

## Trends, Status, and Future Directions of Artificial Intelligence in Human Resources Disciplines: A Bibliometric Analysis

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**Abstract :** Artificial intelligence (AI) technologies and tools are swiftly integrating into many functions of all organizations as a competitive drive to enhance innovations, productivity, efficiency, faster and precise decision making to keep up with rapid changes in the global business arena. Despite increasing research on AI technologies in production, manufacturing, and information management, AI in human resource disciplines is still lagging. Though a few research studies on HR informatics, recruitment, and HRM in general, how to integrate AI in other HR functional disciplines (e.g., compensation, training, mentoring and coaching, employee motivation) is rarely researched. Many inconsistencies of research hinder developing up-to-date knowledge on AI in HR disciplines. Therefore, exploring eight research questions, using bibliometric network analysis combined with a meta-analysis of published research literature. The authors attempt to generate knowledge on the role of AI in improving the efficiency of HR functional disciplines. To advance the knowledge for the benefit of researchers, academics, policymakers, and practitioners, the study highlights the types of AI innovations and outcomes, trends, gaps, themes and topics, fast-moving disciplines, key players, and future directions. AI in HR informatics in high tech firms is the dominant theme in many research publications. While there is increasing attention from researchers and practitioners, there are many gaps between the promise, potential, and real AI applications in HR disciplines. A higher knowledge gap raised many unanswered questions regarding legal, ethical, and morale aspects of AI in HR disciplines as well as the potential contributions of AI in HR disciplines that may guide future research directions. Though the study provides the most current knowledge, it is limited to peer-reviewed empirical, theoretical, and conceptual research publications stored in the WoS database. The implications for theory, practice, and future research are discussed.

**Keywords :** artificial intelligence, human resources, bibliometric analysis, research directions

**Conference Title :** ICADRS 2022 : International Conference on Advanced Domestic Robotics and Intelligent Systems

**Conference Location :** Vancouver, Canada

**Conference Dates :** August 08-09, 2022