

Digital Human Resource Practices and Employee Performance in Libyan Financial Companies: The Role of Digital HR Practitioners

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الممارسات الموارد البشرية الرقمية وأداء العاملين في الشركات المالية الليبية: دور عملي الموارد البشرية الرقمية

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Abstract

Digital human resource practices (DHRPs) have emerged as a strategic tool for enhancing employee performance in organisations experiencing digital transformation. This research analysed the influence of DHRPs on employee performance (EP) within Libyan enterprises, while exploring the intermediary functions of human resource agility (HRA) and digital culture (DC). A quantitative, cross-sectional research methodology was employed, and data were gathered from 200 employees in Libyan telecommunications and technology firms. The suggested model was examined through partial least squares structural equation modelling (PLS-SEM) utilising SmartPLS 4. The findings indicated that DHRPs had considerable beneficial impacts on EP, HRA, and DC. HRA had a considerable impact on both DC and EP, whereas DC exerted a beneficial influence on EP. Mediation analysis validated substantial indirect effects via HRA, DC, and their sequential mediation ($\beta = 0.143$). The results indicate that digital HR methodologies improve employee productivity by bolstering organisational flexibility and fostering a nurturing digital environment, offering significant theoretical and managerial insights for digital transformation in developing economies.

Keywords: Digital Human Resource Practices, Employee Performance, Human Resource Agility, Digital Culture, Libyan Companies.

المخلص

برزت ممارسات الموارد البشرية الرقمية (DHRPs) كأداة استراتيجية لتعزيز أداء الموظفين في المؤسسات التي تشهد تحولاً رقمياً. وقد حلل هذا البحث تأثير ممارسات الموارد البشرية الرقمية على أداء الموظفين (EP) في الشركات المالية الليبية، مع استكشاف الأدوار الوسيطة لكل من مرونة الموارد البشرية (HRA) والثقافة الرقمية (DC). تم اعتماد منهجية بحث كمية مقطعية (cross-sectional)، وجمعت البيانات من 200 موظف يعملون في شركات الاتصالات والتكنولوجيا الليبية، وجرى اختبار النموذج المقترح باستخدام نمذجة المعادلات الهيكلية بطريقة المربعات الصغرى الجزئية (PLS-SEM) عبر برنامج SmartPLS 4. وأظهرت النتائج أن لممارسات الموارد البشرية الرقمية تأثيرات إيجابية ملموسة على كل من أداء الموظفين ومرونة الموارد البشرية، والثقافة الرقمية. كما تبين أن لمرونة الموارد البشرية تأثيراً كبيراً على كل من الثقافة الرقمية وأداء الموظفين، في حين كان للثقافة الرقمية تأثير إيجابي على أداء الموظفين. وأكد تحليل الوساطة وجود تأثيرات غير مباشرة جوهرية عبر مرونة الموارد البشرية والثقافة الرقمية، وكذلك من خلال الوساطة المتسلسلة بينهما ($\beta = 0.143$) وتشير النتائج إلى أن منهجيات الموارد البشرية الرقمية تعزز إنتاجية الموظفين من خلال دعم المرونة التنظيمية وتوفير بيئة رقمية محفزة، مما يقدم رؤى نظرية وإدارية هامة لعمليات التحول الرقمي في الاقتصادات النامية.

الكلمات المفتاحية: ممارسات الموارد البشرية الرقمية، أداء الموظفين، مرونة الموارد البشرية، الثقافة الرقمية، الشركات المالية الليبية.

1. Introduction

Rapid development in technology has brought about a fundamental change in how organizations operate especially when it comes to human resource management (HRM). Digital human resource management (DHRMs) practices are becoming vital facilitators in HR tasks, decision-making and improving workforce productivity through the incorporation of digital technologies in recruitment, selection, training, performance appraisal, and employee development (Aggarwal & Sharon, 2017; Amany, 2025). Unlike traditional HR methods, digital HRM emphasizes decision-making based on data, process automation and agility which enables companies to compete in unpredictable and highly competitive markets (Zakaria et al., 2025). Considering that today many organizations are operating under uncertainties and technological changes, digital HR practices are becoming essential in sustaining competitiveness and viability in the organization (Barišić et al., 2021).

There are many organizational benefits resulting from digital HR projects, such as improved organizational efficiency, greater transparency, effective communications, and faster decision making (Lapi et al., 2025; Bhatti et al., 2025). With the help of automation of regular HR practices and access to real-time analytics of organizational workforce, there is an opportunity for companies to increase employee engagement, implement effective talent management practices, and improve performance results in general (Yusuf et al., 2023; Putri et al., 2025). At the same time, achieving success through digital transformation goes beyond technology application and requires an organizational environment that supports changes, flexible leadership practices, and a culture that is open to changes (Fiaz & Qureshi, 2024; Zhang & Chen, 2024).

Performance of employees is an important factor for determining organizational success as it directly affects productivity, innovation, and competitiveness (Zakaria et al., 2025; Shafter, 2018). It has been seen that there is a positive relationship between digital HRM and performance of employees in different industrial organizations (Nicolás-Agustín et al., 2022; Al-Alawi et al., 2023). Performance of employees gets affected positively due to the efficiency in carrying out tasks, development of skills, provision of performance feedback and collaboration with others due to digital HRM (Nematollahi et al., 2024; Zhang & Chen, 2024). However, the exact process through which digital HR practices result in better performance of employees is not well understood.

Agility in human resource management has become an important subject among scholars because it allows organizations to react quickly to changes in the environment by means of flexibility of their workforce and structure, as well as learning orientation (Mattajang, 2023; Barišić et al., 2021). Digital HR practices support the implementation of agile human resource management by improving workforce planning, talent development, and responsiveness, and agile organizations are more capable of utilizing digital innovations (Yusuf et al., 2023). Similarly, digital culture refers to a set of shared values and behaviors within an organization, which encourage technology adoption, innovation, cooperation, and continuous improvement (Gianni et al., 2025; Zervas & Triantari, 2025). Companies with a strong digital culture develop readiness of their employees to adapt to technologies and create a setting where these technologies will best help both employees and the organization itself perform better (Nazarova & Rudenko, 2023). Thus, together, HR agility and digital culture serve as essential organizational mechanisms that allow digital HR practices to impact employees' performance. The environment of business in Libya can be considered an ideal context in which the relationships between these factors are to be analyzed. With organizations getting over political and economic instability over time, they become faced with growing challenges to develop their HR systems despite the infrastructure deficiencies, talent shortages, and

resistance to change (Shafter & Ghnaem, 2016; Shafter, 2018). Telecom and IT industries, which play a key role in the processes of national digital transformation, use digital HR systems to increase efficiency and competences of workers (Hussein Ali & Abdullah Ibrahim, 2026; Shawish & Masaud, 2026). However, despite all these changes, there is a lack of research on the effectiveness of digital HR strategies in Libya, especially in terms of increasing workers' productivity.

This study seeks to address this gap by developing and testing empirically an analytical framework which will look at the direct and indirect impacts of digital human resource practices on employee performance mediated through HR agility and digital culture. Unlike past studies that looked at these concepts in isolation, this study seeks to develop and test a sequential mediation framework which will illustrate how digital HRM practices enhance organizational capabilities and preparedness resulting in improved employee performance. Through this research, the digital human resource management body of knowledge will be extended in the sense that this study will look at digital HRM practices within emerging economies.

Therefore, the main purpose of this study is to investigate the impact of digital HRM practices on employee performance in Libyan firms while looking at HR agility and digital culture as mediators. It is expected that the findings of this research will add to digital HRM theory by illuminating the mechanisms that determine the impact of digital HRM practices on organizational performance.

2. Literature Review

Digital human resource practices (DHRPs) entail the use of information and communication technologies in several HR processes such as recruiting talent, choosing candidates, training employees, assessing their performance, and compensation management (Aggarwal & Sharon, 2017; Amany, 2025). They help improve organizational efficiency, make informed decisions based on evidence, and strengthen competitive advantage through optimizing workforce management and effectiveness (Asraf, 2020; Bhatti et al., 2025). The key dimensions of digital HRM include technology-assisted recruitment, performance management through digitalization, learning and development through e-learning, and compensation management through automation (Hussein Ali & Abdullah Ibrahim, 2026; Shawish & Masaud, 2026). Previous empirical studies have found positive relationships between DHRPs adoption and employee engagement, productivity, innovation and organizational performance (Yusuf et al., 2023; Putri et al., 2025).

Performance of employees, in general terms, is viewed as a combination of proficiency in tasks, context contribution, and reduction in counterproductive behaviors within the workplace environment (Zakaria et al., 2025). Digital HR processes enhance the performance results by facilitating ongoing professional development, improving methods for providing feedback, motivating employees, and ensuring effective communication among workers (Al-Alawi et al., 2023; Zhang & Chen, 2024). At the same time, HR agility is a key organizational capability that helps in quick adaptation to changes in the business environment by managing workforces flexibly, being flexible in HR processes, and maintaining ongoing learning (Matajang, 2023; Barišić et al., 2021). Digitalization processes contribute to HR agility by improving organizational responsiveness, managing talents, and fostering innovation capacity (Nematollahi et al., 2024; Mogilova & Golosenko, 2024).

A digital culture can be explained as the values, beliefs, and behavior of an organization that fosters the use of new technology, encourages collaboration, inspires innovation, and focuses on the constant improvement of skills (Gianni et al., 2025; Zervas & Triantari, 2025). Companies that have a strong digital culture are more likely to be able to successfully adopt digital transformation initiatives and consequently improve employee performance. Creating a digital culture requires clear commitment from the leaders, communication, and institutional backing (Shafter & Ghnaem, 2016).

Despite the increasing amount of academic attention that has been given to digital HRM, there still remain a number of research gaps. First of all, most of the current literature focuses on the examination of a direct link between digital HRM and performance of employees, whereas very little research effort has been put into understanding the mediating role of HR agility and digital culture. Second, there is a distinct lack of evidence based on the developing countries or post-conflict environment, including Libya. The current research paper aims at filling those gaps by exploring the mediating role of HR agility and digital culture in the link between digital HR practices and employee performance in Libyan organizations. Therefore, the current research paper explores not only the direct impact of digital HR practices on the performance of employees, but also the mediating effects of HR agility and digital culture.

3. Model of the Hypothesis of the Influence (HIP)

3.1 Hypotheses Development

The following hypotheses, based on the theoretical background and literature review, are formulated to be empirically validated. The research model suggested by this study, represented in Figure 1, suggests that digital HRM practices have an effect on employee performance through the direct and indirect sequential mediation paths via human resource agility and digital culture.

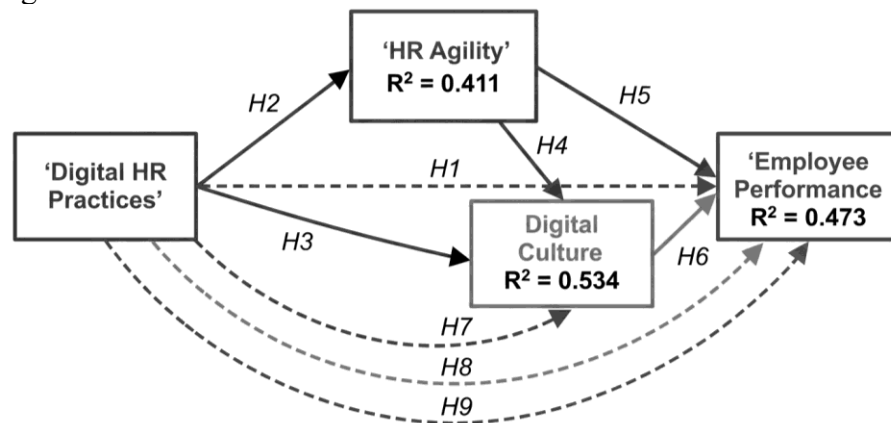


Figure 1: Model of the relationship between variables

The proposed model reflects the following causal pathways:

Direct Effects:

- Digital HR practices directly affect employee performance
- Digital HR practices directly affect human resource agility
- Digital HR practices directly affect digital culture
- Human resource agility directly affects digital culture
- Human resource agility directly affects employee performance
- Digital culture directly affects employee performance

Indirect Effects (Mediation):

- Human resource agility mediates the digital HR practices → employee performance relationship
- Digital culture mediates the digital HR practices → employee performance relationship
- Human resource agility and digital culture sequentially mediate the digital HR practices → employee performance relationship

3.2 Formal Hypotheses

H₁: Digital HR practices exert a statistically significant and positive direct influence on employee performance within Libyan companies.

H₂: The implementation of digital HR practices is positively and significantly associated with the development of HR agility in Libyan companies.

H3: Digital HR practices contribute significantly and positively to the development of a digital culture within Libyan companies.

H4: Greater levels of HR agility are significantly associated with a stronger digital culture in Libyan companies.

H5: HR agility has a significant positive relationship with employee performance in Libyan companies.

H6: A stronger digital culture is significantly and positively related to employee performance in Libyan companies.

H7: HR agility serves as a significant mediating mechanism through which digital HR practices influence employee performance in Libyan companies.

H8: Digital culture significantly mediates the relationship between digital HR practices and employee performance in Libyan companies.

H9: HR agility and digital culture jointly operate as sequential mediators in the relationship between digital HR practices and employee performance in Libyan companies.

4. Methodology

4.1 Research Design and Approach

To investigate the theoretical relationships suggested in the proposed theoretical framework, the current study utilizes a quantitative methodology, incorporating a cross-sectional design with structural equation modeling (SEM) as the main tool used for analysis. Quantitative methodology was chosen because of its proven effectiveness in thoroughly evaluating theoretical claims, allowing to test a number of variables simultaneously, and creating more generalizable results (Hernández et al., 2014). Although the cross-sectional aspect of data collection that implies the analysis of relations between variables at one specific point of time is well-matched with the goals of the current research, it does not allow to draw conclusions regarding causality (Hair et al., 2022). Moreover, the current research utilizes a descriptive-analytical approach, which is consistent with existing empirical research in the area of digital HRM (Hussein Ali & Abdullah Ibrahim, 2026; Shawish & Masaud, 2026). The fieldwork and data collection took place during six months of 2025, starting from January 2025 and ending in June 2025.

4.2 Conceptual Framework

In terms of the conceptual structure, the theoretical framework of the current research identifies digital HR practices as the exogenous (independent) variable, employee performance as the endogenous (dependent) variable, and HR agility along with digital culture as the sequential mediators that occur in the causal chain linking the two. This particular theoretical structure is based on sound theoretical assumptions reflected in the literature review on digital HRM (Aggarwal & Sharon, 2017; Barišić et al., 2021), and it accurately reflects the interrelationships between the focal variables of interest. The sequence of the methodological procedures used in the current research is illustrated in Figure 2 below.

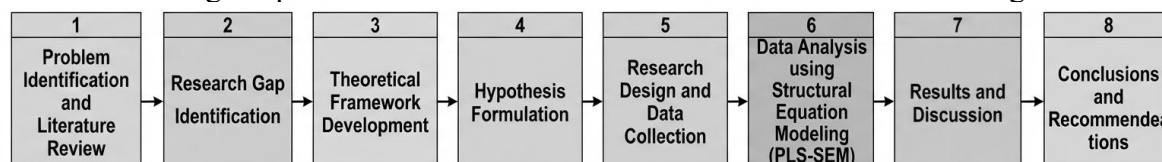


Figure 2: Research methodology flowchart

4.3 Population and Sample

The population target for this research involves workers employed by Libyan companies in the telecommunications and technology industries. These industries have been chosen since they are important parts of the country's infrastructure and are under pressure to transform digitally (Hussein Ali & Abdullah Ibrahim, 2026; Shawish & Masaud, 2026). The selected companies in this case are big Libyan telecommunications and technology companies functioning in Tripoli and Benghazi. According to the statistics available in the industries,

some of the biggest telecommunications companies in Libya in terms of revenues are Libyana, Tafari Telecom & Technology, and AAT (Aljeel Aljadeed for Technology) (ZoomInfo, 2026). Some of the other prominent players are Al Madar Al Jadeed, Libyan International Telecommunications Company, and Libya Telecom and Technology (BGP Network, 2026). These companies are either wholly or partly owned by the Libyan Post, Telecommunications and Information Technology Holding Company founded in 2005 for the purpose of owning and managing major telecommunications companies in Libya (General Authority for Telecommunications & Informatics, 2026).

The group of 250 employees was selected using stratified random sampling techniques, ensuring that the sample would comprise participants from different organizational levels, positions, and regions. The final sample included 200 valid answers from five companies: Libyana, Al Madar Al Jadeed, Libya Telecom and Technology, Libyan International Telecommunications Company, and Aljeel Aljadeed for Technology. The appropriate sample size was determined in light of the guidelines for SEM analysis. In line with the recommendations of Hair et al. (2022), at least 5 to 10 observations were aimed for per each parameter estimated in the intended model.

4.4 Data Collection Instruments

Data collection was done through the administration of a structured questionnaire based on validated scales used in earlier studies. The questionnaire included four sections that were concerned with digital HRM practices, HR agility, digital culture, and performance of employees. The digital HRM practices were measured through scales adopted from Hussein Ali & Abdullah Ibrahim (2026) and Shawish & Masaud (2026). These scales include digital recruitment and selection, digital performance appraisal, digital training and development, and digital compensation management. On the other hand, HR agility was measured through scales adopted from Mattajang (2023) and Barišić et al. (2021). The scales focus on workforce flexibility, adaptive structures, and responsiveness of processes. Similarly, the digital culture was measured through scales adopted from Gianni et al. (2025) and Zervas & Triantari (2025). They include openness to change, innovation orientation, and digital competency development. Employees' performance was measured by Individual Work Performance Questionnaire (IWPQ) by Zakaria et al. (2025). It measures three fundamental performance domains: task performance, contextual performance, and counterproductive work behavior. All the items in this questionnaire were rated on a five-point Likert-type scale.

4.5 Data Collection Procedures

Data collection was done over three months from January to March 2025. For ease of participation by organizations with varying degrees of technology access and competence, the survey questionnaires were sent out using both the paper method and online method. The participants were assured of confidentiality of their data and voluntariness in their participation, such that they had the option to quit participation in the research anytime without any penalties. A total of 250 questionnaires were sent out, with 220 returned for an overall response rate of 88%. After the initial screening, which included exclusion of those with incomplete data and outliers, 200 questionnaires were used in the analysis.

4.6 Data Analysis Techniques

Three steps of data analysis according to SEM guidelines (Hair et al., 2022) were implemented. First, descriptive statistics and frequency distributions were employed to describe the sample and evaluate normality of data.

Second, the measurement model was tested by means of confirmatory factor analysis (CFA) to establish reliability and validity. The values of Cronbach's alpha and composite reliability (CR) were checked on the basis of the 0.70 criterion, and the values of convergent validity – through average variance extracted (AVE), the lowest acceptable value of which is 0.50 (Fornell & Larcker, 1981). Discriminant validity was tested using the Fornell-Larcker criterion and HTMT with the lowest acceptable HTMT value of 0.85 (Henseler et al., 2015).

Third, the structural model was tested on the basis of path coefficients, t-values, significance levels, and R^2 . Both direct and indirect effects were tested using bootstrapping with 5,000 resamples. The model fit was checked with SRMR, NFI, dULS, and dG following PLS-SEM guidelines (Hair et al., 2022; Ringle et al., 2022). The value of SRMR below 0.08 indicated the model fit (Hu & Bentler, 1999).

Table 1: Demographic Characteristics of the Sample (N=200)

Characteristic	Category	Frequency	Percentage
Gender	Male	128	64.0%
	Female	72	36.0%
Age	18-30 years	65	32.5%
	31-40 years	78	39.0%
	41-50 years	42	21.0%
	Over 50 years	15	7.5%
Education	Diploma or below	45	22.5%
	Bachelor's degree	112	56.0%
	Master's degree	32	16.0%
	Doctorate	11	5.5%
Experience	Less than 5 years	68	34.0%
	5-10 years	62	31.0%
	11-15 years	45	22.5%
	Over 15 years	25	12.5%
Company	Libyana	48	24.0%
	Al Madar Al Jadeed	42	21.0%
	Libya Telecom and Technology	40	20.0%
	Libyan International Telecom	35	17.5%
	Aljeel Aljadeed For Technology	35	17.5%

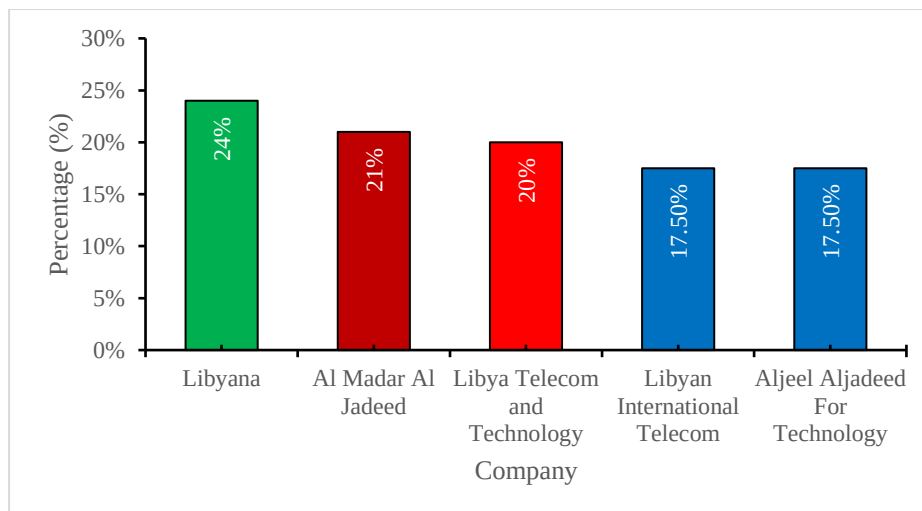


Figure 3: Sample Distribution by Company

5. Results

5.1 Measurement Model Assessment

The measurement model showed acceptable levels of reliability and validity for all the constructs. As shown in Table 2, the Cronbach's alpha values ranged from 0.823 to 0.896, which were greater than the 0.70 threshold, thereby indicating good internal consistency (Fornell & Larcker, 1981). The composite reliability (CR) values ranged from 0.847 to 0.908 and indicated high levels of reliability in the measurement scales. The AVE values ranged from 0.529 to 0.647, which were greater than the minimum required 0.50, thereby indicating good convergent validity. The discriminant validity was also established because the square root of AVE values of each construct exceeded the inter-construct correlations as per the

Fornell–Larcker criterion (Henseler et al., 2015). Moreover, all HTMT values were less than the 0.85 threshold value.

Table 2: Reliability and Validity Assessment

Construct	Cronbach's Alpha	Composite Reliability	AVE
Digital HR Practices	0.872	0.895	0.587
HR Agility	0.843	0.868	0.562
Digital Culture	0.896	0.908	0.647
Employee Performance	0.823	0.847	0.529

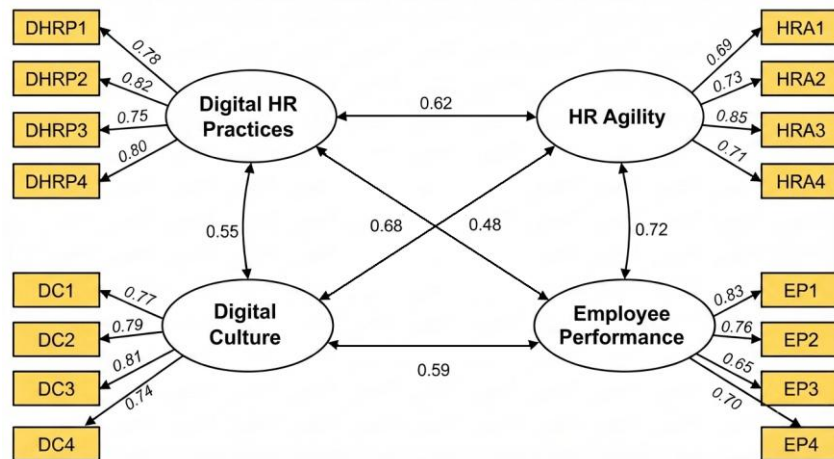


Figure 4: Measurement model results

5.2 Model Fit Assessment

The fitness of the model was tested using various indices, which have been shown in Table 3. The SRMR for saturated and estimated models was 0.074 and 0.072, respectively, both of which are less than the cut-off value of 0.08 specified by Hu and Bentler (1999), showing good fitness. The dG for saturated and estimated models is 0.098 and 0.087, respectively. The corresponding chi-square statistics are 60.304 and 58.792. Additionally, NFI for the saturated and estimated models was 0.902, which is more than the recommended minimum value of 0.90 (Bentler & Bonett, 1980).

Table 3: Model fit indices

Fit Index	Saturated Model	Estimated Model	Recommended Threshold
SRMR	0.074	0.072	< 0.08
d_{ULS}	0.262	0.262	Lower values better
d_G	0.098	0.087	Lower values better
Chi-Square	60.304	58.792	Lower values better
NFI	0.902	0.903	> 0.90

Note: d_{ULS} = Unweighted Least Squares Discrepancy,

5.3 Evaluation of Structural Models

The structural model was tested to investigate the relationships postulated among the variables under study. The model accounted for 47.3% of the variance in employee performance ($R^2 = 0.473$), signifying strong explanatory power. All predictor VIF values were less than 3.0, thus showing that there were no issues of multicollinearity. The estimates of direct and indirect effects are provided in Table 4 and have been illustrated in Figure 5.

Digital HRM practices had a significant positive impact on employee performance ($\beta = 0.312$, $p < 0.001$), thus proving H1. A stronger positive relationship was established between digital HRM practices and HR agility ($\beta = 0.641$, $p < 0.001$), thus proving H2. Digital HRM

practices were found to predict digital culture positively and significantly ($\beta = 0.247$, $p < 0.001$), thus proving H3. HR agility had a significant positive impact on digital culture ($\beta = 0.612$, $p < 0.001$), thus proving H4. Additionally, HR agility ($\beta = 0.245$, $p < 0.001$) and digital culture ($\beta = 0.365$, $p < 0.001$) significantly increased employee performance, thus proving H5 and H6, respectively.

Table 4: Path Coefficients and Hypothesis Testing

Hypothesis	Relationship	Path Coefficient	Standard Error	t-value	p-value	Decision
H1	DHRP → EP	0.312	0.055	5.673	< 0.001	Supported
H2	DHRP → HRA	0.641	0.050	12.789	< 0.001	Supported
H3	DHRP → DC	0.247	0.064	3.876	< 0.001	Supported
H4	HRA → DC	0.612	0.059	10.345	< 0.001	Supported
H5	HRA → EP	0.245	0.054	4.567	< 0.001	Supported
H6	DC → EP	0.365	0.054	6.789	< 0.001	Supported

Note: DHRP = Digital HR Practices, HRA = HR Agility, DC = Digital Culture, EP = Employee Performance

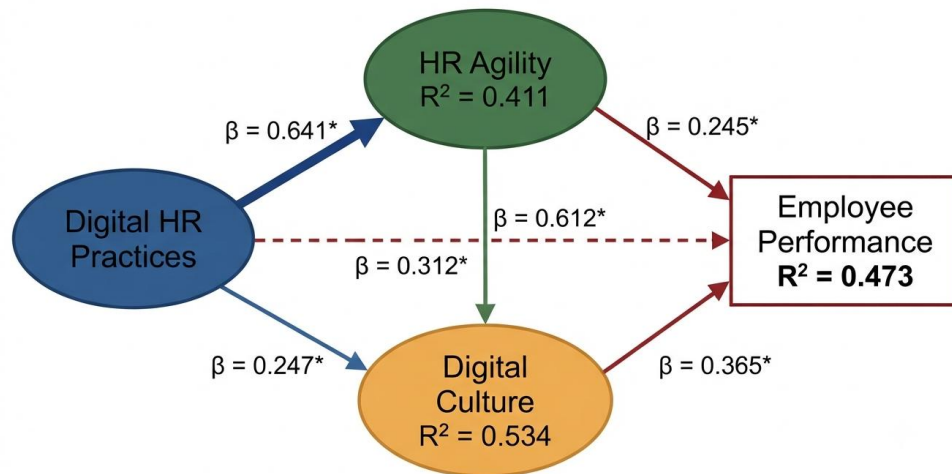


Figure 5: Structural model with path coefficients

5.4 Mediation Analysis

Bootstrap resampling analysis using 5,000 iterations was used to establish the significance of the mediating effects, which is shown in Table 5. First, the indirect effect of digital HRM practices on employee performance via HR agility turned out to be significant ($\beta = 0.157$, $p < 0.001$), thus verifying H7. Likewise, the indirect effect via digital culture proved to be significant ($\beta = 0.109$, $p < 0.001$), which supported H8. In addition, the sequential indirect effect via HR agility and digital culture proved to be significant ($\beta = 0.143$, $p < 0.001$), thus supporting H9. Altogether, significant indirect effect ($\beta = 0.409$, $p < 0.001$) along with significant direct effect ($\beta = 0.312$, $p < 0.001$) shows partial mediation.

Table 5: Mediation Analysis Results

Hypothesis	Mediation Path	Indirect Effect	Standard Error	t-value	p-value	Decision
H7	DHRP → HRA → EP	0.157	0.032	4.893	0.000	Supported
H8	DHRP → DC → EP	0.109	0.032	3.456	0.001	Supported
H9	DHRP → HRA → DC → EP	0.143	0.027	5.234	0.000	Supported
-	Total Indirect Effect	0.409	0.045	9.089	0.000	-

6. Discussion

This study contributes to the growing body of knowledge regarding digital HRM and its implications for organizations. The strong positive relationship between digital HRM and employee performance is consistent with studies conducted in different environments

(Amany, 2025; Nicolás-Agustín et al., 2022; Al-Alawi et al., 2023). The study suggests that adoption of digital HRM can improve employee performance in Libyan organizations, similar to other developing country settings (Bhatti et al., 2025; Putri et al., 2025). In addition, the effect size ($\beta = 0.312$) is similar to those found in other related studies. Furthermore, the result is in line with studies in the Libyan banking industry that found a positive impact of digitalization of HRM on employee performance (Shafter, 2018)..

Facilitative role of HR agility as a link between digital HR and performance is a great theoretical progress. The finding about the positive effect of digital HR approaches on employee performance, including HR agility, continues the previous research in the field of agile HR (Mattajang, 2023; Barišić et al., 2021). Mediation implies that the use of digital HR approaches helps develop organisation's capabilities that help react faster to environmental changes, thus, increasing the employee performance. It is consistent with the previous studies showing that agile firms achieve high levels of engagement and performance of employees (Yusuf et al., 2023; Nematollahi et al., 2024). High correlation between digital HR practices and HR agility ($\beta = 0.641$) indicates that digitalisation makes HR processes more flexible and responsive as it is suggested theoretically (Barišić et al., 2021).

The role played by digital culture in bridging the link between digital HR and performance is further explored to provide more theoretical knowledge. Digital culture has emerged as an important intermediary, which means that digital HR practices create organisational environments conducive to technological adoption, innovation, and education, thus helping improve employee performance (Gianni et al., 2025; Zervas & Triantari, 2025). This finding is consistent with research which points out the importance of digital culture for attaining outcomes of digital transformation (Nazarova & Rudenko, 2023; Zhang & Chen, 2024). The highly significant impact of digital culture on employee performance ($\beta = 0.365$) points to the importance of cultural factors in evaluating the effectiveness of digital HR practices. This finding is consistent with research on Libyan firms which show that information systems substantially improve human resource planning, recruitment, training, and performance appraisal, even though issues such as lack of technical support and human resources can be in the way (Shafter & Ghnaem, 2016).

The innovation of mediation of HR agility and digital culture is the most novel finding of the current study. The finding implies that digital HR practices influence employee performance in a sequential manner whereby digital HR practices first increase the level of HR agility in the organization followed by the development of digital culture. The size of the indirect effect ($\beta = 0.143$) denotes an important path through which digital HR practices influence employee performance. The finding contributes to the existing theoretical knowledge of the linkages between digital HR practices and the outcomes of employees, as well as providing empirical evidence for integrative models that posit different mediators (Nematollahi et al., 2024; Zhang & Chen, 2024). The bigger total indirect effect ($\beta = 0.409$) as opposed to the direct effect ($\beta = 0.312$) denotes that digital HR practices influence employee performance mainly through indirect paths.

Practical implications of findings from this research apply to Libyans organisations and others operating in developing countries. First, the positive and significant direct effect implies that organizations should focus their efforts on investing in digital HR technologies and approaches to enhance the performance of employees. The mediation effects imply that technological investment alone will not be sufficient; organizations need to develop agile HR capabilities and digital culture to realize performance benefits associated with digital HR practices. This means that there is a need for comprehensive change strategies addressing technology, processes, and culture together (Barišić et al., 2021; Gianni et al., 2025). Organizations should consider adopting digital HR systems that support flexible working arrangements, facilitate rapid skills improvement, and provide performance assessment opportunities.

The findings highlight the importance of commitment among leaders to drive digital transformation through HR strategies. Leaders need to come up with a clear digital transformation vision, exhibit digital behavior, and create an environment where employees can be willing to engage with technology and different methodologies (Shafter & Ghnaem, 2016). In addition to this, organizations need to ensure that there is investment in helping employees acquire more digital capabilities through training programs. Development of digital culture requires strategic efforts to instill organizational values and standards that support technology adoption and collaboration.

7. Conclusion

This research focuses on investigating the impact of digital human resource management (DHRM) practices on the performance of employees working in Libyan organizations, especially through the mediation of HR agility and digital culture. The results reveal that DHRM practices have positive direct effects on employee performance, as well as positive indirect effects via increased HR agility and the creation of a digital culture. This paper makes a contribution to the literature on digital human resource management by providing an integrated model explaining the processes underlying the effect of digital HR practices on employee performance in Libya.

The pragmatic implications indicate that the development of digital HRM technologies should be accompanied by initiatives aimed at promoting HR flexibility, continuous learning and creating a digital culture that encourages innovation, collaboration, and technology use. A successful implementation requires leadership commitment, strategy alignment, employee participation, and organizational readiness for sustaining digital transformation. Managers should address the obstacles to digital transformation that exist in the context, such as infrastructure weaknesses, the lack of digital skills, and resistance to change. The findings reveal that digital human resources management is a valuable strategic resource for organizations as it enhances employee performance and contributes to competitive advantages in emerging markets.

8. Suggestions

Based on the findings of the study, those in Libya and similar conditions should consider investing heavily in the infrastructure of digital human resource and training activities to develop their digital skills. Developing leadership should focus on creating digital environments that revolve around transformation, creativity, and lifelong learning, together with the adaptation of HR approaches.

Future studies should adopt a longitudinal research approach, qualitative research methods, and comparative analysis for different sectors within the different industries of Libya. Moreover, future research should explore the effect of moderators such as organisation size, industry classification, and employee attributes on the relationships discussed in this study.

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