

Article

Augmenting HRM through enhancing the benefits of digital transformation

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Abstract: Digital Human Resource Management transformation represent a reality that each organisation is dealing with these days, a situation that was accelerated by COVID-19 pandemic period. Organisations that are taking this step are determined by the benefits that the transformation could have for both employees and organisation's performance. However, research in the field failed in offering the evidence on these benefits in relation to all type of performance. At the same time, despite the advantages brought, the process could still be a challenge for HR professionals to implement, as blending digital processes and human touch is not so easy to be done. Research on the way in which the digital HRM transformation should take place, focusing on factors that facilitate the transformation as well as on HR professionals competencies needed is recommended. Thereby, the purpose of our paper is to analyse the main concepts of augmenting HRM and to propose a future research methodology for this topic.

Keywords: augmentation; digitization; automation; artificial intelligence (AI); technology; human resource management (HRM); digital transformation; augmented capabilities;

Classification-JEL: J20; J24; J29

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INTRODUCTION

Digital Human Resource Management (HRM) represents a reality that more and more organisations live, no matter the industry they belong to or their dimension. Organisations need to adapt faster to changes brought by the digital era and to respond quickly to environmental changes (Zhang and Chen, 2023), thus digital transformation is needed. This reality may bring challenges in transforming HRM processes such as talent acquisition, onboarding, performance management or learning and development (Aggarwal and Sharon, 2017).

A study that investigated the implications of digitization in HRM on employees' well-being identified negative effects, not just positive ones (Fedorova et al., 2019). In this sense, the study highlighted that specific management solutions are needed to maintain employees' well-being at work (Fedorova et al., 2019). At the same time, other studies have shown that regardless of the associated challenges, the digitization process in HRM will continue to take place at a faster or more moderate pace (Chapano et al., 2023). The drivers of HRM digital transformation were internal customer needs, industry digital innovation, competitor challenges, digital innovation governance, and digital era needs (Zhang and Chen, 2023). In this context, increasing the benefits of this process by supporting organizations and HR professionals to manage the digital HRM transformation is recommended.

Research on performance achievement generated by digital HRM is insufficient, without convincing evidence and even a meta-analysis, according to 96 empirical studies that found that between digital HRM and all kind of performance exists a moderate association (Theres and Strohmeier, 2023). The results of another study show that the analysis of increasing digitization in management and development of human resources is still at a very early stage, requiring more in-depth research (Ferreira et al., 2021). Thus, a brief review of what is already known related to digital HRM topic and a research proposal aimed to increase the benefits of digital HRM is the purpose of our paper.

LITERATURE REVIEW

Digitization in HRM appeared after decades of industrialization and legislative requirements, because many routine operations improvements related to workforce were necessary (Malik et al., 2022). After the 1980s, because of the evolution of human resources programs, managers could analyse human resources indicators, solving complex tasks,

and supporting HR strategy (Malik et al., 2022). The 2000s represented the time when contributions to the field of HRM with reference to digitization and automation were unprecedented (Malik et al., 2022). The evolution towards digitization of HRM field was natural, coming with multiple challenges.

To clarify the term "digitization in HRM", it is necessary to define some related terms, used more and more in the scientific community:

- HRM digitization means the technical process of converting analog information about HRM into digital information about HRM, for automatic data processing (Strohmeier, 2020);
- HRM digitalization means the socio-technological process of exploiting digitization potentials for the actual use of software in the process of planning and managing HR (Strohmeier, 2020);
- The digital HRM transformation refers to the socio-technological digitization sub-process of exploiting digitization potentials for strategic HRM purposes (Strohmeier, 2020);
- Digital HRM is the socio-technological result of digitalization of HRM (Strohmeier, 2020).

The digitalization process of HRM activities can be carried out using the mobile phone, software applications, electronic press, social media and information technology (Varadaraj and Wadi, 2021). More precisely, the elements through which digitization is integrated into HRM are: the digital workforce (employees have devices connected to internet and access to applications used via internet); online work and tasks (organizations using digital tools and the online environment to connect and communicate with employees); managing the support offered to employees in a digital way (the implementation and the use of digital technologies to support HRM activities - salary management, rewards and recognition programs, performance management, training and development); new HRM technologies (mobile-based activities for recruitment and selection) (Varadaraj and Wadi, 2021). The human resources processes frequently digitized are: recruitment and selection, statistical analysis of the employee's life cycle, monitoring the quality of the training programs carried out (Zahariev, et al., 2021).

HRM may serve as the support of all other departments in organizations for digitalizing processes. For example, in Indonesia, many companies implement new technologies in their business units, emphasizing the skills of their employees (Alam and Syarifudin, 2018; Kuchciak and Warwas, 2021). When a company goes digital, HRM must keep up (Kuchciak and Warwas, 2021). It is necessary for HRM to keep pace with digitization in this field, aligning itself strategically

with organizations that adopt digitization, and with the workforce that is increasingly connected to internet (Varadaraj and Wadi, 2021). A study aimed at synthesizing the specialized literature in the field concluded that the publications that appeared covered general themes, such as the digitization of HRM and the implications it has on human resources, the implications of digitization on HRM, including the HRM strategy, as well as identifying the development needs of human resources (da Silva et al., 2022).

Another study aimed to clarify the impact level that digitization may have on HRM, defined as e-HRM (electronic Human Resource Management) (Samson and Agrawal, 2020). The authors classified three levels of influence of e-HRM, considered to be in a continuum or evolutionary process: transactional or operational e-HRM (routine tasks), relational e-HRM (facilitating communication between employees and between employees and managers or other stakeholders), and transformational e-HRM (providing inputs for generating strategic directions) (Samson and Agrawal, 2020). E-HRM has proven to be essential for a modern HRM (Arfara et al., 2017), this concept being studied since the 2000s (Ruel et al., 2007), although its impact on the company's strategic results had not been still empirically proven by studies conducted in the period 1990-2011 (Marler and Fisher, 2013) and even by those conducted later (Theres and Strohmeier, 2023).

Connecting HRM to the concept of artificial intelligence (AI), it was concluded that AI refers to a set of digital technologies that mimic certain functions of natural intelligence, such as: perception, learning, cognition, or reasoning, to augment or automate human tasks, which conventionally assume that such functions of natural intelligence are fulfilled (Strohmeier, 2022). According to some voices, the concern that AI may cause significant unemployment in the labour market is false, because digitalization actually increases the number of vacant jobs (Tschang and Almirall, 2021). The threat is now the technological singularity, much more productive than humans, or even on the verge of becoming more intelligent than them (Dégallier-Rochat et al., 2022).

First of all, the adoption of AI requires managers to develop new skills for companies to remain competitive on the market (Giraud et al., 2022). However, the complete replacement of humans is more of a myth than a reality, with new technologies changing the way we work, and bringing new challenges to the way we manage human-machine interactions (Dégallier-Rochat et al., 2022). Technology empowers employees, more than mechanizing them and no longer recognizing their

competences (Dégallier-Rochat et al., 2022). Work automatization impact on workforce occupancy and human resource competencies refer to favouring non-repetitive tasks against repetitive ones, while job offers that require a medium qualification will disappear (Tschang and Almirall, 2021). Indeed, the AI could modify the employees' structure within an organization, as less employees with high qualification will be employed, but this is possible to be happening depending on AI progress and its capacity to substitute more complex work frameworks (Strohmeier, 2022).

AI can be used in HRM either to create more efficient processes and eliminate the repetitive tasks such as the administrative ones, or those related to recruitment and selection - or to contribute more to data driven decisions, such as generating trends and metrics to facilitate strategic decisions. Enhancing the benefits of digital HRM refers to work tasks performed more efficiently by employees and employers through digital tools (Dégallier-Rochat et al., 2022; Wagner, D. N., 2020). In other words, the man is not replaced by AI, only being assisted by it, and becoming in this way, more effective. However, there are also studies that say there is resistance to increasing the capabilities of human resources through the use of AI (McLaughlin and Quan, 2019). The digital transformation of human resources development requires professional knowledge about advanced digitization (databases and AI) and smart applications, respectively instrumental skills (working with digital information, creating and sharing digital content, collaborating with digital tools) (McLaughlin and Quan, 2019).

Digital transformation refers to enhancing performance of the organisations by integrating technologies (mobile, social networking, big data, and analytics) within its activities, while all its stakeholders will benefit from (Gigauri, 2020). Thus, human resource digital transformation should deal with the same thing. However, its conceptualization is confusing or at least is at the very beginning (Bansal et al., 2023). As HRM was among the most affected function by COVID-19 pandemic period (Bresciani et al., 2021), the process of digital transformation was driven by it. A recent qualitative research points out the fact that the main HR processes are transformed by digitalization - recruitment and selection, onboarding, training and development, performance management (including employee rewards and incentives management) (Bansal et al., 2023). The same study suggests that HR digital transformation is lead by innovation capability of the organization which is also enabled through successfully integrating digital

infrastructure and architecture, human creativity, and capability (Bansal et al., 2023).

Enhancing the benefits of digital transformation in HRM can be explained by using software algorithms that work using digital databases, and which facilitate HRM decisions and automate specific HRM activities (Meijerink et al., 2021). Digitally stored data about work, regarding employees or HRM practices represents a good example in this sense (Meijerink et al., 2021), as it puts up-to-date timely reports about employees in companies at the decision of human resources specialists. In order to increase their capabilities (and not only), employees that use intelligent machines should go through five stages: taking the first step, separate performed analysis, entering the field, narrowing down, respectively continuing the activities (Spirgi, 2020). Among the most common benefits of digital HR transformation, when considering its transactional function we find higher efficiency, reduced repetitive administrative tasks that give the opportunity for HR professionals to focus more on strategic aspects and tasks that matter, and cost reduction. The relational function of digital HRM enables all stakeholders to experience a more qualitative connection, its less time/ cost consuming and can also bring a contribution to work-life balance issues for employees. On the other hand, a not clear enough process of digital transformation in organizations may bring some negative consequences too. For example, when using AI in selecting Curriculum Vitae's (CVs) based on the historical actions, this can turn into more discriminatory practice, eliminating those candidates who are not commonly hired. At the same time, this result represents the mirror of the companies past actions, highlighting a discriminatory pattern in CV selection and ranking (Walkowiak, 2023). Thus, it can help the organization to revise the recruitment and selection principles and practices. Another example could be related to performance management practice. Even though employees need personal feedback and a one-to-one discussion could be helpful instead of a simple diagram made by a software, some evaluations made only by humans may be full of bias and subjective actions. These situations are just some examples of how HRM augmentation and human touch need to blend to bring value to organizations.

As research in digital HR transformation still have many unanswered questions, research questions that our future research should answer could be: How can organization blend digital HR transformation and human touch? What are the HR professionals' competencies needed in the context of digitization?

What are the main factors that can enable the process of digital transformation of HRM?

PROPOSED RESEARCH METHODOLOGY

In accordance with the specialized literature reviewed, this paper proposes a few research objectives and analyzes the methods that could be used in a future study. Additionally, this paper offers recommendations for organizations that want to or have already started the process of HRM digital transformation in order to increase (augment) the benefits derived from both, employees and employers.

The specific objectives, through which the general objective will be met, are:

1. To analyse the key concepts related to digitization of HRM and the inter-relationships between augmentation, digitization, automation, AI, and technology.
2. To identify the challenges that can arise in the process of digital transformation in HRM.
3. To analyse the factors that influence the digital transformation process in HRM considering all the associated stakeholders, respectively the digital capacity of the organizations.
4. To determine the necessary skills for professionals, so that to be able to multiply the beneficial effects of digital transformation in HRM.
5. To set up a digital transformation model of HRM field, which explains how the capabilities of employees and employers will be augmented through AI.

Research methods

In accordance with the general objective and the specific objectives of the research, the working methodology follows several main stages. In the first stage, related to the specific objectives no. one, two and three critical analyses will be applied for specialized studies, and meta-analysis for the empirical studies. The analysis of the specialized literature will be carried out using the PRISMA method as it is one of the methods that help to select the most relevant articles and to analyse them systematically. This first phase is extremely useful in explaining the context of the research and proposing hypotheses in agreement with the results of previous results.

The second stage aims to achieve the research objectives no. four and five, through collecting data through a survey. The research tool used will be the questionnaire, and it will be distributed online. This method is the most suitable for the proposed study,

taking into account the fact that the topic of the research it is about the adoption of digitization in companies. To achieve objective no. four the content analysis of the data will be developed in a workshop, in which, human resources professionals, students enrolled in bachelor's and master's programs related to the HRM field, and interested teachers will participate. The topic will be ways to increase the capabilities of employees and human resources professionals under digitalization conditions.

To fulfil the overall objective, the statistical analysis of the data will be done later through descriptive, correlation and regression analysis. The main method for this research will be the quantitative one, and a qualitative method will also be used, in terms of content analysis of the answers recorded at the workshop, to complement the quantitative method with recommendations for organizations that want or have already started the digitization process in HRM activity.

CONCLUSIONS

HRM digital transformation represents the current focus for many organisations, COVID-19 pandemic period forcing them to even accelerate the process. Research in HRM field started to focus on this topic, many of them looking into literature review and identifying the potential benefits, however few convincing evidence was brought for the link between digital HRM and performance. Thus, it can be argued that even though the benefits exist, to augment the results, the digital transformation process needs to be properly addressed, starting with the reason why it is necessary, continuing with competence development of HR professionals and continuously improve the process.

This paper tried to capture the complexity of digital HRM terminology, to underline the main findings of the research in the field, and to develop a research proposal to be undertaken in the future. The sample of the proposed research will contain: human resources professionals, employers, employees, students, and teachers.

Many of the studies analysed in the specialized literature revealed the fact that digitization in HRM is a current topic of interest for the labour market and requires greater attention in further investigation. The main purpose of the research involves also making some recommendations for the organizations that want to align themselves with a digitized HRM. This set of suggestions will be created following a rigorous analysis of the specialized literature, a quantitative analysis, and a workshop with such a topic.

Through the specific objectives proposed in our methodology, are followed some results, such as: to identify challenges for the digitization of HRM in the local industry and the key factors that can influence the digitalization process of HRM, to delimit the necessary skills for HRM specialists to practice e-HRM, and to propose a conceptual model that explains how the capabilities of employees and employers are augmented through the digitization of HRM. All these results will be detailed based mainly on a quantitative analysis that will be carried out and will have respondents from the local industry. Thus, we believe that the reactions obtained from employers, employees, students and interested teachers will lead us to a completely original approach.

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