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The position of HRM in the AI

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Abstract:

This research paper presents a comprehensive analysis of the role of human resources within the realm of artificial intelligence (AI). The objective is to identify and examine the variables associated with human resources and AI from a scientific perspective, detailing their developmental stages and the applications that stem from them. The significance and foundational pillars of both variables are discussed, along with an exploration of their interrelationship. Employing a descriptive methodology with analytical tools, the study elucidates the components pertinent to the research variables. The findings indicate a transition of human resource management from traditional practices to digital frameworks through various applications. This transformation culminates in the emergence of a human resources model that is fundamentally based on artificial intelligence.

Keywords: Human Resources, AI, Application, Digital, Models.

Jel Classification Codes : M12, M15, O33, J24, O32

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1. INTRODUCTION

Digital transformations and technological advancements have significantly influenced the nature of organizations and their human resources. These entities are increasingly focused on developing strategies that align with contemporary developments and modern trends, emphasizing creativity and innovation. As a result, contemporary organizations have formulated differentiated strategies aimed at retaining talent, thereby enhancing their internal stability and achieving a competitive advantage.

In the context of digital transformation, the integration of technologies such as cloud computing, deep learning, and automation has rendered administrative processes more agile. This shift facilitates timely information flow and enables the identification and capitalization of new opportunities. Consequently, the conception of human resources has evolved, reflecting new terminologies and frameworks grounded in scientific principles.

Moreover, artificial intelligence has had a direct impact on human resource management, particularly in areas such as performance evaluation and the transformation of HR functions. With the increasing reliance on AI tools, organizations have adopted innovative approaches to human resource management, leveraging digital data to optimize processes and enhance overall efficiency.

Based on the preceding discussion, the primary research question can be articulated as follows:

1.1.Research Question :

" What is the position of the human resources market in the age of artificial intelligence?"

To further explore this inquiry, the main question can be subdivided into the following sub-questions:

-What constitutes human resources, and what are the key terms that define this concept?

-What is artificial intelligence, and what is the realized added value of AI in human resources?

-What are the contemporary applications and models of human resources?

1.2.Objectives of the Study

-To introduce the fundamental concepts related to human resources and artificial intelligence.

-To clarify the role of AI within the human resources domain.

- To identify the application areas of AI in human resource management

2.Introduction to HR

by(Meriem, 2022, p. 923) involved certain policy formation processes in the working environment ,**"** It is concerned with the development and

effective of HR , to ensure that the organization is able to achieve success through people and It is the management function through which managers recruit, select, train, and develop members for an organization (Elhazzam , 2016, p. 218)**,** and **"**Human resource management is the theory, methods, techniques and tools for looking the arrangement of relations among people in the organization, relationship among work and its different relation (Ilyes, 2022, p. 424)**"**

2.1. HRM Practices

-Management of Resources
-reduce management cost
-devoleppement process
Recruitment and Selection
Creativity and Innovation

2.3.Setep development of the concept HR

Human resources have known a group of stations, which are referred to by specialists in the field and this is due to the position of human resources in contemporary institutions and departments, as it is a basic engine in the administrative process, and among those stages we find :

Table n(01) : development of the concept HR

Approaches	Means
Management of individuals	Includes: Save records and documents related to wages
Industrial Relations Management	This stage includes motivating workers and taking care of morale (behavioral dimension)
Personnel management	A modern vision at the job
HRM	It means the process of making decisions related to the human resources system that works to achieve the adaptation of the human resources system to environmental conditions
H r m – with knowledge	use knowledge in administrative methods

Source :(belaghemas., 2017, p. 49)

As a result of the development of human resources in organizations in terms of practices , new concepts have emerged, which we summarize in the following table :

Table n(02) : **Modern variables related to HR**

Talent Management	By Ashton and Morton , A comprehensive strategy, aimed at achieving organizational effectiveness, For blass :" it is a set of additional operations and opportunities"
Lean Management	It aims to achieve excellence in performance, through the continuous improvement, adopted by the modern administration
High Involvement Management	Discover by Lawler , And it contains (HCM : High Commitment Management) moving from specialization and control to participation and commitment , In addition Practices HIW (high involvement work) ,Which contributes to achieving a competitive advantage

Source : Prepared by researchers. And (zarari, 2011, p. 234), (chergui, 2021, p. 288)

2.4.dimensions :

Also include six elements, We summarize it ,in the following form:

Figure n(01): 6 D- of hrm



***Source** :(Qiong Jia, & all, 2018, p. 108)*

3. AI :Defitin and categore

A review of scientific literature reveals several definitions of AI including **by**(hachemi & meliani, 2024, p. 49) is a branch of computer science and it is one of the pillars of technology , John McCarthy describes

AI as the scientific and technical knowledge to develop computer programmes in particular (Artabaz, 2022, p. 1250)**,**

for categorized as follows (Abderrezzaq & Fatima, 2024, p. 33) :

-Traditional Definition: is understood as the process of exploring meanings and the ability to think and learn from prior experiences by integrating programs

-Scientific Definition: is defined as the replication of human intelligence and cognitive abilities, including modification, learning, and logical analysis,

-Technological Definition: is described as a system comprising programs and intelligent devices designed to build systems and machines that perform complex human tasks

3.1. Importance of Artificial Intelligence : We find them in many areas, including (Marwa & Djaouida , 2025, p. 8) :

-Humans will be able to use in dealing with machines instead of a computer programming language

-will play an important role in many sensitive fields,

-Intelligent machines will relieve man of many dangers and psychological stresses, and make him focus on more important and more humane things,

-It can reduce the occurrence of human errors as it makes decisions at every step based on a set of algorithms and information

In addition, it achieves :

–Realising opportunities

–Increase productivity

–Developing HR

3.2. Role (out put)of AI :

They are as follows (Zahraa Faiz , Mohanad , & Bareq , 2024, p. 6)**:**

-Simplify administrative processes .

-Optimise decision-making .

-Employee participation.

-Increased efficiency.

3.3.Artificial Intelligence techniques and tools : It can be illustrated as (hayder abed razak, 2024, p. 203) :

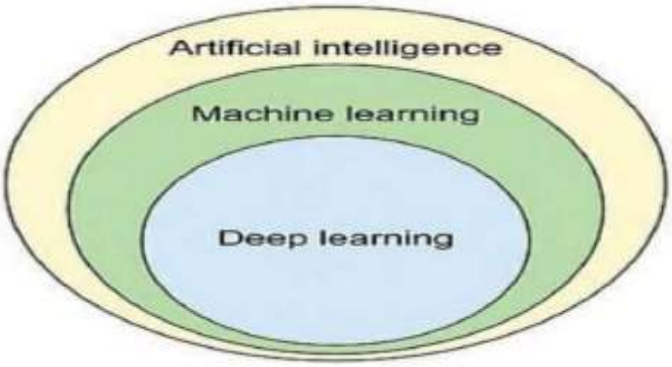
-Machine learling: these systems use big data and algorithms to learn how to perform tasks .

-Deep learling : it uses neural networks , to analyse multiple levels of data .

-Neural Networks : helps the system to learn and gradually optimise its performance.

As for the relationship, it can be illustrated in the following :

Figure n(02) : Relationship between AI, ML and DL



Source : (Sandy , 2023, p. 8)

4. RESULTS AND DISCUSSION

-The applications :

HierSmarter	This app helps HR professionals recruit top talent intelligently, efficiently and effectively - Task Automation
Engage Smarter	Achieving effective interaction between managers and subordinates
Work Smarter	Automate routine tasks intelligently, efficiently and effectively, and detect errors

Source :(Chili, 2023, pp. 88-89)

Regarding the global examples of companies in the field of AI- in hrm

HireVue	Reduce recruitment time by 90%. Increase worker diversity by 16%. Used by 700 companies
Mya Systems	Mya Systems uses an AI chat bot to speed up the recruitment process
HiredScore	Reduces bias , and the client is trained on a set of big data
Wade & Wendy's	Automate task-based recruitment procedures . Through a dedicated recruitment conversation system
Hiretual	Provides a wide range of AI-powered solutions for most recruitment tasks and Control of procedures

Source :(Alaa, 2023, p. 01)

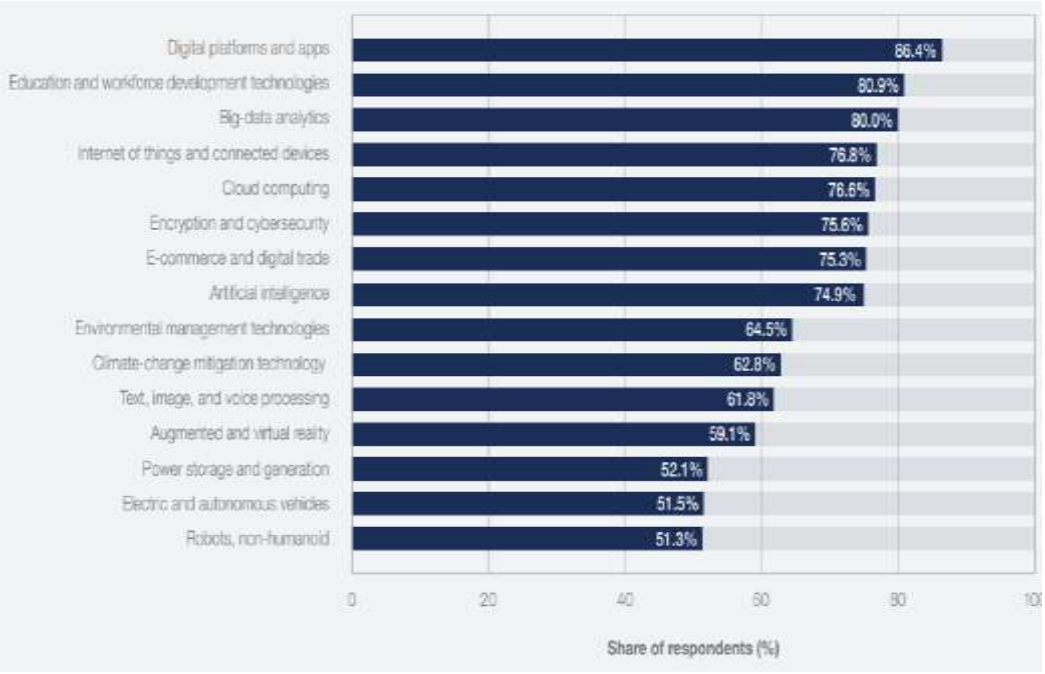
The labour market knows many fears and threats, that some employees will lose their jobs that will be replaced in the future by smart software, where: (Chili, 2023, p. 91) :

-Number of global jobs to be created by AI in 2025 estimated at 97 million .

-50% of global staff will need to be reskilled by 2030.

-Robots could take over up to 20 million factory jobs in 2030.
In terms of global market features, the implications of the use of technology over the period (2023-2027), Companies Will rely on different technologies *:*

Figure n(03) : technology adoption 2023-2027



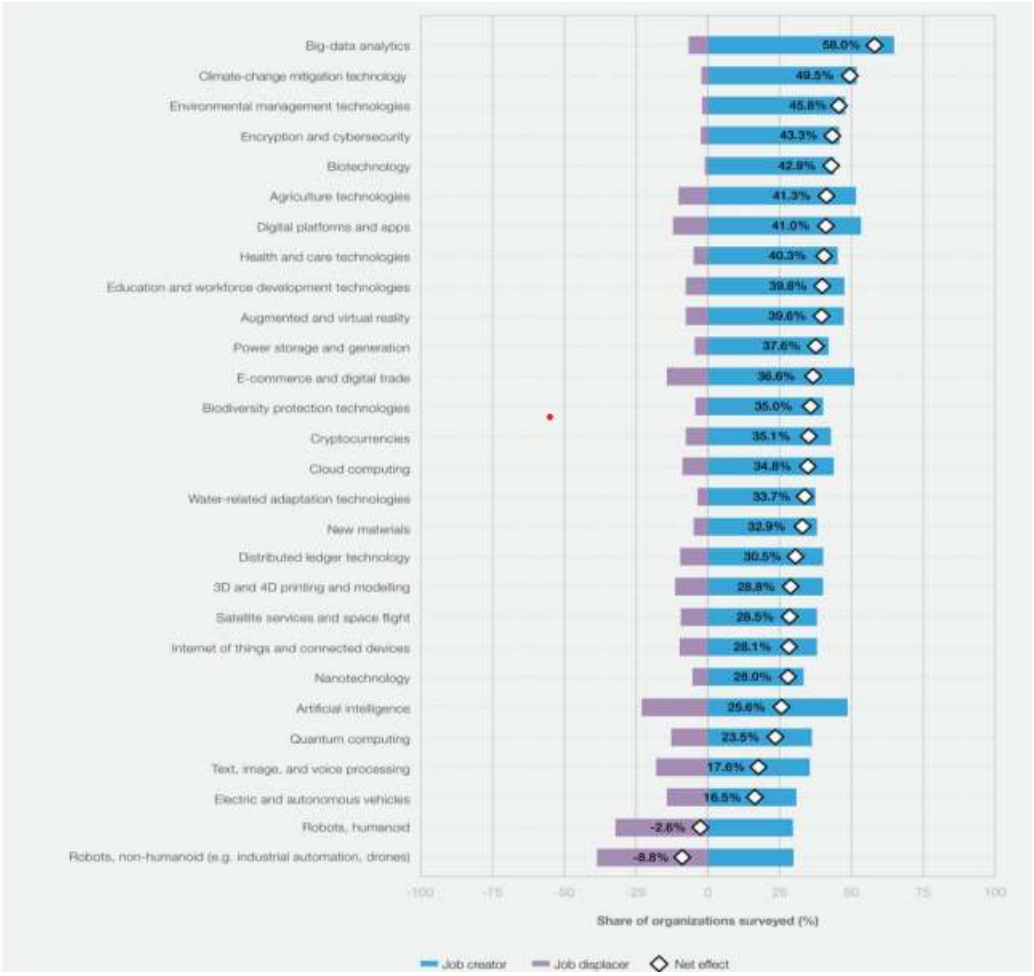
Source :*(Nadia, 2024, p. 441)*

***Analysis of fig* :**

platforms, digital applications, education technology and big data analysis ,first in ranking	By : 80%- 86%
internet of Things (IoT) technology , cloud computing, and cyber securit	Between : 75%- 78%

In terms of impact on jobs, during the period(2023-2027) ,We illustrate it in the following figure :

Figure n(04) : impact of technology on jobs



Source : (Nadia, 2024, p. 442*)*

5. CONCLUSION

This study dealt with the status of human resources in the era of artificial intelligence and the labour market, presenting various aspects and concepts related to the concept and its stages. It was concluded that the integration of human resources management with AI achieves a qualitative leap in managing resources well, starting with the use of robotics, deep learning and automation, which requires organisations to employ strategies and plans that adapt according to the emergence and disappearance of jobs with the degree of adaptation according to developments in the field of AI- in the future

Result :

- AI important for HR(practices) .
-AI applications reduce costs (process).
-In the Future, the labour market will change.
- Employing modern apps and technologies(robots) important for organisations.

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