# 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. All facilitates mechanization of the majority of back office transactional efforts thus enabling rapid service delivery. All 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

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

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

#### Related Content

## A Joint Detection Method of Groundwater-Level Change Based on Radial Basis Function Method with Multi-Social Networks

Wenxiang Wangand Yuemei Cai (2022). *International Journal of Fuzzy System Applications (pp. 1-20).* 

www.irma-international.org/article/a-joint-detection-method-of-groundwater-level-change-based-on-radial-basis-function-method-with-multi-social-networks/312236

#### Fuzzy Continuity of Almost Linear Operators

Mark Burgin (2013). *International Journal of Fuzzy System Applications (pp. 40-50).* www.irma-international.org/article/fuzzy-continuity-almost-linear-operators/76298

# Computation-Oriented Communication: Computation-Based MIMO Radar Communication for Debris Detection in LEO

Shipra Upadhyay, Shailendra Kumarand Manoj Tolani (2023). *Applications of Artificial Intelligence in Wireless Communication Systems (pp. 189-207).* 

 $\underline{www.irma-international.org/chapter/computation-oriented-communication/324594}$ 

## Epileptic Seizure Prediction Using Exponential Squirrel Atom Search Optimization-Based Deep Recurrent Neural Network

Ratnaprabha Ravindra Pune Borhadeand Manoj S. Nagmode (2021). *International Journal of Ambient Computing and Intelligence (pp. 166-184).* 

 $\frac{\text{www.irma-international.org/article/epileptic-seizure-prediction-using-exponential-squirrel-atom-search-optimization-based-deep-recurrent-neural-network/279590}$ 

#### A Study of the Performance Effect of Genetic Operators

Pi-Sheng Deng (2009). *Encyclopedia of Artificial Intelligence (pp. 1504-1509)*. www.irma-international.org/chapter/study-performance-effect-genetic-operators/10437