

International Journal of Research in Human Resource Management



E-ISSN: 2663-3361
P-ISSN: 2663-3213
IJRHRM 2025; 7(1): 132-139
www.humanresourcejournal.com
Received: 12-01-2025
Accepted: 19-02-2025

Yasir Mawlood Hajim
College of Administration and
Economics, Samarra
University, Iraq

Qutaiba Ibrahim Hamada
College of Administration and
Economics, Tikrit University,
Iraq

Tahseen Fadhel Mohammed
College of Administration and
Economics, Tikrit University,
Iraq

Corresponding Author:
Yasir Mawlood Hajim
College of Administration and
Economics, Samarra,
University, Iraq

The extent of adopting digital human resource management practices among employees in private pharmaceutical companies in the city of Samarra

Yasir Mawlood Hajim, Qutaiba Ibrahim Hamada, Tahseen Fadhel Mohammed

DOI: <https://doi.org/10.33545/26633213.2025.v7.i1b.264>

Abstract

The current research aims to identify the extent of adoption of digital human resource management (HRM) practices in its dimensions (digital recruitment, digital selection, digital performance evaluation, digital training, and development) among employees in private pharmaceutical companies in the city of Samarra. To achieve the final results and verify the validity of the adopted hypothesis, the researchers relied on the descriptive-analytical approach, in addition to various statistical methods and tools appropriate to the research purpose for data collection and analysis. A questionnaire was used as the primary tool for obtaining data and information, utilizing the statistical program (SPSS:26). The research sample consisted of (120) individuals from different managerial levels. Based on the research findings, the researchers reached several conclusions, the most prominent of which revealed that the employees' initial perception analysis indicated that their overall awareness level was acceptable and leaned towards a positive direction. This shows that the respondents pay a considerable value for digital HRM practices in the companies studied. Based on such results, the researchers were able to present several recommendations where the most important of those was the need for the companies that had been studied to work to develop the professional development of their employees through supporting training and development programs which would help confirm the utilization of modern technologies in administrative functions.

Keywords: Digital human resource management, private pharmaceutical companies

Introduction

With global advances in technology occurring at breakneck pace in recent years, human resource management (HRM) is one of those fields that has benefited significantly from a slew of new digital innovations. The enormous digital revolution left its shadow on the performance of the majority of companies, forcing them towards using modern and advanced practices, which rely predominantly on technology in performance management and bettering the efficiency of human resource management. Due to accelerated technological advancements that have dramatically altered the business environment, HRM has fundamentally changed its nature and practices. HRM is no longer confined to traditional areas of recruitment, selection, performance appraisals, training and development. Instead, it serves as a strategic function in the evolution of corporations and attaining organizational goals. Digital human resource management is a modern human resource management approach that emerged on the basis of digital technologies, which are used for automation of HRM process from the recruitment and selection stage to training and assessment of performance of employees and organization as a whole. This type of management method has been an inevitable trend in modern business, having a positive effect on the efficiency and effectiveness of HRM and improving the employee's experience. Though, all these practices come with challenges that companies need to overcome to successfully adopt these practices.

First Section: Research Methodology

Research Problem: These tangible and perceptible effects of the pursuit of creating a positive work environment that encourages the integration of managers into a workplace

with employees. It also inspires the workers and incites them to give their best and find new ideas and techniques, making the organizations they work for focused on additional advancement. So their various expectations and hopes have to be fulfilled, which will lead to high loyalty and better performance and make them feel proud to work in a firm that enacts a good influence around them and conveys its corporate vision with efficacy. To achieve this, a comprehensive transformation from traditional to digital approaches is essential, particularly in terms of strategies and the implementation of digital HRM practices using technologies, the internet, and applications. Hence, the researchers aim to explore the role of digital HRM practices in enhancing employee performance. The studied company faces challenges in keeping up with technological advancements in HRM, as the adoption of digital HRM practices remains limited. This issue affects the efficiency and effectiveness of HRM and the company's ability to attract and retain talented employees. Based on this, the research problem emerges by posing the following main question:

"To what extent does the adoption of digital human resource management practices contribute to enhancing overall employee performance?"

Research Significance

The significance of this research stems from the importance of digital human resource management (HRM) practices, which are considered a crucial and contemporary topic due to their impact on the social and cognitive development of human resources within companies. There is a growing need for digital HRM practices to enhance and accelerate company performance, which necessitates redefining the role of HRM specialists by equipping them with the necessary skills to align with modern developments. Consequently, developing strategic plans for human

resource growth in the context of digital technology has become imperative. Thus, it is essential to highlight the importance of adopting digital HRM practices by private pharmaceutical companies in the city of Samarra, aiming to provide employees with a clear understanding of the concept of digital HRM. Furthermore, a review of previous literature indicates a scarcity of studies addressing this research topic within the studied company.

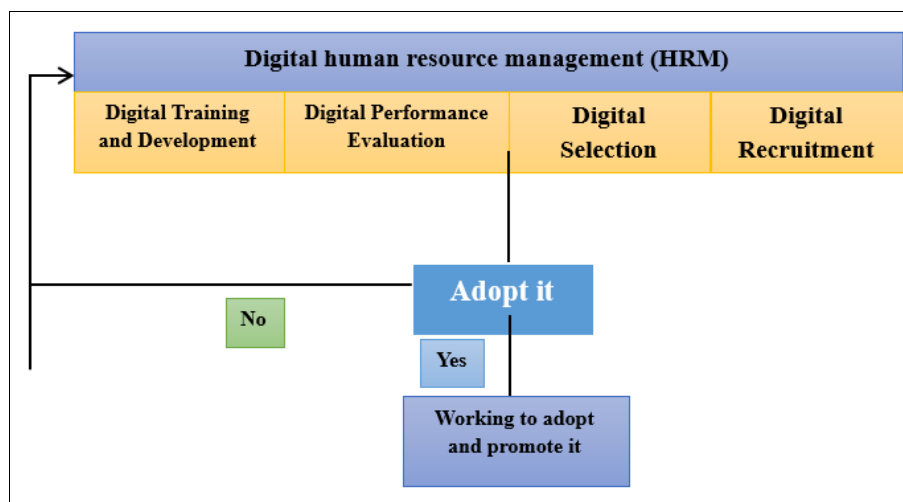
Research Objectives

In light of the research problem and its significance, this study seeks to achieve several objectives aligned with the goals of digital HRM, including:

1. Clarifying the extent to which the management of the sampled companies adopts digital HRM practices to improve employee performance and the level of adoption of modern tools and technologies in various work processes.
2. Identifying the challenges that the studied companies face in implementing digital HRM practices.
3. Assessing the level of interest among the studied companies in adopting digital HRM practices.
4. Determining the relative importance of digital HRM practices.

Research Hypothetical Framework

The methodological approach to addressing the research problem, within its theoretical framework and practical implications, requires the development of a hypothetical framework. This framework outlines the research variables and provides an interpretative basis for potential solutions in response to the research question. The construction of this framework is based on digital HRM practices, as illustrated in Figure (1), which presents the hypothetical research model.



Source: Prepared by researchers

Fig 1: Hypothetical Framework

Research Hypotheses

Based on the research's hypothetical framework, the primary hypotheses are as follows:

First Main Hypothesis: The research sample adheres to each practice of digital human resource management within the studied companies.

Second Main Hypothesis

Employees in the studied companies adopt digital HRM practices, represented by (digital recruitment, digital selection, digital performance evaluation, and digital training and development), based on the responses of the surveyed individuals.

Research Population and Sample

Determining the sector in which the research is conducted is crucial for selecting an appropriate and relevant sample in terms of size and characteristics that align with the research field. This significantly contributes to the accuracy of the results and the testing of the research hypotheses. A random sample was selected from employees working in the administrative departments of the studied companies, totalling 175 individuals. From this group, a purposive sample was drawn and calculated using the following formula (Thompson, 2002:10) ^[15].

Based on this formula, the determined sample size was 120. Consequently, 124 questionnaires were distributed, of which 121 were retrieved, and 120 were deemed valid for analysis, establishing the final sample size as (N=120).

Second Section: Theoretical Framework

Digital Human Resource Management (HRM)

Concept of Digital Human Resource Management

The advancement of digital human resource management (HRM) technologies has transformed work performance. Digitization utilizes technologies and tools that facilitate changes in business models and generate new revenue streams, marking the transition toward digital business (Sharon & Aggarwal, 2017:23) ^[12]. According to Al-Badawi (2022:281) ^[2], digital HRM is defined as the practical implementation of a company's HR strategies and policies through targeted support and the full utilization of internal and external information network channels. Additionally, Abu Al-Enein (2019:97) ^[11] noted that while HRM practices themselves have not changed, the methods and techniques used in these practices have evolved significantly, now relying entirely on information and communication technology (ICT). This transformation has altered the role of employees within the company, making their participation in HRM functions more efficient and effective.

Importance of Digital Human Resource Management

The importance of digital HRM has increased across companies of various types and orientations due to the significant advantages of a well-implemented digital approach. Its significance is highlighted by the following points (Blani & Hussein, 2023:597; Althabhaee & Saeed, 2024:9) ^[3, 10]:

- Reducing task completion time: By eliminating daily routine processes such as attendance tracking, payroll management, and data storage, digital HRM enables faster data retrieval and real-time processing.
- Utilizing cutting-edge ICT solutions: Companies can leverage the latest technological advancements to provide real-time online solutions tailored to modern business demands.
- Addressing workforce shortages: Digital HRM allows companies to overcome geographical constraints by enabling remote work and the creation of virtual workspaces.

- Maximizing digital technology for HR goals: The integration of digital tools enhances workforce management and development in an efficient and innovative manner.
- Ensuring secure and organized data management: Digital HRM employs advanced database management systems that provide secure data storage and confidentiality.
- Achieving competitive advantage: By improving service quality and optimizing operational costs, companies can enhance their market position.
- Promoting transparency and fairness: Employees perceive digital HRM as a tool for ensuring equitable and transparent management practices, fostering a more engaged and satisfied workforce.

Objectives of Digital Human Resource Management

The objectives that companies seek to achieve through the implementation of digital HRM can be summarized in the following points (Al Shobaki, 2017:145; Paramita, 2020:8) ^[9, 13]:

- Enhancing HRM roles and responsibilities by increasing HR involvement in corporate decision-making and strategic planning.
- Reducing workplace bureaucracy and fostering better collaboration and understanding among employees while adopting new employment models, such as flexible and adaptable work arrangements.
- Developing virtual work teams and leveraging outsourcing while forming interconnected work networks, retaining highly skilled human resources that boost productivity and add value to companies.
- Facilitating continuous organizational change to reduce administrative burdens and improve adaptability.
- Standardizing HR policies and processes across global companies through the integration of digital HRM systems.

Dimensions of Digital Human Resource Management

By examining the functions, activities, and practices related to digital HRM, researchers have identified key dimensions despite variations in terminology and classification. The primary dimensions include:

1. Digital Recruitment
2. Digital Selection
3. Digital Performance Evaluation
4. Digital Training and Development

These dimensions are based on studies conducted by Blani & Hussein (2023: 45-55) and Al-Afeshat & Al-Maadheedi (2024: 14) ^[3, 7]. Figure (2) illustrates these dimensions.

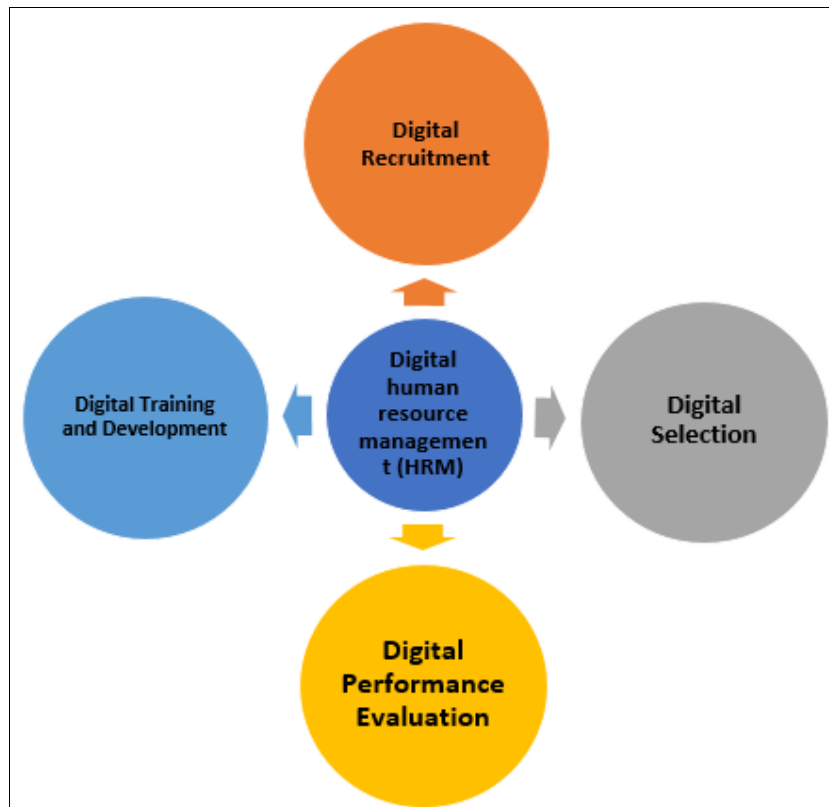


Fig 2: practices of digital human resource management (HRM)

Digital Recruitment

At this stage, companies determine their workforce needs in terms of quantity and quality. Recruitment encompasses all processes and activities that facilitate the availability of qualified labor to achieve the company's objectives (Abdulrahman, 2019:211) ^[6]. Digital recruitment involves leveraging digital technology to attract a larger pool of job candidates from around the world. This approach helps companies reduce costs associated with traditional recruitment while enhancing the quality of applicants by utilizing data analytics techniques to identify the most suitable candidates (Caravella *et al.*, 2022:118) ^[11].

Digital Selection

Digital selection is the use of digital technology to select the best candidates for specific jobs. It means collecting the information and determine the nominees for the best applicants and it includes the many practices and procedures designed to align employees and their behaviors with the needs of the business (Paramita, 2020:8) ^[13]. This process involves utilizing online recruitment platforms, customer relationship management (CRM) systems, data analytics software, and other digital tools to identify and assess top candidates. Digital selection methods have an advantage over traditional methods not only through the quality of recruitment but also in the reduction of costs associated with advertisement. (Sharon & Aggarwal, 2017:27) ^[12].

Digital Performance Evaluation

Digital performance evaluation is a method of evaluating an employee's performance in a company using digital technology. It uses data analytics to evaluate employees' performance and develop performance by identifying

whether training programs are necessary and what corrective actions can be taken to develop unrated employees (Al-Afeshat & Al-Maadheedi, 2024:14) ^[7]. Sultan & Fendi (2022:314) ^[4] state that digital performance evaluation does not only involve performance evaluation of employees there can be organizational performance, monitoring progress, creating performance reports, and enabling internal improvement and development process. It also supports them in leveraging digital technologies and tools to create new employee performance evaluation programs while optimizing time, cost, and effort.

Digital Training and Development

Today's business model requires digital training and development so that both employees and companies can learn the skills they need to thrive in a fast-changing, ever-changing business environment. This field will continue to develop as digital technology evolves. According to Vardarlier (2020:245) ^[14], digital training & development refers to an integrated set of systems and processes enabling employees to receive right training to improve their job performance without location and time limitations by using different digital tools and methods.

Third Section: Field Research Framework Cronbach's Alpha for Internal Consistency

To ensure that the questionnaire accurately measures the intended factors, the researchers used Cronbach's Alpha formula. Generally, obtaining a value of ($\alpha \geq 0.60$) is considered acceptable in studies related to administrative and social sciences. Table (1) presents the results of the Cronbach's Alpha test for the reliability of the research questionnaire.

Table 1: Results of Cronbach's Alpha Test for Internal Consistency

Digital HRM Practices	Number of Items	Cronbach's Alpha	Validity Test
Digital Recruitment	5	0.81	0.91
Digital Selection	5	0.78	0.88
Digital Performance Evaluation	5	0.80	0.89
Digital Training & Development	5	0.84	0.91
Overall HRM Practices	20	0.81	0.90

Source: Prepared by the researchers based on the Statistical Analysis Program (SPSS:26).

The results in Table (1) indicate that all validity and reliability values for Cronbach's Alpha exceeded 0.60, surpassing the assumed threshold for questionnaire reliability. The overall reliability of the questionnaire was 0.81, confirming strong internal consistency.

Description and Diagnosis of Respondents' Answers on Digital Human Resource Management Practices

This section presents an analysis of digital human resource management (HRM) practices based on employees' responses in the studied company, using the five-point

Likert scale. Table (2) shows that all responses for the different dimensions of this variable exceeded the hypothetical mean (3.0). Based on mean scores, standard deviations, and relative importance percentages, the analysis indicates that the most significant practice was Digital Training and Development, with a mean of 3.61, a standard deviation of 0.52, and a relative importance of 72%. In contrast, Digital Selection was the least significant practice, with a mean of 3.37, a standard deviation of 0.62, and a relative importance of 67%.

Table 2: The Relative Importance of Digital Human Resource Management Practices in the Studied Companies

Digital HRM Practices	Mean Score	Standard Deviation	Response Percentage (%)
Digital Recruitment	3.44	0.58	68.8
Digital Selection	3.37	0.62	67.4
Digital Performance Evaluation	3.51	0.54	70.2
Digital Training & Development	3.61	0.52	72.2
Overall HRM Practices	3.48	0.56	69.65

Source: Prepared by the researchers based on the Statistical Analysis Program (SPSS:26).

Table (2) highlights the relative importance of the digital training and development dimension, reflecting employees' strong interest in this aspect. This finding indicates that the studied companies place significant emphasis on digital training and development programs to enhance the skills and capabilities of their workforce.

Determining Employee Response Levels to Digital Human Resource Management Practices: To assess the

extent to which employees in the studied companies respond to digital human resource management (HRM) practices, the One-Sample T-Test is applied. This test determines whether the mean values of each dimension significantly differ from the hypothetical mean value (3.0) on the five-point Likert scale. If the significance value (Sig.) is less than 0.05, it indicates a statistically significant difference between the observed mean and the expected mean.

Table 3: Results of One-Sample T-Test for Respondents' Answers on the Research Variable

Digital HRM Practices	Mean Score	T-Value	Df	Sig.
Digital Recruitment	3.44	8.98	119	0.000
Digital Selection	3.37	8.23	119	0.000
Digital Performance Evaluation	3.51	9.32	119	0.000
Digital Training & Development	3.61	10.44	119	0.000

Source: Prepared by the researchers based on the Statistical Analysis Program (SPSS:26).

The results in Table (3) indicate that all Sig. values are less than 0.05, confirming a statistically significant difference between the actual mean scores of the dimensions and the hypothetical mean (3.0), which suggests that employees in the studied companies demonstrate a strong adoption of digital human resource management (HRM) practices.

1. T-test results for digital recruitment in Table (3) confirm consensus on digital recruitment, as the calculated T-value (8.98) exceeds the critical table value (1.98) at a 0.05 significance level, with a mean score of 3.44.
2. T-test results for digital selection in Table (3) confirm consensus on digital selection, as the calculated T-value (8.23) exceeds the critical table value (1.98) at a 0.05 significance level, with a mean score of 3.37.
3. T-test results for digital performance evaluation in

Table (3) confirm consensus on digital performance evaluation, as the calculated T-value (9.32) exceeds the critical table value (1.98) at a 0.05 significance level, with a mean score of 3.51.

4. T-test results for digital training and development in Table (3) indicate that most responses from the research sample show strong agreement on digital training and development, as the calculated T-value (10.44) exceeds the critical table value (1.98) at a 0.05 significance level, with a mean score of 3.61.

Cluster Analysis: Cluster analysis is a statistical procedure aimed at classifying cases or variables into specific groups (clusters), where variables within the same cluster share similar characteristics while differing from those in other clusters. In this study, Hierarchical Cluster Analysis was employed, as it is particularly suitable for relatively small

samples (Ashour *et al.*, 2024:359) [5]. The research sample consisted of 120 respondents surveyed to examine the adoption of digital human resource management (HRM) practices in private pharmaceutical companies in Samarra. After conducting the test, the analysis confirmed that no missing values were present, ensuring a 100% valid data processing rate. The results of the cluster analysis were as follows:

Proximity Matrix: This matrix determines the similarity or dissimilarity between variables, expressed as distance measures between defined objectives. For instance, the distance between digital recruitment and digital selection was 40.200, while the distance between digital selection and digital performance evaluation was 26.040, and similar calculations applied to the remaining variables.

Table 4: Proximity Matrix

Variables	Digital Recruitment	Digital Selection	Digital Performance Evaluation	Digital Training & Development
Digital Recruitment	0.000	40.480	42.200	47.240
Digital Selection	40.480	0.000	26.040	31.640
Digital Performance Evaluation	42.200	26.040	0.000	33.120
Digital Training & Development	47.240	31.640	33.120	0.000

Source: Prepared by the researchers based on the statistical analysis outputs (SPSS).

The proximity matrix provides an indicator of the clustering values, showing, for example, that the first cluster forms between digital selection and digital performance evaluation, as their proximity value (26.040) is the lowest in the matrix, indicating the closest relationship. The same principle applies to the remaining factors.

digital selection. The second cluster is then formed by merging digital selection and digital performance evaluation with a coefficient of 30.267, reinforcing the importance of performance evaluation in digital HRM practices. The studied companies emphasize this cluster by implementing procedures to bridge the gap between actual and expected performance. Finally, the third and final cluster forms at 55.180, integrating the first cluster (digital selection) with digital recruitment, thereby completing the hierarchical cluster tree. The relative importance of each cluster highlights the role of digital HRM practices in the studied companies.

Agglomeration Schedule: This schedule outlines the hierarchical clustering process, showing how clusters form progressively. The first cluster emerges between digital selection and digital performance evaluation with a coefficient of 13.020, forming an initial cluster known as

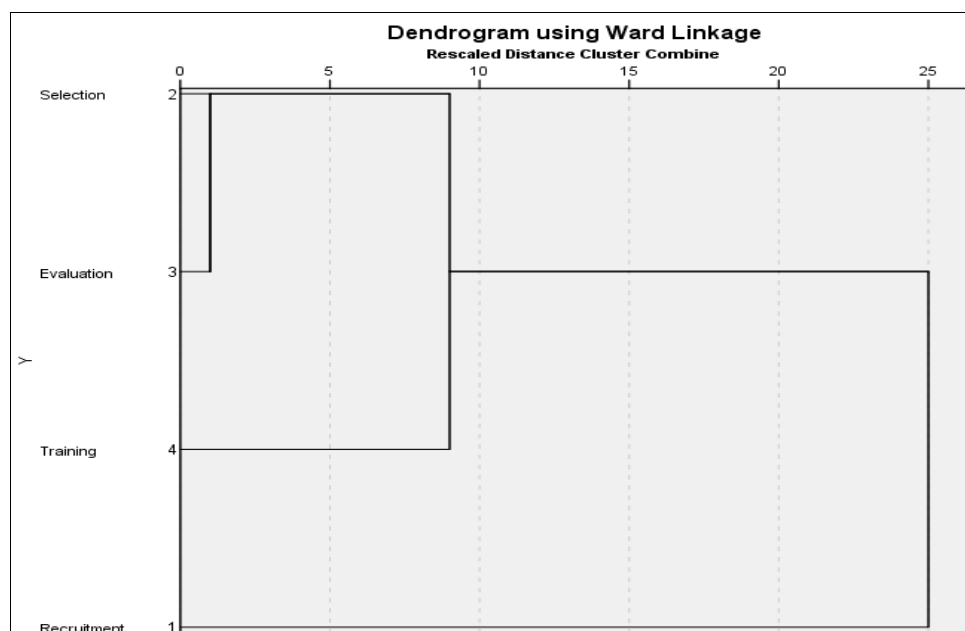
Table 5: Agglomeration Schedule

Stage	Cluster Combined		Coefficients	Stage Cluster First Appears		Next Stage
	Cluster 1	Cluster 2		Cluster 1	Cluster 2	
1	2	3	13.020	0	0	2
2	2	4	30.267	1	0	3
3	1	2	55.180	0	2	0

Source: Prepared by the researchers based on the statistical analysis program (SPSS:26).

Dendrogram: The dendrogram is a hierarchical tree diagram representing similarity measurements extending up to 25 units of measurement. The length of the branches indicates the degree of dissimilarity between the elements,

where longer branches signify greater dissimilarity and shorter branches indicate more substantial similarity. This relationship is visually represented in Figure (3).



Source: Prepared by the researcher based on the statistical analysis program (SPSS:26).

Fig 3: Dendrogram for Cluster Formation

The dendrogram in Figure (3) illustrates the hierarchical clustering process, showing that:

The first cluster forms between digital selection and digital performance evaluation, as they exhibit the highest similarity among the studied companies. This suggests that companies have a strong digital orientation in both selection and performance evaluation, as reflected in respondents' answers.

The second cluster emerges between digital selection and digital training & development, indicating a significant focus on digital transformation and performance improvement in the studied companies.

The final cluster is formed between digital recruitment and digital selection, completing the hierarchical clustering process. This suggests that the companies in the sample place high importance on digital HRM practices as part of their organizational strategy.

Cluster Analysis Using K-Means

After establishing the structural framework through hierarchical clustering, the K-Means clustering method was applied to classify individuals into three groups based on their degree of adoption of digital HRM practices. The Final Cluster Centers are presented in Table (6).

Table 6: Final Cluster Centers

Digital HRM Practices	Cluster		
	High Adoption Group (Cluster 1)	Moderate Adoption Group (Cluster 2)	Low Adoption Group (Cluster 3)
Digital Recruitment	4.57	3.95	3.60
Digital Selection	4.39	4.03	2.94
Digital Performance Evaluation	4.39	4.03	2.97
Digital Training & Development	4.31	3.78	3.23

Source: Prepared by the researcher based on the statistical analysis program (SPSS:26).

We observe from Table (6) that there are three groups for adopting digital HRM practices:

First Group: Individuals with high adoption of digital practices, scoring above 4.0. These individuals should be considered role models in applying digital practices.

Second Group: Individuals with moderate adoption of digital practices, scoring between 3.0 and 4.3. Their digital adoption can be enhanced through motivation and guidance.

Third Group: Individuals with low adoption of digital practices, scoring below 4.0. These individuals require more training and encouragement to integrate digital HRM practices.

Table 7: Distribution of Individuals across Adoption Groups

Adoption Group	Number of Individuals	Percentage (%)
High Adoption	38	31.6%
Moderate Adoption	75	62.6%
Low Adoption	7	5.8%
Total Individuals	120	100%

Source: Prepared by the researchers based on the statistical analysis program (SPSS:26).

From the data in Table (7), we observe that high adoption of digital HRM practices in the first group accounts for 31.6% of employees in the studied company. The second group, representing moderate adoption, constitutes 62.6%, the largest proportion of employees. In contrast, with low adoption, the third group includes the smallest number of employees, comprising only 5.8%. These findings confirm that employees show significant interest in adopting digital HRM practices.

Fourth Section: Conclusions and Recommendations

First: Conclusions

This section presents key conclusions derived from the theoretical and field research findings related to the study variables:

Digital transformation is essential for all companies to

remain efficient and future-oriented, ensuring they do not fall behind competitors in the market.

Digital human resource management (HRM) practices are among the most significant outcomes of technological advancements, fundamentally changing work patterns and creating new job opportunities that did not exist previously.

One of the key factors in providing quality medical services is fostering teamwork, which enhances service delivery to beneficiaries and promotes harmony and collaboration within organizations.

Initial perception analysis of employees regarding digital HRM practices revealed a generally positive awareness level, indicating that respondents place great importance on adopting these practices within the studied companies.

The studied companies all have digital HRM practices; all the responses exceeded the hypothetical mean (3.0) indicating good relative importance. Of the different HRM dimensions, digital training and development was ranked as the most important dimension, with a mean score of 3.61, standard deviation of 0.52, and relative importance of 72%. This finding reflects the companies are focusing on companies focus more on building and enhancing these skills and capabilities of employees so that they can do their jobs without being restricted on time or place using digital tools.

The prevailing approach in digital HRM practices is aimed at developing values and attitudes related to these practices and enhancing their implementation among employees in the studied companies.

Second: Recommendations

Based on the conclusions, the following recommendations are proposed to enhance the research framework:

1. Highlighting the need for digital human resource management (HRM) and that it can be implemented in healthcare companies, as digital HRM will help reduce errors and improve the quality of healthcare services based on customer expectations.
2. Supporting training and development of modern technologies in administrative processes of private pharmaceutical companies as a part of professional

- development of its employees.
3. Awareness raising of administrative staff, especially top management, in the studied companies, that digitalHRM practices are an important factor of quality assurance and allow administrative staff to properly meet the challenges in the complex and rapidly shaping environment.
 4. Encouraging an environment of innovation is allowing employees to speak their mind about what they do, how they do it, and get actively engaged when it comes to bringing suggestions into practice.
 5. Gain support from top management for implementing digital HRM solutions, as it requires a strong commitment from leadership with necessary skills to ensure change from a traditional to modern management system.

References

1. Abu Al-Enein MAW. The impact of digital human resource management on job quality - a field study on the Islamic banking sector in Egypt [PhD thesis]. Ain Shams University, Egypt; 2019.
2. Al-Badawi RSS. The role of digital human resource management in achieving competitive advantage - a case study of October 6 University and the British University in Egypt. *Arab J Manag.* 2022;42(4).
3. Blani ZHA, Hussein SQ. The role of digital human resource management in achieving digital transformation - an exploratory study of the opinions of a sample of administrative and academic leaders at the University of Duhok. *Nawroz Univ Acad J.* 2023;4(12).
4. Sultan AB, Fendi AH. The role of digital human resource management practices in high performance - an analytical study in the Iraqi Ministry of Labor and Social Affairs. *Jafar Al-Sadiq Univ J Humanit Soc Sci.* 2022;2(4):295-348.
5. Ashour DA, Mahdi MM, Hendawi MGK. Using multivariate statistical analysis to study the economic and social structural framework of funders - an applied study. *Sci J Financ Bus Stud Damietta Univ.* 2024;5(1).
6. Abdulrahman Y. Human resource management and the challenges of digital transformation in business organizations. *J Adm Econ Res.* 2019;3(1):207-219.
7. Al-Afeshat TM, Al-Maadheedi MWA. The role of digital human resource management in enhancing digital transformation readiness - the moderating role of ICT resources in commercial banks. *Research at Amman Arab University;* 2024.
8. Al-Karawi MTF, Al-Khazraji MRY, Al-Bayati AMK. The role of digital human resource management in enhancing digital culture at the University of Kufa. *J Account Financ Stud.* 2024;(Special Issue).
9. Al Shobaki, Nasser. The role of excellence strategies in education to achieve sustainable competitive advantage in higher education institutions - Faculty of Engineering and Information Technology at Al-Azhar University in Gaza as a model. *Int J Digit Publ Technol.* 2017;(1).
10. Althabhwae AAK, Saeed ZMH. Digital human resources management and its role in enhancing career agility - a research study analyzing the viewpoints of a sample of employees at many private banks in the Najaf Governorate. *AIP Conf Proc.* 2024;309.
11. Caravella S, Cirillo V, Crespi F, Guarascio D, Menghini M. The diffusion of digital skills across EU regions: structural drivers and polarization dynamics. *GLO Discussion Paper.* 2022;(1188).
12. Sharon D, Aggarwal V. Digital human resource management. *GYAN Manag.* 2017;11(2):Jul-Dec.
13. Paramita D. Digitalization in talent acquisition: a case study of AI in recruitment [Master's thesis]. Uppsala University, Uppsala, Sweden; 2020.
14. Vardarlier P. Digital transformation of human resource management: digital applications and strategic tools in HRM. In: Hacıoglu U, editor. *Digital business strategies in blockchain ecosystems: transformational design and future of global business.* Springer Nature Switzerland AG; 2020.
15. Thompson B. What future quantitative social science research could look like: Confidence intervals for effect sizes. *Educational researcher.* 2002 Apr;31(3):25-32.