital learning is greater than average dominance of other predictors on the 0 level ( $R^2_0 = 0.214$ ). Next, and crucial, the general dominance for digital learning is considerably greater than the general dominance for any other predictors ( $G_{\text{digital learning}} = 0.159$ ).

### 4. Discussion

### 4.1. Theoretical implications

Previous research suggested that the use of digital HRM can help the HR function to increase its value by becoming more strategic (e.g., Bondarouk & Ruel, 2013; Parry, 2011; Parry & Tyson, 2010, Ruel et al., 2004; Ruel et al., 2007). Moreover, it has been elaborated that integrating the concept of digitalization into HRM goes beyond simply aligning digital technologies with pre-established

HRM strategies, but encompasses formulating and implementing HRM strategies that are based on the potential of digitalization to create value for an organization (Strohmeier, 2020). However, the evidence on the relationship between digital HRM practices and SHRM orientation, especially empirically based, is still inadequate, as emphasized by Bondarouk et al. (2017) and Theres and Strohmeier (2023). Moreover, there is a lack of quantitative and larger-scale empirical research in the field. Finally, previous studies showed that the digitalization of HRM could have transformational outcomes (e.g., Parry, 2011; Parry & Tyson, 2010; Ruel et al., 2007), but opposite conclusions are as well present in the literature (e.g., Bondarouk & Ruel, 2013; Marler, 2009; Ruel et al., 2004). All this raises the need for further exploration of the topic.

Consequently, our research adds to the discussion by empirically positioning digital HRM practices as an important element of SHRM orientation. Our results, based on a large-scale global data set, revealed that each digital HRM practice explored (manager self-service, employee self-service, HRIS, algorithm-based HRM, the usage of HR analytics, telework, digital learning, social media recruitment, social media selection) is positively and significantly related with an organization's SHRM orientation (SRQ1).

Moreover, up to date to the best of our knowledge, there were no studies which compare the contribution of various digital HRM practices to an organization's SHRM orientation. The logistic regression analysis we conducted revealed that six out of nine practices explored – manager self-service, algorithm-based HRM, the usage of HR analytics, telework, digital learning and social media selection - are more relevant for having a SHRM orientation. Moreover, the odds ratios showed that practices aligned the most with an organization having a SHRM orientation are the usage of HR analytics, digital learning and social media selection. Organizations which have those practices have a higher probability of strategically oriented HRM (SRQ2).

The revealed importance of the usage of HR analytics is in line with the newest research on HR professionals' competencies (e.g., Ulrich et al., 2021). Namely, HR professionals are nowadays required to make decisions and solve problems based on the most relevant information. HR analytics, as the supreme stage of the transactional HRM activity of data manipulation, is therefore indispensable. Furthermore, the utilization of

digital tools when selecting employees and ensuring learning has drastically increased in the last decade, and this trend has been additionally accelerated by the COVID-19 pandemic. Namely, digital HRM technologies support especially the management of vital HRM activities such as selection and learning (Kurek, 2021).

Furthermore, the dominance analysis revealed that the most relevant digital practice for a SHRM orientation is digital learning (SRQ3). This is in line with the notion that accelerated development of technologies such as AI and the widespread implementation of remote work are enhancing the importance of digital learning (Sayed al Mnhrawi & Alreshidi, 2023). Traditional modes of learning have been surpassed by the flexibility, accessibility and scalability offered by digital learning platforms (Lin et al., 2017). External factors, together with the importance of rapid knowledge absorption in the Knowledge age, positioned digital learning as a cornerstone in SHRM orientation.

Altogether our research implies that the digitalization of HRM contributes to the SHRM orientation of a company (CRQ). Digitalization of HRM goes alongside with making an organization's HRM policies and practices strategic, which results with the alignment of the HRM function with business objectives and consequently organizational performance.

### 4.2. Practical implications

Given the rapid development of technology, organizations must be informed about the importance of HRM digitalization for the positioning of HR function as a strategic partner. The findings of our research indicate that organizations need to pursue the latest trends in the field of digital HRM to obtain or retain the SHRM orientation. However, to enhance the SHRM orientation through the digitalization of HRM processes, organizations must be ready for digital HRM solutions, and managers and employees should acquire new technical and analytical skills (e.g., Bondarouk & Ruel, 2013; Parry, 2011). Therefore, the role of HR department is to foster the HRM digitalization, which includes training managers and employees to use e-HRM solutions, encouraging them to engage in further HRM digitalization, and ensuring that HRM digitalization aligned with processes are organizational needs. More precisely, HR professionals should identify tasks and roles that could be digitalized, and they have to constantly provide support in uncertainties associated with digitalization (Parry & Battista, 2019). With such a comprehensive approach, HRM digitalization will have a transformational impact, observable through the existence of SHRM orientation and its gains.

Furthermore, our results imply which HRM digitalization processes organizations should focus on to achieve the maximal SHRM orientation. Manager self-service, algorithm-based HRM, HR analytics, telework, digital learning and social media selection are the best options to begin with while digitalizing HRM practices, as those practices are standard practices in organizations with a SHRM orientation, implying that they increase the probability of HR function having a strategic position and strategic results in an organization. However, if organizations decide to digitalize one practice at a time to enhance their SHRM orientation, our research suggests that they should start with digital learning, as this practice proved to be the most relevant to support it. Namely, in times when there is a clear need for continuous, flexible, and efficient learning, contemporary e-learning systems and practices provide high adoption, smooth usage, high satisfaction, and close alignment with the current practices of an enterprise (Giannakos et al., 2022).

### 4.3. Limitations and future research

Limitations of our analysis arise from the CRANET data specifics. First, although CRANET data was used previously for the assessment of HRM digitalization (e.g., Berber et al., 2018; Parry, 2011; Strohmeier & Kabst, 2014) and SHRM orientation (e.g., Rimac Bilusic, 2022; Szierbowski-Seibel et al., 2019), the CRANET questionnaire collects selected digital HRM and SHRM indicators. Moreover, CRANET measures are relatively simple (Parry, 2011). A further limitation of the CRANET methodology is the problem of common method variance, as variables are collected from a single source (a representative of the organization). However, Berkery et al. (2017) argued that the CRANET methodology is following all techniques which are suggested to minimize common method bias, psychological and methodological separation of criterion and predictor variables. Precisely, as the validity of single-source measures depends on the expertise of the source responding to the questions and the clarity of items comprising the survey (e.g., Berkery et al., 2017; Huselid & Becker, 2000), the CRANET questionnaire was asked to be completed by the most senior HR professional in the

organization (the presumption of the strongest expertise), and only factual (not subjective) data was collected. To assure that questions were specific and clear, questionnaires were piloted in each country of data collection.

Despite numbered limitations, our analysis contributes to both fields explored - digital HRM and SHRM orientation, as it was conducted on a large-scale international dataset. However, because of the utmost relevance of the strategic approach towards HRM policies and practices for contemporary organizations, as well as the need to accept the 21st century digitalization command of the HRM area, further research using different sampling frames, and HRM and SHRM variables is desirable. For example, as the SHRM research establishes that achieving sustainable competitive advantage is better facilitated by deploying a cohesive set of HRM practices than relying on individual practices in isolation (Fu et al., 2015), our research lays the ground for future investigations of 'bundles' of digital HRM practices that can be identified as combinations of practices most beneficial for organizations.

### **Conclusion**

The objective of our study was to shed further light on the relationship between HRM digitalization and SHRM orientation. The results indicate that HRM digitalization is important for achieving the ultimate stage in the evolution of HRM – the SHRM orientation. For that, the one most relevant digital HRM practice is digital learning, while the usage of manager self-service, algorithm-based HRM, HR analytics, telework, digital learning and social media selection is also highly beneficial for the SHRM orientation of a company. Our study provides empirical support for the relevance of HRM digitalization for strategic HRM outcomes, as well as gives insights into digital HRM practices that could be considered a priority while digitalizing HRM.

# Declarations Availability of data and materials

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

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### References

- Arunprasad, P., Dey, C., Santhanam, N., & Bin Ahmad, K. Z. (2023). Strategic HRM practices, learning orientation and learning competence: study from retail industry. *The Learning Organization 30*(4), 406-425. https://doi.org/10.1108/TLO-05-2022-0066
- Azen, R., & Budescu, D. V. (2006). Comparing predictors in multivariate regression models: An extension of dominance analysis. *Journal of Educational and Behavioral Statistics*, 31(2), 157-180. <a href="https://doi.org/10.3102/10769986031002157">https://doi.org/10.3102/10769986031002157</a>
- Azmi, F. T. (2014). Strategic HR Orientation: A Comparison of Top Ranking Companies in India. *Pacific Business Review International*, 6(7), 9-19.
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99-120.
  - https://doi.org/1177/014920639101700108
- Berber, N., Dordevic, B., & Milanovic, S. (2018). Electronic Human Resource Management (e-HRM): A New Concept for Digital Age. *Strategic management*, *23*(2), 22-32.
  - https://doi.org/10.5937/StraMan1802022B
- Berkery, E., Morley, M. J., Tiernan, S., Purtill, H., & Parry, E. (2017). On the Uptake of Flexible Working Arrangements and the Association with Human Resource and Organizational Performance Outcomes. European Management Review, 14(2), 165-183.
  - https://doi.org/10.1111/emre.12103
- Bissola, R., & Imperatori, B. (2014). The unexpected side of relational e-HRM Developing trust in the HR department. *Employee Relations*, *36*(4), 376-397. https://doi.org/10.1108/ER-07-2013-0078
- Bondarouk, T., & Ruel, H. (2013). The strategic value of e-HRM: results from an exploratory study in a governmental organization. *The International Journal of Human Resource Management*, 24(2), 391-414. https://doi.org/10.1080/09585192.2012.675142
- Bondarouk, T., Parry, E., & Furtmueller, E. (2017). Electronic HRM: four decades of research on adoption and consequences. *The International Journal of Human Resource Management*, 28(1), 98-131. <a href="https://doi.org/10.1080/09585192.2016.1245672">https://doi.org/10.1080/09585192.2016.1245672</a>
- Budescu, D. V. (1993). Dominance analysis: A new approach to the problem of relative importance of predictors in multiple regression. *Psychological Bulletin*, 114(3), 542-551. https://doi.org/10.1037/0033-2909.114.3.542
- Burbach, R., & Royle, T. (2014). Institutional determinants of e-HRM diffusion success. *Employee Relations*, *36*(4), 354-375.
  - https://doi.org/10.1108/ER-07-2013-0080
- Chawla, A. S., Gahlawat, N., Kumar, S., Kundu, S. C., & Kundu, H. (2023). Strategic HRM and Firm Performance: Mediating Role of Knowledge Management Capacity and Innovation Performance. *Management and Labour Studies*, 48(1), 98-117. https://doi.org/10.1177/0258042X221113676
- Chow, I. Hs., Teo, S. T. T., & Chew, I. KH. (2013). HRM systems and firm performance: The mediation role of strategic orientation. Asia Pacific Journal of Management, 30(1), 53-72. <a href="https://doi.org/10.1007/s10490-012-9288-6">https://doi.org/10.1007/s10490-012-9288-6</a>

- Collins, C. J., & Clark, K. D. (2003). Strategic Human Resource Practices, Top Management Team Social Networks, and Firm Performance: The Role of Human Resource Practices in Creating Organizational Competitive Advantage. *Academy of Management Journal*, 46(6), 740-751. <a href="https://doi.org/10.5465/30040665">https://doi.org/10.5465/30040665</a>
- Cooke, F. L., Xiao, M., & Chen, Y. (2021). Still in search of strategic human resource management? A review and suggestions for future research with China as an example. *Human Resource Management*, 60(1), 89-118.
  - https://doi.org/10.1002/hrm.22029
- Cormack, R. M. (1971). A Review of Classification. *Journal* of the Royal Statistical Society: Series A (General), 134(3), 321-353. https://doi.org/10.2307/2344237
- Cranfield Network on International Human Resource Management (CRANET). (2024). CRANET Database. [Unpublished raw data].
- Febrianti, A. M., & Jufri, N. S. N. (2022). Examining the predictors of firm performance: The role of transformational leadership, HRM digitalization, and organizational commitment. *International journal of research in business and social science*, 11(4), 131-139

https://doi.org/10.20525/ijrbs.v11i4.1788

- Fitz-enz, J., & Phillips, J. J. (1998). A New Vision for Human Resources – Defining the Human Resources Function by Its Results. Crisp Publications.
- Fu, N., Flood, P. C., Bosak, J., Rousseau, D. M., Morris, T., & O'Regan, P. (2015). High-Performance Work Systems in Professional Service Firms: Examining the Practices-Resources-Uses-Performance Linkage. *Human Resource Management*, 56(2), 329–352. https://doi.org/10.1002/hrm.21767
- Giannakos, M. N., Mikalef, P. & Pappas, I. O.(2022). Systematic Literature Review of E-Learning Capabilities to Enhance Organizational Learning. *Information* Systems Frontiers, 24, 619-635. https://doi.org/10.1007/s10796-020-10097-2
- Haque, A. (2021). Strategic HRM and organisational performance: does turnover intention matter?. *International Journal of Organizational Analysis*, 29(3), 656-681.
  - https://doi.org/10.1108/IJOA-09-2019-1877
- Ho, M., Soo, C., Tian, A., & Teo, S. T. (2023). Influence of strategic HRM and entrepreneurial orientation on dynamic capabilities and innovation in small- and medium-sized enterprises. *International Small Business Journal*,
  - https://doi.org/10.1177/02662426231201761
- Huselid, M. A., & Becker, B. E. (2000). Comment on "Measurement error in research on human resources and firm performance: How much error is there and how does it influence effect size estimates?" by Gerhart, Wright, McMahan, and Snell. Personnel Psychology, 53(4), 835-854. https://doi.org/10.1111/j.1744-6570.2000.tb02419.x
- Jackson, S. E., Schuler, R. S., & Jiang, K. (2014). An Aspirational Framework for Strategic Human Resource Management. Academy of Management Annals, 8(1), 1-56.
  - https://doi.org/10.5465/19416520.2014.872335

- Kumar, M., Tat Kee, F., & Taap Manshor, A. (2009). Determining the relative importance of critical factors in delivering service quality of banks: An application of dominance analysis in SERVQUAL model. Managing Service Quality: An International Journal, 19(2), 211-228.
  - https://doi.org/10.1108/09604520910943198
- Kurek, D. (2021), Use of Modern IT Solutions in the HRM Activities: Process Automation and Digital Employer Branding. European Research Studies Journal, 24(Special Issue 1), 152-170. https://doi.org/10.35808/ersj/2035
- L'Ecuyer, F. & Raymond, L. (2023). Enabling the HR function of industrial SMEs through the strategic alignment of e-HRM: a configurational analysis. Journal of Small Business & Entrepreneurship, 35(3), 450-482, https://doi.org/10.1080/08276331.2020.1802095
- Lazarova, M., Morley, M., & Tyson, S. (2008). International comparative studies in HRM and performance - the Cranet data. The International Journal of Human Resource Management, 19(11), 1995-2003. https://doi.org/10.1080/09585190802404239
- Lengnick-Hall, M. L., Lengnick-Hall, C. A., Andrade, L. S., & Drake, B. (2009). Strategic human resource management: The evolution of the field. Human Resource Management Review, 19(2), 64-85. https://doi.org/10.1016/j.hrmr.2009.01.002
- Lepak, D. P., & Snell, S. A. (1998). Virtual HR: Strategic human resource management in the 21st century. Human Resource Management Review, 8(3), 215-234. https://doi.org/10.1016/S1053-4822(98)90003-1
- Lin, M. H., Chen, H. C., & Liu, K. S. (2017). A study of the effects of digital learning on learning motivation and learning outcome. Eurasia Journal of Mathematics, Science and Technology Education, 13(7), 3553-3564. https://doi.org/10.12973/eurasia.2017.00744a
- Lo, K., Macky, K., & Pio, E. (2015). The HR competency requirements for strategic and functional HR practitioners. The International Journal of Human Resource Management, 26(18), 2308-2328. https://doi.org/10.1080/09585192.2015.1021827
- Malik, A., Budhwar, P., & Kazmi, B. A. (2023). Artificial intelligence (AI)-assisted HRM: Towards an extended strategic framework. Human Resource Management Review, 33(1), 1-16. https://doi.org/10.1016/j.hrmr.2022.100940
- Mansour, S. (2023). Can strategic HRM bundles decrease emotional exhaustion and increase service recovery performance?. International Journal of Manpower, 44(3), 503-523. https://doi.org/10.1108/IJM-10-2021-0576
- Marler, J. H. (2009). Making human resources strategic by going to the Net: reality or myth?. International Journal of Human Resource Management, 20(3), 515-527. https://doi.org/10.1080/09585190802707276
- Martin-Alcazar, F., Romero-Fernandez, P. M., & Sanchez-Gardey, G. (2005). Strategic human resource management: integrating the universalistic, contingent, configurational and contextual perspectives. International Journal of Human Resource Management, 16(5), 633-659.
  - https://doi.org/10.1080/09585190500082519

- Meijerink, J., Boons, M., Keegan, A., & Marler, J. (2021). Algorithmic human resource management: Synthesizing developments and cross-disciplinary insights on digital HRM. The International Journal of Human Resource Management, 32(12), 2545-2562. https://doi.org/10.1080/09585192.2021.1925326
- Parry, E. (2011). An examination of e-HRM as a means to increase the value of the HR function. The International Journal of Human Resource Management, 22(5), 1146-1162.
  - https://doi.org/10.1080/09585192.2011.556791
- Parry, E., & Battista, V. (2019). The impact of emerging technologies on work: a review of the evidence and implications for the human resource function. Emerald Open Research, 1(4), 1-14. https://doi.org/10.1108/EOR-04-2023-0001
- Parry, E., & Strohmeier, S. (2014). HRM in the digital age digital changes and challenges of the HR profession. Employee Relations, 36(4), 456-461. https://doi.org/10.1108/ER-03-2014-0032
- Parry, E., & Tyson, S. (2010). Desired goals and actual outcomes of e-HRM. Human Resource Management Journal, 21(3), 335-354. https://doi.org/10.1111/j.1748-8583.2010.00149.x
- Parry, E., Farndale, E., Brewster, C., & Morley, M. J. (2021). Balancing Rigour and Relevance: The Case for Methodological Pragmatism in Conducting Large-Scale, Multi-Country and Comparative Management Studies. British Journal of Management, 32(2), 273-282. https://doi.org/10.1111/1467-8551.12405
- Parry, E., Stavrou-Costea, E., & Morley, M. J. (2011). The Cranet International Research Network on Human Resource Management in retrospect and prospect. Human Resource Management Review, 21(1), 1-4. https://doi.org/10.1016/j.hrmr.2010.09.00
- Poloski Vokic, N. (2016). Fifteen years of strategic HRM philosophy in Croatian companies - Has HR department evolved into a strategic partner?. Strategic Management, 21(2), 37-44.
- Prahalad, C. K., & Hamel, G. (1994). Strategy as a field of study: Why search for a new paradigm?. Strategic Management Journal, 15(S2), 5-16. https://doi.org/10.1002/smj.4250151002
- Prikshat, V., Malik, A., & Budhwar, P. (2023). Al-augmented HRM: Antecedents, assimilation and multilevel consequences. Human Resource Management Review, 33(1), 100860. https://doi.org/10.1016/j.hrmr.2021.100860
- Rimac Bilusic, M. (2022). Is Strategic HRM Orientation Relevant for the Status of Organizational Work-Life Balance Practices? In S. Sever Malis, B. Jakovic & I. Nacinovic Braje (Eds.), Proceedings of FEB Zagreb International Odyssey Conference on Economics and Business (pp. 890-905). University of Zagreb - Faculty of Economics & Business.
- Ruel, H. J. M., Bondarouk, T. V., & Looise, J. K. (2004). E-HRM: Innovation or irritation – An explorative empirical study in five large companies in web-based HRM. Management Revue, 15(3), 364-380. https://doi.org/10.5771/0935-9915-2004-3-364
- Ruel, H. J. M., Bondarouk, T. V., & Van der Velde, M. (2007). The contribution of e-HRM to HRM effectiveness. Employee Relations, 29(3), 280-291. https://doi.org/10.1108/01425450710741757

- Sayed al Mnhrawi, D. N. T. A., & Alreshidi, H. A. (2023). A systemic approach for implementing Al methods in education during COVID-19 pandemic: higher education in Saudi Arabia. *World Journal of Engineering*, 20(5), 808-814. https://doi.org/10.1108/wje-11-2021-0623
- Schuler, R. S., & Jackson, S. E. (2005). A Quarter-Century Review of Human Resource Management in the U.S. The Growth in Importance of the International Perspective. *Management Revue*, *16*(1), 11-35. https://doi.org/10.5771/0935-9915-2005-1-11
- Steinley, D., & Brusco, M. J. (2008). Selection of Variables in Cluster Analysis: An Empirical Comparison of Eight Procedures. *Psychometrika*, 73(1), 125-144. https://doi.org/10.1007/S11336-007-9019-Y
- Strohmeier, S. (2020). Digital human resource management: A conceptual clarification. *German Journal of Human Resource Management* 34(3), 291-365.
  - https://doi.org/10.1177/2397002220921131
- Strohmeier, S., & Kabst, R. (2014). Configurations of e-HRM an empirical exploration. *Employee Relations*, 36(4), 333-353. https://doi.org/10.1108/ER-07-2013-0082
- Szierbowski-Seibel, K., Wach, B. A., & Kabst, R. (2019). The Collaboration of Human Resource Management and Line Management – An International Comparison. Organization Management Journal, 16(4), 262-277. https://doi.org/10.1080/15416518.2019.1679076
- Theres, C., & Strohmeier, S. (2023). Met the expectations? A meta-analysis of the performance consequences of digital HRM. *The International Journal of Human Resource Management*, 34(20), 3857-3892. <a href="https://doi.org/10.1080/09585192.2022.2161324">https://doi.org/10.1080/09585192.2022.2161324</a>
- Ulatowska, R., Wainio, E., & Pierzchala, M. (2023). Digital transformation in HRM of the modern business service sector in Finland and Poland. *Journal of Organizational Change Management*, 36(7), 1180-1192. <a href="https://doi.org/10.1108/JOCM-11-2022-0339">https://doi.org/10.1108/JOCM-11-2022-0339</a>

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- Ulrich, D. (1997). Human Resource Champions The Next Agenda for Adding Value and Delivering Results. Harvard Business School Press.
- Ulrich, D. (1998). A New Mandate for Human Resource. Harvard Business Review, 76(1), 124-134.
- Ulrich, D., Kryscynski, D., Ulrich, M., & Brockbank, W. (2017). Victory Through Organization: Why the War for Talent Is Failing Your Company and What You Can Do About It. McGraw-Hill.
- Ulrich, D., Ulrich, M., Wilson Burns, E., & Wright, P. (2021).

  New HRCS 8 Competency Model Focuses on
  Simplifying Complexity.

  https://www.rbl.net/insights/articles/new-hrcs-8competency-modelfocuses-on-simplifying-complexity
- Waldkirch, M., Bucher, E., Schou, P. K., & Grunwald, E. (2021). Controlled by the algorithm, coached by the crowd How HRM activities take shape on digital work platforms in the gig economy. *The International Journal of Human Resource Management*, 32(12), 2643-2682. https://doi.org/10.1080/09585192.2021.1914129
- Walkowiak, E. (2023). Digitalization and Inclusiveness of HRM Practices: The Example of Neurodiversity Initiatives. *Human Resource Management Journal*, <a href="https://doi.org/10.1111/1748-8583.12499">https://doi.org/10.1111/1748-8583.12499</a>
- Wright, P. M., & McMahan, G. C. (1992). Theoretical Perspectives for Strategic Human Resource Management. *Journal of Management*, *18*(2), 295-320. <a href="http://doi.org/10.1177/014920639201800205">http://doi.org/10.1177/014920639201800205</a>
- Zhou, Y., Liu, G., Chang, X., & Wang, L. (2021). The impact of HRM digitalization on firm performance: investigating three-way interactions. Asia Pacific Journal of Human Resources, 59(1), 20-43. https://doi.org/10.1111/1744-7941.12258