

The Role of Digital Human Resources Management Functions in Enhancing Digital Transformation Readiness

دور وظائف إدارة الموارد البشرية الرقمية في تعزيز جاهزية التحول الرقمي

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ABSTRACT

The research problem addressed in this study is to investigate the role of digital employee resources in enhancing the readiness for digital transformation in Jordanian commercial banks. To achieve the research objectives, this study adhered to the quantitative research methodology, which provides a numerical measurement and analysis of factors determining accreditation using SPSS. Moreover, electronic survey questionnaires were distributed to 250 respondents from the population, are Workers of Jordanian banks, and 193 questionnaires were collected from the respondents and were used in the results aggregation. The results indicate that there is a statistically significant effect at the significance level ($\alpha \leq 0.05$) of digital human resource management in its various dimensions (such as digital recruitment, digital selection, digital performance evaluation, digital training and development, digital compensation management, and digital learning) on the readiness of digital transformation in Jordanian commercial banks. This means that improving these dimensions can enhance the readiness of banks for digital transformation. The results indicate that there is a statistically significant effect at the significance level ($\alpha \leq 0.05$) of digital human resource management in its various dimensions (such as digital recruitment, digital selection, digital performance evaluation, digital training and development, digital compensation management, and digital learning) on the readiness of digital transformation in Jordanian commercial banks. This means that improving these dimensions can enhance the readiness of banks for digital transformation. The study recommends focusing on developing digital HR functions, with special attention to digital performance appraisal, training and development, and digital learning. It also stresses the importance of enhancing the deployment of digital HR functions and improving readiness for digital transformation by leveraging ICT resources.

Keywords: Digital Human Resources Management, Digital Transformation Readiness, Digital Recruitment, Digital Selection, Digital Performance Evaluation, Digital Training and Development, Digital Compensation Management, Digital Learning, Jordanian Commercial Banks.

1. Introduction

The world is presently undergoing diverse transformations across social, economic, cultural, scientific, and technological domains. (Zhang & Chen, 2024). These transformations have, in turn, contributed to the development of banks that work to cultivate and advance human resources and assist them in adapting to new modern developments (Diener & Špaček, 2021).

Human resources management expresses us with the optimal use of the available human element efficiently and effectively, as modern technologies show their role in developing human resources

(AlHamad et al., 2022), as they are considered the nerve of practical life, due to their role in reducing practical pressures, and technology also plays a role in bringing about many changes in work and management patterns that allow for the provision of speed for the exchange of information and the change of plans and skills (Kambur & Yildirim, 2023).

In recent years, digital transformation has emerged as a topic of significant importance. This process involves the reorganization of the services that are offered in the economic sectors in general, and in the banking sectors in particular, in order to take into account, the requirements and needs of human resources in the digital age in which they are living (Ulas, 2019).

In light of this, it is possible to assert that the functions of digital human resources management play a significant role; in fact, they are the essential factor in enhancing the readiness of the organization for digital transformation (Bansal et al., 2023). A further clarification of the subject matter is provided by this statement, which makes reference to the crucial nature of being prepared for digital transformation and the role that human resource management plays in this regard (Blanka et al., 2022). Using Jordanian commercial banks as a central case, the research also demonstrates the important role that digital HR management technologies play in ensuring improvements in digital transformation strategies. This is demonstrated through the use of a comprehensive case study. The research problem addressed in this study is to investigate the role of digital employee resources in enhancing the readiness for digital transformation in Jordanian commercial banks.

2. Literature review

2.1 Digital human resources management

Researchers' views on the concept of digital human resource management differed based on the differences in each of their points of view, study approaches, as well as the existence of conceptual overlaps with some close terms, including but not limited to (electronic human resource management), although digital human resource management is the latest in comparison to electronic human resource management (Kuhn et al., 2021). (Mia & Faisal, 2020) defined it as the transformation of human resource management processes and functions into digital ones using mobile and cloud technologies to ensure employee engagement and commitment to the organization. As for (Thomas, 2020), he defines it as: the result of using innovative developments and modern information technology with the aim of standardization and achieving increasing automation of human resource management activities to transform them into digital ones to ensure efficiency, effectiveness, and support for other departments and operations in the organization. Some define it as the use of computer systems, digital technologies, and communication networks to accomplish human resource management functions (Zhang & Chen, 2023).

When looking at the functions and activities related to digital human resources management, we find that the functions and activities that have been adopted in most research, despite the difference in their names and numbers, are represented by the following: (digital recruitment, digital selection, digital performance evaluation, digital training and development, digital compensation management, digital learning (Jebril et al., 2024), (Zhang & Chen, 2024).

2.2 Digital transformation

Digital transformation has been generally defined after great efforts and many interventions as: "A process that aims to improve an entity by making significant changes in its characteristics through a set of information, computing, communications, and communication technologies" (Vial, 2021). Here, the aspects that reflect the importance of digital transformation have varied according to the researchers' points of view. Where, Femenía Mulet (2020) summarizes this importance in the (economic, social, and political) aspects. While (Nadeem et al., 2018) focused on its ability to enhance convergence between the real and virtual worlds due to the spread of digital methods and tools, making them a driving force for innovation and change. As for Aldoseri

et al. (2023) he defines it in improving the operational efficiency of the organization by automating processes and improving performance, as well as speed and accuracy in the decision-making process. In periods of crises, disasters, and epidemics, Hai et al. (2021) indicated the importance of digital transformation during the pandemic (COVID-19) when organizations were forced to find an appropriate way to accomplish their activities and operations and rely on digital means and tools in remote work to avoid personal proximity in order to address the crises resulting from the pandemic and thus ensure the re-provision of various services after the suspension and curfew in most regions of the world. (Qirem et al., 2023)

2.3 Hypothesis development

Efficient use of highly skilled Human Resources (HR) is crucial for expediting development. In order to enhance the caliber of human resources, it is imperative to motivate universities to cultivate an ecosystem that is pertinent to the contemporary era. The accessibility of technology and the provision of skilled human resources in models and designs within the technology ecosystem are crucial factors that present both challenges and opportunities for achieving the level of the fourth industrial revolution (Hidayati, 2022). The findings of Szűcs-Luipold (2024) indicate that the facilitation of digital transformation behaviors depends on certain conditions: self-efficacy has a distinct impact on the desire to participate in digital transformation, and digital transformation behaviors have a highly significant impact on digital transformation performance. Surprisingly, the dynamics affecting individual digital transformation readiness changed in the presence of continuous improvement, indicating paradoxical effects. Moreover, the connections among the intention to undergo digital transformation, the behaviors observed during digital transformation, and the performance of digital transformation are influenced by the level of continuous improvement maturity. While, the study conducted by Bahyan et al. (2024) revealed that the implementation of flexibility and adaptability to technological advancements, together with cyber resilience, would significantly improve the process of digital transformation. The participants' self-efficacy in the study prompted them to cultivate innovation readiness, so fostering creativity and promoting co-creation, all while sustaining collaborative endeavors with clients and stakeholders. This influenced various technological and human factors, including the significance of managers' comprehension of customer requirements, preferences, and challenges, which entails actively pursuing and appreciating customer input to guide decision-making. Demir et al. (2023) detected a dual impact of digital transformation on innovations and HR planning, as well as the reciprocal influence of innovations on HR planning. Furthermore, the implementation of digital transformation and innovations amplified the qualitative aspects of HR planning while diminishing the quantitative aspects. The findings of Narbariya et al. (2022) indicate that the adoption of high-performance work systems, which include comprehensive training and development, performance-based evaluation and compensation, involvement in decision-making, flexible work opportunities, and strict recruitment and staffing processes, leads to improved outcomes at the employee level. Thereby definitively influencing their preparedness to adapt to digital transformations. In their study, Gupta et al. (2022) employed Fuzzy Analytic Hierarchy Process (AHP) to prioritize the factors related to manpower readiness for the digitalization of logistics operations. The analysis reveals that organizational factors are the paramount elements that demand prompt attention. Critical sub-factors for developing competencies in the logistics industry include offering appropriate training on functional skill enhancement, securing top management support and commitment for digitalization, and fostering an organizational culture that promotes process digitalization. Varadaraj & Al Wadi (2021) argue that digital Human Resource optimization of Social, Mobile, Analytics, and Cloud (SMAC) technology can support organizations in managing and assuming responsibility for ensuring that assumptions and expectations within the organization lead to appropriate behavior (Alshehadeh et al., 2024). The implementation of digitalization in HRM will enhance its efficiency and relevance in the future. Failure to undergo digital transformation will result in HRM falling significantly behind the global

demands of the organization. According to the above, the following hypotheses can be reached:

H01: The first main hypothesis: There is no statistically significant effect at the significance level ($\alpha \leq 0.05$) of digital human resource management in its dimensions (digital recruitment, digital selection, digital performance evaluation, digital training and development, digital compensation management, digital learning) on digital transformation readiness.

Several sub-hypotheses emerge from this main hypothesis, which are:

H01.1: There is no statistically significant effect at the significance level ($\alpha \leq 0.05$) of digital human resource management on leadership factors.

H01.2: There is no statistically significant effect at the significance level ($\alpha \leq 0.05$) of digital human resource management in its dimensions on strategic focus factors.

H01.3: There is no statistically significant effect at the significance level ($\alpha \leq 0.05$) of digital human resource management on customer factors.

H01.4: There is no statistically significant effect at the significance level ($\alpha \leq 0.05$) of digital human resource management on market factors.

3. Methodology

To achieve the research objectives, this study adhered to the quantitative research methodology, which provides a numerical measurement and analysis of factors determining accreditation using SPSS. Moreover, electronic survey questionnaires were distributed to 250 respondents from the population, are Workers of Jordanian banks, and 193 questionnaires were collected from the respondents and were used in the results aggregation. The investigation aims to determine the role of digital human resources management functions in enhancing digital transformation readiness.

4. Results

To identify the likelihood of affirmative action and acceptance of this hypothesis, the researcher used multiple regression analysis to test this hypothesis, analyzing the variability of regression as shown in the following table:

Table No. (1): Multiple linear regression analysis of the main hypothesis

Independent Variable	Model Summery		ANOVA			Coefficients				
	R	R ²	F	D F	Sig F*	variables	B	Standard error	T	Sig t*
<i>digital human resources management functions</i>	0.712	0.536	186.658	4	0.000	leadership factors	0.364	0.036	4.389	0.000
						strategic focus factors	0.264	0.029	3.561	0.009
						customer factors	0.267	0.046	3.473	0.008
						market factors	0.316	0.038	3.489	0.003

*The effect is statistically significant at the level ($\alpha \leq 0.05$)

The results of Table (1) indicate a positive linear correlation. That is, there is a statistically significant effect. To visualize digital human resources management functions in enhancing digital transformation readiness. The correlation coefficient ($R = 0.712$) indicates a statistically significant relationship between the independent variable (digital human resources management functions) and the dimensions of the dependent variable (digital transformation readiness).

The branching hypotheses of this hypothesis have been subjected to simple linear regression analysis, and the results are as follows:

Table No. (2): Impact test results H1.1, H1.2, H1.3 & H1.4

I.V	D.V	Model Summery		ANOVA		Coefficients			
		R	R2	F	Sig F*	B	standard error	T	Sig T*
<i>digital human resources management functions</i>	leadership factors	0.642	0.412	86.644	0.000	0.431	0.036	14.785	0.000
	strategic focus factors	0.681	0.443	81.486	0.000	0.458	0.034	17.631	0.000
	customer factors	0.635	0.450	79.495	0.000	0.419	0.041	16.672	0.000
	market factors	0.672	0.472	89.682	0.000	0.426	0.039	14.647	0.000

*The effect is statistically significant at the level ($\alpha \leq 0.05$)

The results are presented in Table No. (2) indicate a statistically significant impact of the perception of digital human resources management functions in enhancing digital transformation readiness (leadership factors, strategic focus factors, customer factors, and market factors).

5. Discussion

The results indicate that there is a statistically significant effect at the significance level ($\alpha \leq 0.05$) of digital human resource management in its various dimensions (such as digital recruitment, digital selection, digital performance evaluation, digital training and development, digital compensation management, and digital learning) on the readiness of digital transformation in Jordanian commercial banks. This means that improving these dimensions can enhance the readiness of banks for digital transformation. The results also show a statistically significant effect at the significance level ($\alpha \leq 0.05$) of digital human resource management on leadership factors in Jordanian commercial banks. This indicates that digital human resource management plays an important role in improving and developing leadership within these banks. The results also show a statistically significant effect at the significance level ($\alpha \leq 0.05$) of digital human resource management in its various dimensions on strategic focus factors in Jordanian commercial banks. This means that digital human resource management can contribute to enhancing the strategic focus of banks. The results indicate a statistically significant effect at the significance level ($\alpha \leq 0.05$) of digital human resource management on customer factors in Jordanian commercial banks. This means that digital HR management can positively impact customer experience and satisfaction. Finally, the results show that there is a statistically significant effect at the significance level ($\alpha \leq 0.05$) of digital HR management on market factors in Jordanian commercial banks. This suggests that digital HR management may have a direct impact on market factors such as competition or market share.

These results are consistent with a number of studies. Rapid development requires efficient use of skilled HR. Szűcs-Luipold (2024) found that self-efficacy significantly impacts digital transformation behaviors and performance. Individual digital transformation readiness changed paradoxically with continuous improvement. Continuous improvement maturity affects digital transformation intention, behaviors, and performance. Digital transformation would benefit from cyber resilience and technological flexibility, according to Bahyan et al. (2024). In the study, self-efficacy fostered innovation readiness, creativity, and co-creation with clients and stakeholders. This affected technological and human factors, such as managers' understanding of customer needs, preferences, and challenges and actively seeking and appreciating customer input to guide decision-making. Digital transformation affects HR planning, and innovations affect HR planning, according to Demir et al. (2023). Digital transformation and innovations improved HR planning's quality but decreased its quantity. Narbariya et al. (2022) found that high-performance work systems improve employee outcomes by providing comprehensive training and development, performance-based evaluation and compensation, decision-making, flexible work opportunities, and strict recruitment and staffing processes. Ultimately affecting digital transformation readiness. Gupta et al. (2022) prioritized that digital Human Resource optimization of Social, Mobile,

Analytics, and Cloud (SMAC) technology can help organizations manage and take responsibility for ensuring assumptions and expectations lead to appropriate behavior, according to Varadaraj & Al Wadi (2021). Digitalization will improve HRM efficiency and relevance. Without digital transformation, HRM will fall behind global demands.

6. Conclusion

The scientific significance of this study lies in the fact that it contributes to the existing body of knowledge on digital human resources management and its impact on the preparedness of Jordanian commercial banks for digital transformation. The study's dimensions include digital employment, digital selection, digital performance evaluation, digital training and development, digital compensation management, and digital learning. The researcher hopes that future researchers will benefit from this study by drawing on its theoretical contributions, which will enrich the Arab scientific library with new information on digital HRM and its implications for digital transformation in Jordanian commercial banks. Ultimately, this study's findings and recommendations can inform future research in this area. The current study may assist commercial banks in identifying the study variables that are applicable to them and what needs to be applied. By choosing Jordanian commercial banks as a representative community, it addressed the role of digital human resources management in improving the readiness of digital transformation. As a result, commercial banks can benefit from the results and enhance their digital transformation readiness through HRM functions. The study recommends focusing on developing digital HR functions, with special attention to digital performance appraisal, training and development, and digital learning. It also stresses the importance of enhancing the deployment of digital HR functions and improving readiness for digital transformation by leveraging ICT resources. It is essential to focus on ICT to provide the necessary tools and applications for digital HR management, such as human resource management systems, e-learning programs, and collaboration platforms. The study also recommends conducting future research to discover best practices and technologies for effectively integrating digital HR management. Jordanian commercial banks should also invest in digital infrastructure to ensure that the necessary tools and technologies are available to support digital HR management. It is also important to provide ongoing training programs for employees to enhance their digital skills and ensure their ability to adapt to new technologies. It is essential to enhance cooperation between IT and HR departments to ensure that digital transformation strategies are implemented effectively.

Declaration

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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