

# THE IMPACT OF KNOWLEDGE ACCUMULATION OF LEADERS ON HUMAN RESOURCES MANAGEMENT PRACTICES IN NTU IRAQ

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## Abstract

**Purpose:** The aim of this study is to examine the relationship between knowledge accumulation and human resource management practices in Northern Technical University in Iraq.

**Theoretical framework:** The knowledge accumulation represented by its dimensions (data analysis, continuous improvement, knowledge absorption, knowledge sharing and knowledge integration) as an independent variable and human resource management practices with its dimensions (human resource planning, recruitment, training and development, compensation and incentives and performance evaluation), as an dependent variable.

**Design/methodology/approach:** In this study; We analyzed by used a quantitative approach, and 221 administrative leaders were selected as a sample and given a questionnaire. The SPSS, Ver.26 and AMOS, Ver.24 software was used to examine the data that were obtained from the questionnaire.

**Finding:** The results showed that there is a significant correlation between knowledge accumulation and human resource management practices, in addition, there is a significant effect of accumulation knowledge on practices of human resource management.

**Research, Practical & Social implications:** Overall, it was shown that the Northern Technical University and its formations in Nineveh Governorate is benefiting from the adopting human resources management practices by the impact of knowledge accumulation.

**Originality/value:** Our current study attempts to bridge the research gap in the literature review about the relationship between human resources management practices and knowledge accumulation, and that the originality in the research comes from the application of these variables in the Northern Technical University and its formations in Nineveh Governorate.

**Keywords:** knowledge accumulation; human resources management practices; Northern Technical University; Iraq

## **Introduction**

The past recent years have witnessed a clear development in knowledge-based organizations and the global economy is characterized by gradual development and promoting economic and service growth. As knowledge represents one of the important and rare resources of organizations and is considered a special feature that distinguishes the organization from others, which is directly related to its human resources, therefore, organizations seek to focus on their current knowledge and matching with their previous knowledge in order to carry out the transfer and exchange of knowledge with many similar organizations to them to acquire new knowledge help them to direct their human resource management practices, accumulation of knowledge contributes in detail to improving the organization performance, represents the most important source in building organizations, it is necessary to rely on human resources capable of producing knowledge, which leads to development the organization dynamically, human resources management is one of the main management in the organization, through which the organization can get what it needs from human resources and provide the necessary competencies, skills and expertise to achieve the objectives effectively and in accordance with the organization's strategy.

The current study aims to test the relationship between knowledge accumulation represented by its dimensions (data analysis, continuous improvement, knowledge absorption, and knowledge sharing and knowledge integration) and human resource management practices with its dimensions (human resource planning, recruitment, training and development, compensation and incentives and performance evaluation). It concerns the first part of the study, while the second part is devoted to the theoretical side and hypotheses of the study. The third part of the study presents the methodology, results, conclusions, and finally proposals for future studies.

## **Knowledge accumulation**

This axis is concerned for previous literature related to the relationship between knowledge accumulation as an independent variable and human resource management practices as a dependent variable. There are still few studies that dealt with the relationship between knowledge accumulation and human resource management practices, Where the study (Mullei, 2019) dealt with the relationship of correlation and influence between knowledge accumulation and the performance of the organization on a sample of (155) companies in the State of Kenya, and the results showed a significant correlation between knowledge accumulation and the organization performance, with a statistically significant effect of knowledge accumulation on the performance of the organization, In a study conducted by (Ahmed, 2021) for the purpose of examining the effectiveness of career rotation in enhancing knowledge accumulation on (26) workers at the Iraqi Al-Kitab University, the results showed that there is a significant correlation between career rotation and knowledge accumulation, As for human resource management practices, a sample of (200) workers in the fertilizer sector in Pakistan was surveyed by Ahmed, Zaman and Khahak (2017) to find out the nature of the relationship between human resource management practices and job satisfaction. The results showed that there is a correlation Significance between human resource management practices and job satisfaction, In another direction, both (Houti and Drum, 2021) proved the existence

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of a significant correlation between human resource management practices and the development of intellectual capital, with a statistically significant effect in their study on a sample of (51) workers in commercial banks in the state of Jefla.

The idea of linking knowledge accumulation with human resource management practices is recent and has not been widely addressed, as there are studies that linked the variable of knowledge accumulation with other variables, for example the study (Hussein, 2021), which showed the role of knowledge accumulation in reducing deceptive behaviors, in the other side there are studies that have linked human resource management practices with other variables, for example, a study (Mahdi, 2022) showed the role of digital transformation in improving human resource management practices, and a study (Habeeb, Mostafa, Altyar, et al. (2020) showed the impact of leadership traits on human resource management practices, gender, and transformational leadership. In addition, some studies took human resources management practices as independent variable, for example, the study of (Klimovskikhs, Sekerin, Makushkin, et al. (2023) tested the impact of human resources management on improving the innovation potential of an enterprise to achieve the principles of sustainable development, and, the study of (Abunaila and Kadhim, 2022) took improve the competitive advantage through human resources management practices in the Iraqi banking sector, then, Chouhan (2023) he research aims to observe the impact of career adaptability on employee performance using organizational commitment as the mediator. This study also attempts to investigate human resource practices as a moderator in the association between career adaptability and organizational commitment. Finally, Bashir and Venkatakrishnan (2022) investigates the effect of human resource management practices, consisting of recruitment and selection, reward as well as recognition, training, performance appraisal and career development on affective commitment among employees working for micro, small and medium enterprises in Tirupur, the commercial hub of India. This study develops a better understanding of employer-employee exchange relationships by drawing on the theoretical framework of social exchange theory.

Therefore, current study focus to the following:

Knowledge accumulation is the process of growing new knowledge from the pre-existing knowledge of administrative leaders that was acquired over time through Learning and experiment during the job (Giraudy and Niedzwiecki, 2021, 2). Hamid and Sultan (2021) mentioned the dimensions of knowledge accumulation (data analysis, data classification, exploitation of human resources, continuous improvement), Ahmed, (2021) mentioned it as (data analysis, data classification, exploitation of human resources and continuous improvement), while, Lai (2009) and Ly and Lai (2017) expressed the dimensions of knowledge accumulation with (knowledge absorption, knowledge sharing and knowledge integration).

In this study, the following dimensions be adopted, as most studies agree on them:

a- Data analysis: Data analysis is defined as the practice by which raw data is collected, arranged and organized in an understandable manner that helps extract useful information from it (Ahmed, 2021, 185).

b- Continuous improvement: It is a systematic effort to search for new and innovative ways to perform the work and apply them and make iterative process improvements, as it is a gradual cumulative learning process according to which continuous additional innovations flow and continuous improvement leads to the development of specific capabilities within the organization (Van Assen, 2021, 133).

c- Knowledge absorption: the ability of the organization to recognize the value of new external information and to absorb and apply it internally.

d- Knowledge Sharing: Knowledge sharing is defined as the process through which explicit and tacit knowledge can flow between workers or organizations (Ed, Tarhini and Obeidat, 2015, 2).

e- Knowledge Integration: That it is the workers' possession of mental capabilities in an impressive way that enables them to perform their difficult and complex cognitive operations in a complete and organized manner (Hassan and Kutaisi, 2021, 328).

### **Human resources management practices**

Human resources management practices are a group of activities perform by the human resources management through recruitment, appointment, promotion, motivation, identification of training needs and performance evaluation (Al-Wakil, 2019, 798), Houti and Drum (2021) and Ali (2022) showed the dimensions of human resource management practices are human resource planning, recruitment, training and development, compensation, incentives and performance evaluation but, Omar (2022) showed them as human resource planning, recruitment, training and development, compensation and incentives and retention of human resources.

This study will take the practices which most of researchers mentioned them, as are the following:

a- Human resource planning: It is a set of integrated policies and procedures related to human resources that aim to identify and provide the required numbers of workers to run a specific business at a specific time and an appropriate cost (Al-Dhabab, 2020, 6).

b- Recruitment: Recruitment consists of operations (recruitment, selection and appointment) and is one of the most important functions carried out by the human resources management, through which it is possible to recruit workers and make a comparison between them according to scientific standards and identify those who meet the necessary conditions for performing the work and taking responsibility (Al-Badarin, Muhammad and Al-Amri, 2014, 67).

c- Training and development: an organized and continuous process that aims at on developing and developing the capabilities and skills of workers, increasing their information and improving their behavior, which is reflected in the efficient and effective performance of their job (Al-Mughni, 2019, 23).

d- Compensation and incentives: It is all that the organization provides in terms of financial or non-financial returns, benefits and services to the workers, for performing the roles assigned to them, performing the tasks entrusted to them, and contributing to achieving the goals of the organization (Fathiye, 2015, 91).

e- Performance appraisal: Performance appraisal is a continuous periodic process that aims to measure and indicate strengths and weaknesses in the efforts and behavior of employees at a specific time for the purpose of achieving the strategic objectives of the organization (Hamad, 2021, 167).

Best on the above, four hypotheses were used to test the relationship between knowledge accumulation and human resource management practices, as follows:

**The main hypothesis H1:** The researched organization includes dimensions expressing knowledge accumulation represented by (data analysis, continuous improvement, knowledge absorption, knowledge sharing and knowledge integration).

**The main hypothesis H2:** The researched organization includes dimensions expressing human resources management practices represented by (human resource planning, recruitment, training and development, compensation and incentives and performance evaluation).

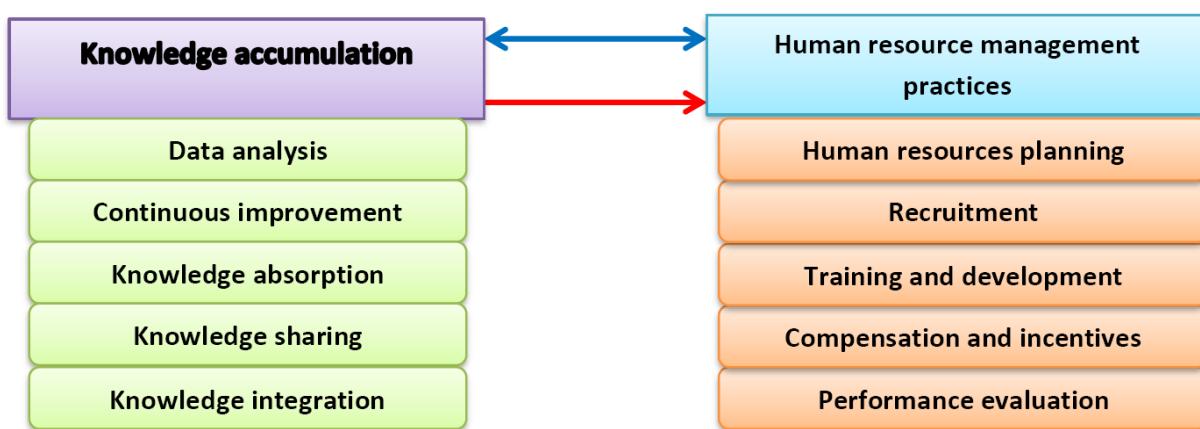
**The main hypothesis H3:** There is a significant correlation between dimensions of knowledge accumulation (combined) and dimensions of human resource management practices (combined) in the researched organization.

**The Main Hypothesis H4:** There is a significant effect of dimensions of knowledge accumulation (combined) dimensions of human resource management practices (combined) in the researched organization.

## METHODOLOGY

A quantifiable study technique was applied in this research. The data for this study was composed administrative leaders in Northern Technical University and its formations in Nineveh Governorate in Iraq were selected as a sample and given a questionnaire. A theoretical structure was applied to examine the connection between knowledge accumulation and human resources management practices. The investigation surveys, which were physically distributed to the nominated members. SPSS and AMOS were used to test the hypotheses; examined using multivariate assumptions and goodness of fit of the structural model. Following, the significance of the connection between knowledge accumulation and human resources management practices, were studied. Finally, the impact of knowledge accumulation on human resources management practices, were studied.

The methodology treatment of problem of the study requires the design of a conceptual frame work as shown in Figure (1), which reflects the nature of the above relationship, data were analyzed by statistical programs (SPSS, Ver.26) and (AMOS, Ver.24).

**Figure (1) Proposed Conceptual frame work**

Source: Prepared by the authors (2023)

## RESULTS AND DISCUSSION

### RESULTS

Table (2) showed that there is an agreement of (67.80%) from the respondents on the total expressions expressing the five dimensions of the knowledge accumulation variable represented by (data analysis, continuous improvement, knowledge absorption, knowledge sharing, knowledge integration) with a mean of (3.72). ), a standard deviation of (0.93), a coefficient of difference (25.16%), and a response rate of (74.46%). The dimension of knowledge absorption achieved the highest contributions of agreement, in a manner that placed it in the first place compared to the other dimensions, with an agreement rate of (73.03%), while the dimension of knowledge integration ranked second with an agreement rate. It reached (68.69%), the continuous improvement dimension ranked third with an agreement rate of (67.51%), finally analysis dimension ranked fourth with an agreement rate of (67.51%), and the knowledge sharing dimension ranked fifth and last with an agreement rate of (62.26%).

Thus, the main hypothesis (**H1**) was proved.

Table (2) Summary of the description and diagnosis of knowledge accumulation variable

Dimensions		Data					
		agreement (strongly agree and agree) %	Arithmetic mean	deviation normative	coefficient of difference %	rate response %	arrangement
	knowledge absorption	73.03	3.84	0.84	22.03	76.81	first
	knowledge integration	68.69	3.74	0.89	23.78	74.71	second
	continuous improvement	67.51	3.72	0.94	25.29	74.50	third
	Data analysis	67.51	3.72	0.97	26	74.41	fourth
	knowledge sharing	62.26	3.59	1.03	28.69	71.87	Fifth
	the average	67.80	3.72	0.93	25.16	74.46	

Source: prepared by the authors (2023).

Table (3) reveals that there is an agreement of (70.43%) from the respondents on the total expressions expressing the five dimensions of the human resource management practices variable represented by (human resource planning, recruitment, training and development, compensation and incentives and performance evaluation) and the arithmetic mean that it reached (3.77), a standard deviation of (0.95), a coefficient of difference of (25.40%), and a response rate of (75.36%). The performance appraisal dimension achieved the highest agreement contributions, in a manner that placed it in the first place compared to other dimensions, with an agreement rate of (83.26%), while the training and development dimension had the second rank, with an agreement rate of (73.76%), the employment dimension ranked third with an agreement rate of (71.67%), the human resources planning dimension ranked fourth with an agreement rate of (66.61%), and the compensation and incentives dimension came in the fifth and last place with an agreement rate of (56.83%). From the above, we can say the main hypothesis (H2) was proved.

**Table (3) Summary of the description and diagnosis of the human resource management practices variable**

practices	the agreement (strongly agree and agree) %	Data				
		Arithmetic mean	deviation normative	coefficient of difference %	rate response %	arrangement
Performance evaluation	83.26	4.07	0.86	21.27	81.38	first
training and development	73.76	3.83	0.88	23.09	76.67	second
Recruitment	71.67	3.8	0.96	25.34	76.05	third
Human resources planning	66.61	3.68	0.96	26.02	73.59	fourth
Compensation and incentives	56.83	3.46	1.08	31.26	69.1	Fifth

**Source:** Source: prepared by the authors (2023).

The third main hypothesis: There is a statistically significant correlation between the dimensions of knowledge accumulation (combined) and the dimensions of human resource management practices (combined) in the researched organization, at the level of statistical significance ( $\alpha > 0.05$ ).

The results of Table (4) and Figure (2) show that there is a direct and significant correlation between knowledge accumulation and human resource management practices, in terms of the value of the correlation coefficient, which appeared equal

to (0.944), and this relationship is significant based on the probability value (P-value). Which appeared equal to (0.019), which is less than (0.05), as well as the similarity of the signals of both the lower and upper limits of the confidence intervals (95% Confidence Interval) at a significant level (0.05).

**Table (4) Relationship between knowledge accumulation and human resources management practices**

The first variable	relationship direction	The second variable	link value	95% Confidence Interval		probability value P-value
				Lower	Upper	
Knowledge accumulation	↔	Human resource management practices	0.944	0.897	0.980	0.019

**Source:** prepared by the authors (2023).

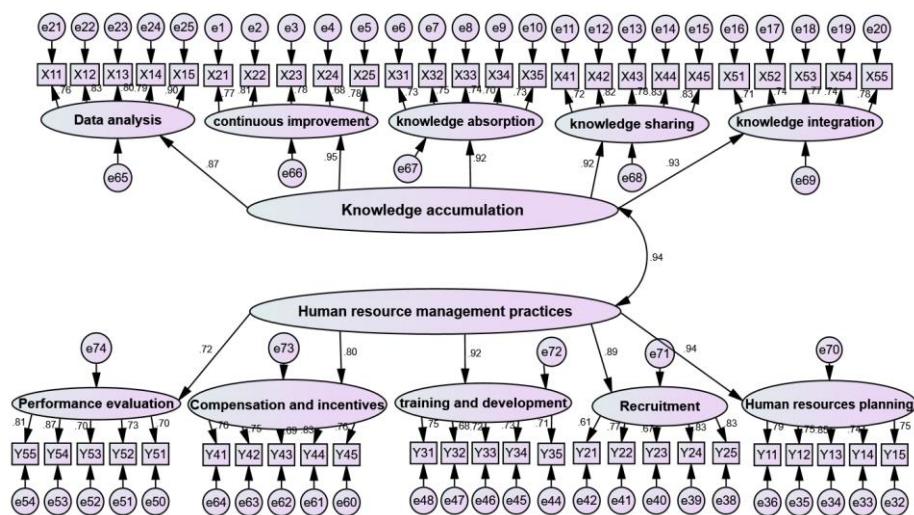


Figure (2) Correlation between the relationship between knowledge accumulation and human resource management practices

**Source:** prepared by the authors (2023).

The fourth main hypothesis: There is a statistically significant impact of the dimensions of knowledge accumulation (combined) and the dimensions of human

resource management practices (combined) at a statistically significant level ( $0.05 < \alpha$ ) in the researched organization.

Table (5) and Figure (3) show that there is a statistically significant direct and significant impact of knowledge accumulation on human resource management practices in the researched organization, in terms of the value of the Estimate ( $\beta$ ) regression coefficient, reached (1.000) and with a probability value of (0.018), which is less than (0.05), as well as the similarity of the signals of both the lower and upper limits of the confidence limits at a significant level (0.05), which indicates that knowledge accumulation is important in raising human resource management practices in the researched organization.

**Table (5) results of the impact of knowledge accumulation on human resource management practices**

The independent variable	direction of impact	Dependent variable	Estimate( $\beta$ )	SRW	95% Confidence Interval		P-value
					Lower	Upper	
Knowledge accumulation	→	Human resource management practices	1.000	0.944	0.765	1.252	0.018

Source: prepared by the authors (2023).

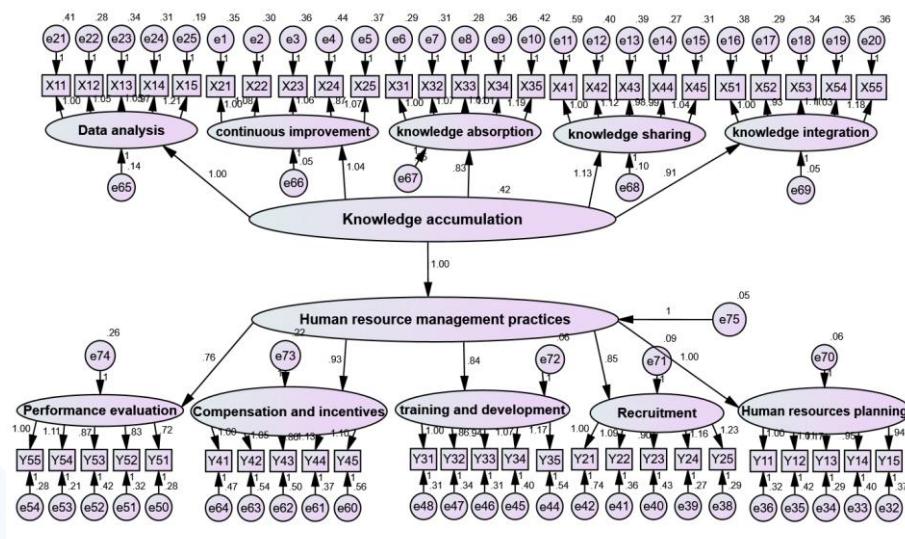


Figure (3) Impact of knowledge accumulation on human resource management practices

Source: prepared by the authors (2023).

## **Conclusion**

The results of describing knowledge accumulation with its dimensions (data analysis, continuous improvement, knowledge absorption, knowledge sharing and knowledge integration) indicated that the general rate of the respondents' answers was high and acceptable, and this confirms that the respondents have knowledge accumulation, the results of describing human resource management practices and diagnosing them with their dimensions of (human resource planning, recruitment, training and development, compensation and incentives and performance evaluation) showed that the general rate of respondents' answers was high and this confirms that the researched organization has the ability to apply human resource management practices correctly. The results of the study showed that there is a significant correlation between knowledge accumulation as an independent variable and human resource management practices as a dependent variable in the researched organization and at the macro level, which contributed to the correct adoption of human resource management practices. In addition, the results proved that there is a significant impact of knowledge accumulation on human resource management practices, and this result indicates that the impact was clear in adopting human resource management practices by knowledge accumulation among the administrative leaders in the researched organization.

Finally, the results show the positive association between knowledge accumulation and human resources management practices, but, the researchers cannot match those results with another study.

The study demonstrates that there is a positive direct relationship between knowledge accumulation and human resources management practices, it seems reasonable to conclude that there is a positive direct relationship between the above variables. This study has many limitations along with future directions such as, the difficulties of searching same study with the current. Moreover, this study takes knowledge accumulation as an independent variable while future studies should take it dependent and test it in other sector.

## **References**

### **Journal article**

- 1- Abunaila, A.S.H. & Kadhim, S., M. (2022). Improve the Competitive Advantage Through Human Resources Management Practices in the Iraqi Banking Sector. *Inter.Journal of Profess. Bus.Review*, 7 (6), 1-20.
- 2- Ahmed, A. F. (2021). The Effectiveness of Job Rotation in Enhancing Knowledge Accumulation - A Field Study of the Opinions of a Sample of Employees at Al-Kitab University. *Journal of Economics, Finance and Accounting Studies*, 3(2), 180–189.
- 3- Ahmed, A., Zaman, Y., & Khattak, A. (2017). Impact of H.R practices on employee's job satisfaction: A case study from fertilizer industry of Pakistan. *Management Science Letters*, 7, 225–232.
- 4- Al-Wakeel, M. M. (2019). The impact of human resources management practices towards the role of individuals on achieving organizational justice in public institutions / an applied study on the Ministry of Communications, *Scientific Journal of Economy and Trade*.
- 5- Al-Badarin, R. Q., Muhammad, N. S. & Al-Amri, Z. S. (2014). The Impact of Human Resources Management Practices on Discovering and Developing the Creative Capabilities

---

of Employees / Applied Study on Banks Operating in the Northern Region, Economic Insights Magazine, 6 (7), 63.

- 6- Al-Mughni, M. Y. (2019). Human resource management practices and their impact on achieving sustainable competitive advantage / a field study on Internet service providers in the southern governorates - Gaza Strip, Al-Azhar University - Gaza, Faculty of Economics and Administrative Sciences.
- 7- Ali, D. O. (2022). Human resource management practices and their role in the creative behavior of workers/ an analytical study, (Master's thesis), University of Baghdad, College of Administration and Economics.
- 8- Al-Dhabab, S. (2020). Human resource management practices and their role in achieving outstanding performance in sports institutions / a field study in the Directorate of Youth and Sports in the state of M'sila, (Master's thesis), University of Mohamed Boudiaf M'sila, Institute of Science and Technology of Physical and Sports Activities.
- 9- Bashir, F., & Venkatakrishnan, S. (2022). The impact of human resource management practices on affective commitment: An empirical study in micro, small and medium enterprises using partial least squares structural equation modelling. *South African Journal of Business Management*, 53(1), 10.
- 10- Chouhan, V. S. (2023). Impact of Career Adaptability on Employee Performance: The Moderating Role of HR Practices. *Management and Labour Studies*, 0258042X231160956.
- 11- Fethiye, N. (2015). The effect of salaries on job satisfaction, satisfaction on compensation, and self-motivation for higher education teachers / a field study at Ferhat Abbas University, (PhD thesis), Farhat Abbas University - Setif, Faculty of Economic, Commercial and Management Sciences.
- 12- Giraudy, A. & Niedzwiecki, S. (2021). Multi-level governance and subnational research : Similarities, differences, and knowledge accumulation in the study of territorial politics. *Regional and Federal Studies*, 0(0), 1–19.
- 13- Habeeb, F. J., Mostafa, M. S., Altyar, A. R., Ismail, W. K. W., & Nor, K. M. (2020). The impact of leadership traits on human resource practices, gender and transformational leadership. *Polish Journal of Management Studies*, 21(1), 135–145.
- 14- Hassan, R. K. & Al-Kubaisi, S. A. (2021). The Effect of Knowledge Absorption on Strategic Clarity/ An Exploratory Study in the Iraqi Ministry of Transport - Iraqi Airways Company, *Journal of Economics and Administrative Sciences*, 27(126), 70-85.
- 15- Hamid, K. H. and Sultan, R. Y. (2021). The Role of Strategic Openness as a Contemporary Approach to Enhancing Knowledge Accumulation / A Field Study of the Opinions of a Sample of Tikrit University Employees, *Iraqi University Journal*, 1 (52), 491-501.
- 16- Hammad, M. M. (2021). The Impact of Big Data Applications on Improving Human Resources Management Practices / A Field Study on International Information Technology Companies in Egypt, *Scientific Journal of Commercial and Environmental Studies*, 12 (1), 150-190.
- 17- Hussein, W. H. (2021). The Role of Knowledge Accumulation of Human Resources in Reducing Strategic Deception Behaviors, *Journal of the University College of Economic Sciences, Baghdad*, 65, 227-235.
- 18- Hoti, W. & Drum, A. (2021). Developing Intellectual Capital Through Human Resource Management Practices / Field Study, *Journal of Economic Studies*, Volume 15(2), 184-195.

---

19- Klimovskiks, N., Sekerin, V., Makushkin, S., Kuzmicheva, A., Leontev, M., & Kochetkov, E.(2023). Impact of Human Resources Management on Improving the Innovation Potential of an enterprise to achieve the principles of Sustainable Development. *Journal of Law and Sustainable Development*, 11(1), 1-14.

20- Koshelieva, O. T. , Kravchuk, O. B. & Volodymyr, M. N. (2023). Knowledge Management as a New Strategy of Innovative Development, *International Journal of Professional Business Review*, 8 (5), 1-25.

21- Ly, P. T. M., & Lai, W. (2017). Fuzzy AHP Analysis of Firm-Level Knowledge Accumulation. *Journal of Information & Knowledge Management*, 16(03), 1750024.

22- Mahdi, A. (2022).The Role of Digital Transformation in Improving Human Resources Management Practices, *Journal of Organization and Work*, 11 (1), 154-166.

23- Mullei, S. N. (2019). Effect of Knowledge Accumulation and Utilization on Organization Performance in Selected State Corporations in Kenya. *International Academic Journal of Arts and Humanities*, 1(2), 113–131.

24- Van Assen, M. F. (2021). Training, Employee Involvement and Continuous Improvement – the Moderating Effect of a Common Improvement Method. *Production Planning & Control*, 32(2), 132–144.

## **Conference paper**

- 1- Ed. R., Tarhini, A. & Obeidat, B. (2015, September 2 ). Knowledge Sharing Capability : A Literature Review Knowledge Sharing Capability : A Literature Review. Conference Proceedings- Centre of Excellence for Scientific & Research Journalism.
- 2- Lai, W. (2009). A competence of firm-level knowledge accumulation in enterprises. *PICMET '09 - 2009 Portland International Conference on Management of Engineering & Technology*.