

# Chapter 11

## The Role of Artificial Intelligence in the Automation of Human Resources

**Anjali Rai**

*Vignana Jyothi Institute of Management (VJIM), Hyderabad, India*

**Amar Kumar Mishra**

*Graphic Era University, India*

### **ABSTRACT**

*Organizational effectiveness is dependent on how resourcefully and effectively people, process, and technology unite and bring value at best cost. Artificial intelligence facilitates to automate most of the back office transactional effort in that way enabling rapid service delivery. AI competencies are scaling new heights and changing the way employee work in this ever-changing corporate world. AI has the power to change various employee skill through quick and accurate processing of a large amount of the data from recruitment to talent management.*

### **INTRODUCTION**

Organizational effectiveness is contingent on how resourcefully and effectually individuals, processes, and technical knowhow unite to deliver the cost effective value. AI facilitates mechanization of the majority of back office transactional efforts thus enabling rapid service delivery. AI as a new technology defines the new normal in working trade. This new methodology automates and complete majority of the human resource functions of low value nature thus a better focal point of the strategic

DOI: 10.4018/978-1-7998-7959-6.ch011

length of work may be determined. AI as a technology implemented presents the scope to upgrade various employee skills via accurate processing of a huge amount of the data like recruitment to talent management and that too in short amount of time. Additionally, AI competencies are ever scaling new heights and changing the work ethos in today's dynamic corporate world. Besides, AI can be successfully integrated into the employee lifecycle, right from hiring and onboarding, to various HR functions and career opportunities thus paving way for a personalized worker experience. AI enables HR teams to draw understandings from the data and provide real-time feedback. It also eliminates many human errors and predispositions in a function as important and responsible as human resource management. Therefore, any resolution influenced by AI has the potential to be time-saving, precise, reliable, and unbiased.

A new norm in today's demand is Intelligent Automation. It is achieved when AI blends with automation and facilitates machines to be intelligent self-learning capable of performing on their own or with least human support. Intelligent automation has potential to achieve physical capabilities and cognitive abilities to make decisions as any human might do. AI competency level enables machines to diagnose processes and identify any deviation. Moreover, AI can be deployed across all repeating processes to increase their efficiency and productivity thus bringing about innovation. AI in HR enables ever-increasing prospects and generates ground breaking value for the Human Resources Professional.

## **EVOLUTION OF ARTIFICIAL INTELLIGENCE IN HUMAN RESOURCES**

Artificial Intelligence began as a research area in the 1950s, to understand the nature of intelligence in living organisms, exclusively of the humans (Mesquita, L. Daniel, 2018). The increase of the information quantity in the databases, initiate in many practical troubles of optimization, has encouraged the study and relevance of unconventional techniques in the investigate of techniques that can attain good solutions, such as, to conjugate concepts of Optimization and Artificial Intelligence (Cançado, L. Vera, Vendramine F. M. Corrêa, A. Dalila, Oliveira, J. Elizângela, and Castro. P. S. Dagmar, 2017). Recently, much concentration has been given to the machine learning, most likely due to the countless possibilities of automation brought by recent advances in Artificial Intelligence (Nascimento, M. Alexandre, and Queiroz. M.C Anna, 2017). Further, it is anticipated that the force of Artificial Intelligence development will go away from modifying the nature of work, causing transformation in economic mechanisms and business models, which will probably bring impacts to management (Loebbecke, Claudia, and Picot, Arnold, 2015). In

9 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: [www.igi-global.com/chapter/the-role-of-artificial-intelligence-in-the-automation-of-human-resources/289454](http://www.igi-global.com/chapter/the-role-of-artificial-intelligence-in-the-automation-of-human-resources/289454)

## Related Content

---

### If Pandora had a Blog: Towards a Methodology for Investigating Computer-Mediated Discourse

Otilia Pacea (2015). *International Journal of Signs and Semiotic Systems* (pp. 15-32). [www.irma-international.org/article/if-pandora-had-a-blog/142498](http://www.irma-international.org/article/if-pandora-had-a-blog/142498)

### Traffic Density Estimation for Traffic Management Applications Using Neural Networks

Manipriya Sankaranarayanan, C. Malaand Snigdha Jain (2024). *International Journal of Intelligent Information Technologies* (pp. 1-19). [www.irma-international.org/article/traffic-density-estimation-for-traffic-management-applications-using-neural-networks/335494](http://www.irma-international.org/article/traffic-density-estimation-for-traffic-management-applications-using-neural-networks/335494)

### The Study of Ecosystem and Vendor Management in Hyper-Automation Across Select Industry Verticals

Akshata Desai, Giri Gundu Hallur, Natraj N. A. and Abhijit Chirputkar (2024). *Principles and Applications of Adaptive Artificial Intelligence* (pp. 263-272). [www.irma-international.org/chapter/the-study-of-ecosystem-and-vendor-management-in-hyper-automation-across-select-industry-verticals/337697](http://www.irma-international.org/chapter/the-study-of-ecosystem-and-vendor-management-in-hyper-automation-across-select-industry-verticals/337697)

### Supervised Learning of Fuzzy Logic Systems

M. Mohammadian (2009). *Encyclopedia of Artificial Intelligence* (pp. 1510-1517). [www.irma-international.org/chapter/supervised-learning-fuzzy-logic-systems/10438](http://www.irma-international.org/chapter/supervised-learning-fuzzy-logic-systems/10438)

### Solution to Big Data Security Issues

Prashant Srivastava, Niraj Kumar Tiwari and Ali Abbas (2021). *Computational Methodologies for Electrical and Electronics Engineers* (pp. 67-74). [www.irma-international.org/chapter/solution-to-big-data-security-issues/273835](http://www.irma-international.org/chapter/solution-to-big-data-security-issues/273835)