

Evaluating the state of digital human resource management in Iraqi public universities

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Abstract

The goal of this research is to examine the current condition of digital human resource management in Iraqi public institutions. Because the essential data was obtained in the field and through a survey, the current research method was realistic in terms of its nature and purpose, as well as the descriptive-analytical analysis technique and time. The statistical population in the qualitative portion of this study consisted of scientific elites (university professors) and experimental elites (university managers) with more than ten years of experience in the study and design of strategic planning, and the statistical population in the quantitative portion consisted of academic experts. The sample approach was designed with both qualitative and quantitative goals in mind. Strengths, weaknesses, opportunities, and threats were discovered through a semi-structured interview. To accomplish this goal, it is required to first determine the SWOT Management of digital human resources in Iraqi public institutions. To identify strengths, weaknesses, opportunities, and threats, Management of digital human resources at Iraq's public universities Strengths (S), vulnerabilities (IN), opportunities (O), and threats (T) were determined by an examination of the existing situation, data, and a semi-structured interview. A research inventory, questionnaire, expert meetings, and analytical seminars were among the research instruments used in this phase. The findings of the inquiry proved the advantageous placement. Mashhad Sacred City Public Activities It is so flawed in this area that Li environmental dangers have a bigger influence on the management of digital human resources in Iraqi public colleges. Furthermore, the strategies chosen by wt are dominating.

Keywords: strategic situation, Digital human resource management, Iraqi public universities.

Introduction

Long-term economic expansion is contingent upon the character of human capital development. Its strategic objective is to build the capacity to invest in communication and information technology as well as digital platforms in order to sustain the learning and innovation process. Under the influence of digital technology advancements, the dimensions of human capital

management and human capital strategies have undoubtedly changed. The information age requires human resources with exceptional intelligence, creativity, and innovation, as well as exceptional knowledge and skills, so that businesses can compete and adapt to extensive environmental changes. (Mowgli et al., 2020) Strategic management of human capital is the process of guiding and directing the intellectual and behavioral capabilities of human capital in order to accomplish business results and have a strategy for what is regarded as the advantage and superiority of human capital. Under the influence of digital technology advancements, the dimensions of human capital management and human capital strategies have undoubtedly changed. The information age requires human resources with exceptional intelligence, creativity, and innovation, as well as exceptional knowledge and skills, so that businesses can compete and adapt to extensive environmental changes. Strategic management of human capital is the process of guiding and directing the intellectual and behavioral capabilities of human capital in order to achieve business results and have a plan for what is regarded as the advantage and superiority of human capital (Feng Chu et al., 2020).

(Keshva and Maheshwari, 2020) Almost all large organizations use digital human resource management systems to attract job candidates. In addition, they use these systems increasingly to deliver training, manage employee performance, and administer compensation and benefits systems. (Stone and Lukaszki, 2009) Research has demonstrated that digital HRM systems typically increase the efficacy of HR processes and reduce administrative costs. Digital human resource management is distinguished by the fact that it not only aids in employee management, but also enhances the planning and work of personnel in providing development and training to employees. With the proliferation of the Covid-19 virus, however, organizations now confront a formidable obstacle. To prevent the spread of Corona pandemic disease (Covid-19), a significant number of employees worked from home instead of reporting to work. Employees who previously spent the majority of their time within the organization's environment must now rapidly acclimate to the remote work environment, which has made it difficult to distinguish between the work space and the private space (Chawla et al. 2020).

Recent changes brought about by the Covid-19 pandemic have compelled organizations around the globe to accelerate their transition to digital processes, and this shift has made the role of digital human resource management in guiding employees in these conditions particularly delicate. Digital human resource management plays a crucial role in aiding employees' use of digital platforms to gain access to their colleagues and in assisting organizations in their efforts to continue business processes. During a time of economic crisis, it is vitally important for organizations to give close attention to their workforce management in order to ensure the continuance of business operations and the maintenance of a healthy work-life balance. For this reason, it is anticipated that working conditions will become more flexible and accommodating in the future, and that more attention will be paid to the formulation of digital norms as well as changes in policies, processes, the work environment, and the health and comfort of employees. (Rahimi et al., 1400) Human resource managers should assist their employees in adapting to accelerated changes in the workplace and society.

In spite of its prevalence in the world's most successful organizations, this system has not yet been implemented in Iraq. Unfortunately, despite the presence of Internet consumers in Iraq, administrative systems and human resource management do not use these technologies efficiently and effectively to enhance organizational performance. Some consider the failure to pay attention to the factors influencing the implementation of digital human resource management to be a failure. As a result, Iraqi organizations are compelled to pay special attention to the category of digital human resources management in order to eliminate certain obstacles in the country, such as hierarchical organizational structures, slowness of affairs, low productivity, underwork, unrealistic evaluations of human resources, and sometimes employee and supervisor dissatisfaction (Alipour et al., 2019). Universities do not deviate from this norm. As a result of the increasing use of modern technology and computer applications, as well as the current corona situation, the use of digital human resource management is a necessity and a key issue in human resource management in all departments, including the university department, in order to achieve positive results for improvement. (Alexis et al., 2021) The performance of employees and increasing their efficacy has become a priority. This is used in the field of education to provide learners and instructors with information and services for learning/educational purposes (e-learning). In this context, Brill and Galloway (2007) discovered that the integration of digital human resource management deployment in higher education institutions has resulted in the emergence of new concepts regarding work relations (Barifoayo, 2016).

Al-Bukhitan's research (2020), Sipek et al.'s research (2020), and Phillips' human capital strategy model (2016) all concluded that the impact of digital technology is so significant that it has the potential to completely transform the conditions of technology-based enterprises. In light of the changes in the organizational environment following the outbreak of the Corona disease, which is based on digital technology, Iraqi public universities must develop a clear vision based on the realities of business in order to adapt to the developments of digital technology; a vision that serves as a platform for shaping capabilities for the development of communication and information technology systems, networks, and infrastructures. Alternatively, business executives and human capital strategies should be designed and formulated based on the vision of digital technology transformation.

Universities do not deviate from this norm. As a result of the increasing use of modern technology and computer applications, as well as the current corona situation, the use of digital human resource management is a necessity and a key issue in human resource management in all departments, including the university department, in order to achieve positive results for improvement. (Alipour et al., 2019) The performance of employees and increasing their efficacy have changed. It is used in the field of education to provide learners and instructors with information and services for learning/teaching purposes (e-learning) (Alexis et al., 2021). In this context, Brill and Galloway (2007) discovered that the integration of digital human resource management deployment in higher education institutions has resulted in the emergence of new concepts regarding work relations (Barifoayo, 2016).

In this regard, it is essential and decisive to focus on human resources as the organization's most valuable assets, particularly in universities, which play a vital and infrastructure-building role in the community. And the management of entry, development, cultivation, maintenance, relations, and exit of human resources in such a sensitive organization becomes increasingly important; the path of investigation and pathology of the aforementioned topic should be sought in the factors and criteria that can alter the processes and functions of the management of human resources in this organization; These factors and criteria can have an external origin in the form of laws and regulations promulgated by upstream institutions such as the government, governorate, and ministries, etc., or they can originate at a lower level and closer to the human resource management functions of the organization, in the body of organizational strategies and resources. humans, internal organizational structures and processes, organizational culture, and organizational technology. Although there are numerous universities in Iraq, only a few of them (such as Al-Kitab University in Iraq) have been able to implement the digital human resources management system. Some of these universities have invested a great deal of time and money implementing this system, or are in the process of doing so. At the time of implementation, they encountered numerous hardware and software obstacles, or they were unable to fully implement this system. In spite of its prevalence in the world's most successful organizations, this system has not yet been implemented in Iraq. Unfortunately, despite the presence of Internet consumers in Iraq, administrative systems and human resource management do not use these technologies efficiently and effectively to enhance organizational performance. Some consider the failure to pay attention to the factors influencing the implementation of digital human resource management to be a failure. As a result, Iraqi organizations are compelled to pay special attention to the category of digital human resources management in order to eliminate certain obstacles in the country, such as hierarchical organizational structures, slow flow of affairs, low productivity, underwork, unrealistic evaluations of human resources, and sometimes employee and supervisor dissatisfaction. Understanding the significance of this issue, it appears that having a strong IT infrastructure is important and useful for all organizations and enterprises; However, public universities are more important than other organizations in the area of fostering creativity and responsibility for innovation that can train human resources. Now, the primary research query will be, "What is the current state of digital human resource management in Iraqi public universities, and what steps are necessary to rectify the situation?"

Research Methodology

According to the topic of the study, Analyzing the state of digital human resource management in Iraqi public universities This research employed both qualitative and quantitative approaches. The qualitative component of theme analysis was investigated, whereas SWAT analysis was utilized for the quantitative component. Consequently, the methods of information collection vary between phases.

a) Collecting information and identifying the factors During the phase of identifying and studying related articles and books and interviewing experts, it is necessary to select a specific criterion for

including or excluding the articles and works in order to answer the previous question. Thus, we can be confident in the quality of the research's design. As filters, these criteria are required because they eradicate incorrect and irrelevant information. In order for a study to be considered for inclusion in the systematic review of this research, it must be a peer-reviewed scientific article published between 2015 and 2022 in a peer-reviewed university journal. In addition, it should be taken into account, whether operationally or conceptually, that it has an impact on the objectives of the research (study), and because concepts and ideas in management advance and evolve so rapidly, articles older than fourteen years are deemed inappropriate because they can cause problems and distort the results. Obviously, it should be noted that in addition to the articles selected based on the aforementioned criteria, some articles from lower-ranked journals and even articles presented at conferences were considered in order to provide a more comprehensive access to the relevant literature. let's be Article search in informational databases Done is acknowledged. At the article-searching stage, it is necessary to employ an appropriate search strategy to identify articles that could be included in the literature review. In the continuance of the recognition phase, in order to complete the information, enrich the theoretical foundations, and pay close attention to the conditions, in-depth interviews with specialists and specialists were conducted. A comprehensive interview or targeted conversation is a well-known data collection technique in qualitative research. Use the ascending form.

b) Model design phase; the objective of this phase is to determine the content codes and their respective relationships.

c) the evaluation stage. Using data collected from interviews and other available data, as well as questionnaires, quantitative information about the phenomenon under study is gathered in the second stage. At this stage, the collected data is analyzed utilizing statistical methods, and the final research model is validated utilizing statistical techniques such as structural equation modeling and path analysis. For this purpose, partial least squares-based structural equation modeling has been employed. This methodology will be examined in depth below.

As a result of conducting the research in three distinct phases, in the first step, some of the identification model's constituent elements were identified through library research, followed by in-depth interviews with 20 professional experts to localize and identify other factors affecting the model. and academic (based on research and interviews). This study's statistical population is comprised of a review of relevant articles and books, as well as 20 experts (professors of human resources), selected using a purposive sampling technique. Several samples were chosen. The method of theme analysis was used to extract and group the elements. Lastly, the proposed model will be evaluated and measured using partial least squares-based structural equations. Finally, forty managers administered the questionnaire. And experts from public universities in Iraq were compiled and analyzed.

Research findings

To research the strengths, limitations, opportunities, and challenges of digital human resource management in Iraqi state universities, 45 systematic review articles were identified and their constituent factors and elements were analyzed using content analysis. In the subsequent phase, additional influential elements were identified through expert interviews and incorporated into the previously identified model.

Table 1- Open codes from articles and interviews regarding the status of strengths of digital human resources management in Iraqi public universities

Strengths	Component	Row
<ul style="list-style-type: none"> The presence of technological and modern equipment for digitization in the university The existence of technological infrastructures in the university Pursuing the rapid and continuous growth of digital technology changes Adaptation and coordination of the university with rapid changes in technology 	Facilities and equipment	1
		2
		3
		4
<ul style="list-style-type: none"> The willingness of employees to digital activities of the university The willingness of employees to develop digital skills Interest in career challenge and continuous digital education in university Abundant attention and interest in the digital work environment 	human resources	5
		6
		7
		8
<ul style="list-style-type: none"> Needs assessment of the university's digital goals Ensuring that the university's digital goals are achievable Providing constructive suggestions to advance digital goals Needs assessment of the university's digital goals 	Cultural and social management	9
		• 10
		• 11
		• 12
<ul style="list-style-type: none"> Rewarding innovative actions and ideas in the digital field of the university Financial support of the university management for the performance of digital human resources management Establishing a service compensation system in the digital field of the university 	• Funds	• 13
		• 14
		• 15

Table 2- Open codes from articles and interviews regarding the state of weaknesses of digital human resources management in Iraqi public universities

Weaknesses	Component	Row
<ul style="list-style-type: none"> Lack of access to Technological and modern equipment for digitization in the university 	Facilities and	1
<ul style="list-style-type: none"> Some equipment is worn out Digitization in the university 	equipment	2
<ul style="list-style-type: none"> Equipment not up to date Digitization in the university 		3
<ul style="list-style-type: none"> Lack of unanimity among top managers for Digital human resource management 	human resource	4
<ul style="list-style-type: none"> Weak supervision and control of managers on the performance of the field Digital human resource management 	s	5
<ul style="list-style-type: none"> Weak participation of experts and elites in decision-making for Digital human resource management 		6
<ul style="list-style-type: none"> Inadequacy of the number of experts with people's expectations in development Digital human resource management 		7
<ul style="list-style-type: none"> Lack of culture development Digital human resource management 	Cultural and	8
<ul style="list-style-type: none"> Failure to pay attention to Digital human resource management groups 	social manage	9
<ul style="list-style-type: none"> Incomplete instructions in support of Digital human resource management 	ment	10
<ul style="list-style-type: none"> Weakness of information and lack of written program for Digital human resource management 		11
<ul style="list-style-type: none"> Failure to hold joint meetings between units for Digital human resource management 		12
<ul style="list-style-type: none"> Lack of motivation for private sector investment in development Digital human resource management 	Funds	13
<ul style="list-style-type: none"> The high cost of maintenance and repair of equipment and Digital human resource management 		14
<ul style="list-style-type: none"> Strong financial dependence on the government 		15

Table 3- Open codes from articles and interviews regarding the status of digital human resource management opportunities in Iraqi public universities

Opportunities	Component	Row
<ul style="list-style-type: none"> The high capacity of the university for Digital human resource management 	Facilities and	1
<ul style="list-style-type: none"> Application of technologies in daily work activities in the university 	equipment	2
<ul style="list-style-type: none"> Access to modern hardware technologies 		3
<ul style="list-style-type: none"> Technology graduates and the possibility of using them in Creation and dynamics of digital human resource management 	human resources	4
<ul style="list-style-type: none"> The possibility of using experts to hold related classes and courses 		5
<ul style="list-style-type: none"> Existence of self welding groups in the university for development Digital human resource management 		6
<ul style="list-style-type: none"> The existence of excellent training centers for development Digital human resource management 		7
<ul style="list-style-type: none"> Creating a clear and open environment and strengthening the spirit of criticism 	Cultural and	8
<ul style="list-style-type: none"> Using information technology to increase speed and accuracy 	social management	9
<ul style="list-style-type: none"> Emphasis on the development of university law Digital human resource management 		10
<ul style="list-style-type: none"> Lower cost and greater access to Digital human resource management 	Funds	11
<ul style="list-style-type: none"> Good credit Digital human resource management At the head of budget chapters 		12
<ul style="list-style-type: none"> The possibility of supporting resources and private sectors Digital human resource management 		13

Table 4- Open codes from articles and interviews regarding the state of digital human resource management threats in Iraqi public universities

threats	Component	Row
<ul style="list-style-type: none"> • Hard access to Digital human resource management For special groups 	Facilities and equipment	1
<ul style="list-style-type: none"> • Failure to embed information using MIS 		2
<ul style="list-style-type: none"> • Lack of employee access to new digital technology 		3
<ul style="list-style-type: none"> • Employment of non-specialized workers and their employment in Digital human resource management 	human resources	4
<ul style="list-style-type: none"> • Attracting elites Digital human resource management in organization 		5
<ul style="list-style-type: none"> • Successive changes of university administrators 		6
<ul style="list-style-type: none"> • Failure to gain a competitive advantage in university digital human resources 	Cultural and social management	7
<ul style="list-style-type: none"> • The university's lack of quick response to new ideas and models 		8
<ul style="list-style-type: none"> • Failure to prepare a strategic plan for digital human resources in the university 		9
<ul style="list-style-type: none"> • Lack of long-term goals of the university 		10
<ul style="list-style-type: none"> • Increase in the price of equipment and supplies Digital human resource management 	Funds	11
<ul style="list-style-type: none"> • Economic problems of universities for Digital human resource management 		12

Using the convergent validity technique (AVE index), the validity of the research instrument was determined. According to Table 2's values, the convergent validity index indicates that the validity of the subcategories of the factors is in an advantageous state. As a consequence of its reliability, the values associated with Cronbach's alpha coefficient and combined reliability indicate that the tool's measurement accuracy falls within the high category. In addition, the concept Model's total alpha coefficient is estimated to be 0.85 using this questionnaire.

Table 5- Validity and reliability evaluation indicatorsThe status of digital human resources management in Iraqi public universities

divergent (reliability)		Convergent validity	Axial code	selection code
Composite reliability	Cronbach's alpha	AVE		
9168/0	9626/0	9209/0	Strengths	The state of digital human resource management threats in Iraqi public universities
7820/0	7054/0	7588/0	Weaknesses	
7936/0	8310/0	7713/0	Opportunities	
9168/0	9626/0	9209/0	threats	

In order to identify the strengths, weaknesses, opportunities, and threats of digital human resource management in Iraqi state universities, a list of SWOT factors was extracted by utilizing available resources and expert opinions. After evaluating the current situation, several questions were removed or modified, and some questions were added to the SWOT list during sessions attended by distinguished professors as supervisors and consultants. The final list of identified strengths, weaknesses, opportunities, and threats is presented below.

Strengths

The study's findings revealed that public universities in Iraq have a serious problem with digital human resource management. It excels in a wide variety of areas. Table (4-6) Based on the Friedman test results, it displays the strengths along with their mean, standard deviation, and rank. The university administration's confidence in the efficacy of digital human resources management is based on the results of this evaluation. They were deemed crucial qualities.

Table 6- Strengths Management of digital human resources in Iraqi public universities

average rank	The standard deviation	Average	Title	Row
12.72	0.47	3.87	The presence of technological and modern equipment for digitization in the university	1
13.29	0.57	3.87	The existence of technological infrastructures in the university	2
9.26	0.82	3.49	Pursuing the rapid and continuous growth of digital technology changes	3
9.94	0.55	3.59	Adaptation and coordination of the university with rapid changes in technology	4
10	0.71	3.64	The willingness of employees to digital activities of the university	5
6.87	0.72	3.26	The willingness of employees to develop digital skills	6
9	0.72	3.41	Interest in career challenge and continuous digital education in university	7
10.91	0.81	3.64	Abundant attention and interest in the digital work environment	8
9.88	0.82	3.56	Needs assessment of the university's digital goals	9
8.17	0.79	3.41	Ensuring that the university's digital goals are achievable	10
12.03	0.66	3.79	Providing constructive suggestions to advance digital goals	11
9.97	0.76	3.51	Needs assessment of the university's digital goals	12
8.51	0.87	3.33	Rewarding innovative actions and ideas in the digital field of the university	13
13.88	0.58	4.08	Financial support of the university management for the performance of digital human resources management	14
9.4	0.76	3.51	Establishing a service compensation system in the digital field of the university	15

Table 7- Significance of Friedman's test in strengths Management of digital human resources in Iraqi public universities

39	Number
128/102	hey two
14	Degrees of freedom
0001/0	The significance level

Weaknesses

Based on the findings, it is clear that there are several gaps in the way digital human resources are managed in Iraq's public universities. Table 4-6Based on the Friedman test findings, it displays the flaws along with their average, standard deviation, and rank. Weaknesses in digital human resource management were identified, including a failure to arrange cross-departmental meetings.

Table 8 – Weaknesses Management of digital human resources in Iraqi public universities

average rank	The standard deviation	Average	Title	Row
7.64	0.83	3.69	Lack of access to Technological and modern equipment for digitization in the university	1
9.6	0.7	3.87	Some equipment is worn out Digitization in the university	2
10.82	0.5	4.1	Equipment not up to date Digitization in the university	3
9.73	0.6	3.95	Lack of unanimity among top managers for Digital human resource management	4
10.76	0.76	4	Weak supervision and control of managers on the performance of the field Digital human resource management	5
9.83	0.73	3.87	Weak participation of experts and elites in decision-making for Digital human resource management	6
11.26	0.76	4	Inadequacy of the number of sports experts with people's expectations in development Digital human resource management	7
9.94	0.56	3.95	Lack of culture development Digital human resource management	8
9.13	0.63	3.85	Failure to pay attention to Digital human resource management groups	9
11.42	0.84	4.03	Incomplete instructions in support of Digital human resource management	10
13.92	0.88	4.26	Weakness of information and lack of written program for Digital human resource management	11
14.38	0.73	4.31	Failure to hold joint meetings between units for Digital human resource management	12
11.86	0.65	4.05	Lack of motivation for private sector investment in development Digital human resource management	13
12.77	0.79	4.1	The high cost of maintenance and repair of equipment and Digital human resource management	14
11.38	0.47	4.13	Strong financial dependence on the government	15

Table 9- Significance of Friedman's test in weaknesses Management of digital human resources in Iraqi public universities

39	Number
52/86	hey two
14	Degrees of freedom
0001/0	The significance level

Opportunities

Based on the findings, there are several potential applications for digital human resource management at Iraq's public universities. Table 4-6Based on the Friedman test findings, it displays the flaws along with their average, standard deviation, and rank. A passing score on this test indicates that you have ready access to the latest and greatest in hardware technology. They were deemed the best chances available.

Table 10- Opportunities Management of digital human resources in Iraqi public universities

average rank	The standard deviation	Average	Title	Row
15.11	0.55	4.1	The high capacity of the university for Digital human resource management	1
12.13	0.61	3.79	Application of technologies in daily work activities in the university	2
15.91	0.52	4.21	Access to modern hardware technologies	3
7.5	0.78	3.36	Technology graduates and the possibility of using them in Creation and dynamics of digital human resource management	4
11.64	0.85	3.74	The possibility of using experts to hold related classes and courses	5
12.32	0.67	3.77	Existence of self-welding groups in the university for development Digital human resource management	6
14.04	0.9	3.92	The existence of excellent training centers for development Digital human resource management	7
13.67	0.79	3.95	Creating a clear and open environment and strengthening the spirit of criticism	8
10.51	0.84	3.64	Using information technology to increase speed and accuracy	9
12.58	0.55	3.9	Emphasis on the development of university law Digital human resource management	10
13.8	0.51	4.05	Lower cost and greater access to Digital human resource management	11
10.18	0.9	3.64	Good credit Digital human resource management At the head of budget chapters	12
10.49	0.81	3.64	The possibility of supporting resources and private sectors Digital human resource management	13

Table 11- Significance of Friedman's test in opportunities Management of digital human resources in Iraqi public universities

40	Number
328	hey two
12	Degrees of freedom
0001/0	The significance level

Threats

According to the findings of the study, public universities in Iraq have several challenges in the area of digital human resource management. Tables 4–6 list the detected and prioritized weaknesses related to this topic, based on the Friedman test. The findings of the test suggest that rising costs of technology and supplies integral to the administration of digital human resources pose the greatest danger.

Table 12- Threats Management of digital human resources in Iraqi public universities

average rank	The standard deviation	Average	Title	Row
7.97	0.78	3.85	Hard access to Digital human resource management For special groups	1
12.39	0.59	4.38	Failure to embed information using MIS	2
12.16	0.79	4.28	Lack of employee access to new digital technology	3
9.45	0.59	4.15	Employment of non-specialized workers and their employment in Digital human resource management	4
8.62	0.79	3.95	Attracting elites Digital human resource management in organization	5
4.91	0.79	3.46	Successive changes of university administrators	6
11.18	0.51	4.28	Failure to gain a competitive advantage in university digital human resources	7
12.92	0.73	4.31	The university's lack of quick response to new ideas and models	8
14.93	0.59	4.59	Failure to prepare a strategic plan for digital human resources in the university	9
12.66	0.64	4.41	Lack of long-term goals of the university	10
16.28	0.44	4.74	Increase in the price of equipment and supplies Digital human resource management	11
16.34	0.5	4.74	Economic problems of universities for Digital human resource management	12

Table 13- Significance of Friedman's test in threats Management of digital human resources in Iraqi public universities

40	Number
128/121	hey two
11	Degrees of freedom
0001/0	The significance level

Location Management of digital human resources in Iraqi public universities

To determine the current situation, the internal factors matrix, external factors matrix, and internal-external factors matrix were utilized.

Internal factors matrix

Internal factors matrix was scored by dividing the average of each factor by the sum of the averages of all internal factors, as determined by the importance coefficient in column three of Table 14. The total importance coefficient in the internal factors matrix was calculated to be 1. The intensity of each factor was determined based on the average expert opinions regarding the current situation of each factor, which was then placed in the fourth column of the table. In contrast to the conventional SWOT matrix approach, there were no limitations on the values assigned to the internal and external factors, which could range from 1 to 4. Finally, the score of each factor was calculated by multiplying the importance coefficient by the intensity, and the results were added together to determine the overall score of each factor. The findings indicate that financial support for digital human resource management from university management is a strength, while the high costs associated with the maintenance and repair of equipment and digital human resource management are weaknesses (scoring above 2.5).

Table 14-Matrix of internal factors Condition Management of digital human resources in Iraqi public universities

Score	The severity of the factor	Importance factor (weight)	Agents	code
0.1	3.87	0.025	The presence of technological and modern equipment for digitization in the university	S1
0.1	3.87	0.026	The existence of technological infrastructures in the university	S2
0.11	3.49	0.031	Pursuing the rapid and continuous growth of digital technology changes	S3
0.09	3.59	0.024	Adaptation and coordination of the university with rapid changes in technology	S4
0.11	3.64	0.031	The willingness of employees to digital activities of the university	S5
0.11	3.26	0.035	The willingness of employees to develop digital skills	S6
0.09	3.41	0.026	Interest in career challenge and continuous digital education in university	S7
0.08	3.64	0.023	Abundant attention and interest in the digital work environment	S8
0.08	3.56	0.023	Needs assessment of the university's digital goals	S9
0.11	3.41	0.032	Ensuring that the university's digital goals are achievable	S10
0.11	3.79	0.03	Providing constructive suggestions to advance digital goals	S11
0.11	3.51	0.031	Needs assessment of the university's digital goals	S12
0.1	3.33	0.031	Rewarding innovative actions and ideas in the digital field of the university	S13
0.12	4.08	0.03	Financial support of the university management for the performance of digital human resources management	S14
0.09	3.51	0.025	Establishing a service compensation system in the digital field of the university	S15
0.09	3.87	0.023	Lack of access to Technological and modern equipment for digitization in the university	W1
0.11	3.87	0.029	Some equipment is worn out Digitization in the university	W2

0.11	3.49	0.032	Equipment not up to date Digitization in the university	W3
0.11	3.59	0.031	Lack of unanimity among top managers for Digital human resource management	W4
0.12	3.64	0.032	Weak supervision and control of managers on the performance of the field Digital human resource management	W5
0.07	3.26	0.023	Weak participation of experts and elites in decision-making for Digital human resource management	W6
0.12	3.41	0.035	Inadequacy of the number of sports experts with people's expectations in development Digital human resource management	W7
0.13	3.64	0.036	Lack of culture development Digital human resource management	W8
0.09	3.56	0.025	Failure to pay attention to Digital human resource management groups	W9
0.09	3.41	0.027	Incomplete instructions in support of Digital human resource management	W10
0.14	3.79	0.037	Weakness of information and lack of written program for Digital human resource management	W11
0.09	3.51	0.025	Failure to hold joint meetings between units for Digital human resource management	W12
0.09	3.33	0.027	Lack of motivation for private sector investment in development Digital human resource management	W13
0.13	4.08	0.031	The high cost of maintenance and repair of equipment and Digital human resource management	W14
0.08	3.51	0.024	Strong financial dependence on the government	W15
9/3 S=	_____	S=1	The sum of the coefficients of the importance of internal factors	

Matrix of external factors

The scoring technique for the external factors matrix was as described in the third column of table 4-15 (importance factor): On the basis of expert opinion regarding the favorable condition of the items, the importance coefficient was calculated by dividing the average of each item by the sum of the averages of all items of external factors. The sum of the coefficients of prominence in the

external factors matrix was determined to be 1. In the fourth column of the table (severity of the factor), the average opinion of experts regarding the present status of each item was computed and inserted. These numbers were calculated between 1 and 4, and, unlike the typical matrix SWOT method, there was no restriction method for internal and external factors, so these items could contain any number between 4 and 1. In the final column, the product of the importance coefficient and the intensity of the factor was multiplied to determine the score for that item, and based on the total item scores, it was determined that The university's exceptional capacity for digital human resource management It possesses both favorable opportunities and the greatest threat. Price increases for equipment and supplies Human resource management is digital (scoring above 5.2).

Table 15-matrix of external factors Condition Management of digital human resources in Iraqi public universities

Score	The severity of the factor	Importance factor (weight)	Agents	code
0.23	4.1	0.055	The high capacity of the university for Digital human resource management	O1
0.2	3.79	0.053	Application of technologies in daily work activities in the university	O2
0.23	4.21	0.055	Access to modern hardware technologies	O3
0.2	3.36	0.059	Technology graduates and the possibility of using them in Creation and dynamics of digital human resource management	O4
0.24	3.74	0.063	The possibility of using experts to hold related classes and courses	O5
0.23	3.77	0.06	Existence of self-welding groups in the university for development Digital human resource management	O6
0.2	3.92	0.052	The existence of excellent training centers for development Digital human resource management	O7
0.22	3.95	0.056	Creating a clear and open environment and strengthening the spirit of criticism	O8
0.2	3.64	0.055	Using information technology to increase speed and accuracy	O9
0.23	3.9	0.059	Emphasis on the development of university law Digital human resource management	O10
0.23	4.05	0.056	Lower cost and greater access to Digital human resource management	O11
0.19	3.64	0.052	Good credit Digital human resource management At the head of budget chapters	O12
0.21	3.64	0.059	The possibility of supporting resources and private sectors Digital human resource management	O13
0.23	3.85	0.06	Hard access to Digital human resource management For special groups	T1
0.23	4.38	0.052	Failure to embed information using MIS	T2
0.2	4.28	0.046	Lack of employee access to new digital technology	T3
0.19	4.15	0.045	Employment of non-specialized workers and their employment in Digital human resource management	T4
0.19	3.95	0.049	Attracting elites Digital human resource management in organization	T5
0.19	3.46	0.056	Successive changes of university administrators	T6

0.22	4.28	0.052	Failure to gain a competitive advantage in university digital human resources	T7
0.21	4.31	0.049	The university's lack of quick response to new ideas and models	Q8
0.16	4.59	0.47	Failure to prepare a strategic plan for digital human resources in the university	T9
0.23	4.41	0.053	Lack of long-term goals of the university	T10
0.26	4.74	0.054	Increase in the price of equipment and supplies Digital human resource management	T11
0.3	4.74	0.064	Economic problems of universities for Digital human resource management	T12
23/8 S=	_____	S=1	The sum of the coefficients of the importance of external factors	

Overall, the results of the tables as well as the internal and external matrix indicate that the status of digital human resource management in Iraqi public universities is positioned in the WT region in terms of the situation. Therefore, it has strengths in terms of internal situation and threats in terms of external environment. To simultaneously analyze internal and external factors, the internal and external matrix was used. This matrix is used to determine the position of digital human resource management in Iraqi public universities. To form this matrix, scores obtained from the evaluation matrices of internal and external factors are placed horizontally and vertically to determine the position of digital human resource management in Iraqi public universities in the cells of this matrix, and an appropriate strategy can be adopted for it. In this matrix, scores are determined on a two-part spectrum of strong (2.5 to 4) and weak (1 to 2.5)

Diagram 1- MatrixSWOT

strength									
5									
4									
3									
2									
1									
Threat					the opportunity				
-8	-6	-4	-2			1	2	3	4
				-1					
-2									
-3									
-4									
-5									
weakness									

According to the preceding matrix and average, it is evident that WT is in a strategic position with numerous assets and opportunities, as well as significant vulnerabilities. Consequently, WT strategy should be employed. The objective of the WT strategy is for the organization to enhance its internal weaknesses by eliminating internal environment weaknesses. Sometimes there are excellent opportunities outside the organization, but internal weaknesses and external threats prevent the organization from taking advantage.

Discussion and Conclusion

Experts and publications agreed on a total of 19 favorable strengths, 22 undesirable weaknesses, 22 promising opportunities, and 24 dangerous threats. The data demonstrated that The most crucial emphasis Financial backing from the university administration for the implementation of digital human resources management Points’ relative superiority and High prices for repairs and upkeep, as well as for DHR software, can add up quickly. One of the main flaws not to mention the school's formidable resources in the field of digital HRM Both the best opportunities and the greatest danger are present. The rising cost of materials caused by the rise in popularity of digital HR management. Condition Management of digital human resources at Iraqi public universities in the circumstances indicated by the above matrix and the mean of the findings is dire. WT is situated, has numerous strengths and opportunities, and is now plagued by serious weaknesses. Likewise, the tactic employed The plan's ultimate goal WT That the company works to strengthen itself by eliminating its own internal weaknesses. There are instances when there are excellent opportunities outside the company, but owing to internal weaknesses and external threats, the organization cannot capitalize on them.

Goal: Improve confidence in the future of managing digital human resources at Iraq's public institutions. Officials and individuals working in this field, in order to make the most of technological talents, must first design and implement a strategic plan, with special emphasis paid to the private sector's capabilities. However, the issues may be fixed if you focus on organizational tactics such as Methods of planning, monitoring, and assessing team and group efforts for maximum efficiency near Facilitating open and honest dialogue in the workplace and enhancing participants' ability to communicate with one another Stability may be the result. When compared to other colleges, Iraqi public institutions fall short when it comes to the most basic parts of building an IT infrastructure for an efficient communication system. This study must be conducted in Iraqi public universities due to a lack of resources (such as an advanced internet system for internal communication, modern and advanced electronic devices in the university and its formations, a developed and updated database, and expert personnel in this technical aspect). Therefore, in order for public universities in Iraq to succeed in IT infrastructure, they need to manage their capacities in a consistent manner during the bulk of operational operations, accomplish their goals, and produce at a high level. Because Today's businesses need to be on the lookout for external crises that pose threats to their performance and existence, as well as the unpredictability of its employees. In response to the exceptional challenges posed by the recent Covid-19 disease outbreak, several sectors of business have developed novel approaches to old problems. Now, it appears It turns out that having a solid IT infrastructure is beneficial for businesses of all sizes; however, public universities stand out as particularly pivotal players in the field of fostering creative thinking and taking on the mantle of innovation in order to educate the workforce. Given the present complicated and dynamic conditions, it is crucial that Iraqi public universities develop a model for digital human resources management in cyberspace in order to boost performance and realize organizational goals.

In conclusion, it was proposed that 1) the digital transformation at universities is influenced by the presence or absence of a digital roadmap, digital resources, digital attitude, digital culture building, and digital security; 2) the digital culture development variable has the greatest impact on the digital transformation; and 3) the digital governance variable does not have a linear relationship with the digital transformation. Culture development and the digital road plan are also given high importance as a result of the factor analysis technique.

2 - University administrations may better prepare for the workforce of the future by examining employee and university strategy challenges through the lens of digital transformation. The pace of innovation and engagement in today's society has been accelerated by the advent of new technology. While it's true that digital resources provide a fertile ground for the development of new ideas, an organization's most valuable resource is its extraordinary and distinctive workforce. Universities today, however, are suffering from a significant shortage of leaders who are equipped with both the digital literacy to deal with data and the social intelligence to interact with people. Those who have the financial wherewithal to take advantage of academically-based innovation opportunities and the imaginative and technical chops to generate truly useful ideas for the

company. The loss of brilliant personnel poses a serious danger to the continued existence of businesses that lacked the foresight to take the lead in their industries and make strides toward meeting the difficulties posed by digitization. Everything that happens in the modern workplace is being altered and disrupted by digital change. Work practices must also evolve to accommodate the demands of new technology. When this happens, it's not enough to just have people with varied talents or to help them become more proficient. Companies need employees with fresh perspectives and outlooks if they want to succeed in the present market. Companies who fail to adopt digital transformation strategies will be left behind. scene

Third, initiatives and activities pertaining to the change must be consistent with the change strategy. Successful digital transformations typically use more agile methods. It's common practice, for instance, to urge departments throughout the corporation to work together and take risks as part of the transformation process. The relevance of agility to the success of digital transformations becomes obvious when we examine the features of agility in the organizational culture of businesses.

4-Ownership of digital transformation has become a contentious subject because of the influence that companies' actions have on the allocation of their resources and even the long-term goals of the company. A comparison of the positions described by the respondents with those responsible for leading the transformation plan and its implementation in successful groups indicates crucial variances. Another hallmark of effective businesses is a crystallized understanding of who is accountable for what during the change. Ownership transparency is crucial because as innovations mature, the roles of various groups evolve and their respective contributions must be clearly articulated.

The need of involvement and alignment at all levels of the institution is stressed in a significant number of successful digital transformations in order to coordinate efforts and prioritize them. Inconsistencies at universities are common because administration rarely works together to achieve shared goals. One method to get buy-in for the transformation-related work that has to be done is to demonstrate the strategy's success through early wins that corroborate the big picture. The economic investment in a straightforward action persists. Making these kinds of signs public can help garner support for reform initiatives. The similar effect may be expected from leaders who are adept with digital tools. These measures aid institutional heads in allocating enterprise-level capital and operational expenses, showcase the dedication of administrators, and lessen the likelihood of wasting resources on half-baked initiatives.

6. Facilitating adaptability through targeted partnerships. The ownership of each transformation will also change as it progresses from concept to execution, and this is because effective transformations entail substantial contributions from throughout the business. This study's findings suggest that the transition to new responsibilities requires careful planning. One of the crucial jobs is to figure out how to balance collaboration and intervention. Leaders need to bring together like-minded groups at the organizational level and present a detailed strategy for each change if they want to prevent unnecessary work, discord, and missed opportunities.

The plan will specify the business objectives you want to accomplish through digitalization. Initiating, analyzing, and progressing a digital transformation program need a strategy and action plan.

The ability of universities to swiftly adapt, accept new technologies, and undergo digital transformation is crucial if they are to remain competitive in the global student admittance market. The educational system is becoming increasingly computerized. According to IDC, global expenditures in technology and services that allow digital transformation will hit \$2 trillion by 2022. Better and more connection with students is possible for universities that embrace digital change, while those that don't run the danger of falling behind.

9- More agile approaches are applied in successful digital sector advancements. It's common practice, for instance, to urge departments throughout the corporation to work together and take risks as part of the transformation process. The relevance of agility to the success of digital transformations becomes obvious when we examine the features of agility in the organizational culture of businesses.

Ten- Backing the maintenance of the best course of action concerning digital technology. Transparency is essential for both ownership and action investing. There must be transparent parameters for redistributing funds between instructional and operating expenses at the institution. If the aims of any of the digital technology initiatives are to be realized, then those activities will continue to get funding. When one strategy fails to provide the desired results, colleges should immediately stop investing in that area and redirect those money to the next strategy. Success factors have included seeking integration and collaboration opportunities to speed up the development of new capabilities, and this trend looks more likely to persist as the rate of digital transformation quickens.

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