

Chapter 2

Artificial Intelligence– Enabled Human Resource Functional Innovations in the E–Economy


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ABSTRACT

The rapid growth of the e-economy, driven by digital technologies and decentralized systems, is reshaping how organizations approach Human Resource Management (HRM). Traditional, location-based HR models no longer work in a remote work world, platform labor, and algorithmic management. This book explains how HR innovations such as AI, blockchain credentialing, and virtual organizational structures are redefining employees' work, talent, and performance. The world is moving beyond merely making things easier with technology; it critically examines the ethical and human-centered challenges these changes pose. The study combines insights from multiple disciplines to offer an in-depth understanding of how digital tools

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connect with human resource functions. This chapter presents case studies, success stories, and challenges of digital-enabled HR functions in an e-economy. Aimed at scholars, policymakers, and practitioners, the book promotes deeper reflection on fairness, inclusion, and resilience in the digital workplace.

INTRODUCTION

The concept of Artificial Intelligence in Human Resource Management (HRM) began with early expert systems of the 1980s and expanded significantly with advancements in machine learning, people analytics, and cloud-based HR technologies in the early 21st century. With the rise of the e-economy defined by the widespread use of digital platforms and technologies HR functions increasingly integrated AI into core areas such as talent acquisition, performance evaluation, workforce planning, and employee engagement. The acceleration of big data, remote work ecosystems, and enterprise automation platforms in the last decade has pushed AI adoption to new heights, making AI-enabled HR a global reality across both developed and emerging economies. Modern e-economy tools like Applicant Tracking Systems (ATS) allow companies to manage HR functions from employee entry to exit. Leading digital firms such as ZOHOO Corp. have developed platforms like ZOHOO Recruit and ZOHOO People to monitor and streamline HR operations, while integrating AI tools to enhance efficiency and decision-making. Compared to traditional technological systems that involved time-consuming paperwork, AI platforms minimize administrative burdens and allow employees to focus their skills and intelligence more effectively (Nawaz et al., 2024).

Furthermore, the e-economy driven by rapid digitalization, platform-based business models, artificial intelligence, and decentralized organizational structures has profoundly reshaped the HRM landscape. Traditional paradigms centered on fixed roles, physical office environments, and hierarchical decision-making are being replaced by flexible, technology-augmented models that prioritize autonomy, agility, and real-time insights. As the global workforce becomes more distributed and digitally connected, HRM is confronted with both unprecedented opportunities and complex challenges in managing talent, fostering engagement, and sustaining organizational culture. In this rapidly evolving digital environment, HR leaders must balance technological innovation with ethical considerations to ensure that AI-driven practices support organizational goals while safeguarding fairness, transparency, and employee well-being (Dawra et al., 2024).

This chapter explores the imagination of Human Resource Management (HRM) in the digital economy, foregrounding both innovative practices and the human-centered challenges they introduce. Drawing on contemporary research, industry

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