

## Recent Updates on Intelligent System for Talent Management: Does That Become a Helpful System?

Aditia Putra Hamid<sup>1</sup>, Rosyid Ridlo Al-Hakim<sup>2\*</sup>, Yanuar Zulardiansyah Arief<sup>3</sup>, Brainvendra Widi Dionova<sup>4</sup>,  
Mahmmoud Hussein A. Alrahman<sup>5</sup>

<sup>1,2\*</sup>Post-Graduate Program in Electrical Engineering, Depok, Jakarta Global University, Indonesia

<sup>3</sup>Department of Electrical and Electronic Engineering, Samarahan, Universiti Malaysia Sarawak, Malaysia

<sup>4</sup>Department of Electrical Engineering, Depok, Jakarta Global University, Indonesia

<sup>5</sup>Iraqi Natural History Museum and Research Center, Baghdad, University of Baghdad, Iraq

Email: rosyidridlo10@gmail.com

### ABSTRACT

*The use of information technology in human management today has increased, along with the implementation of intelligent systems that generally use artificial intelligence (AI) in their application. One of the areas of human management that has adopted AI is talent management (TM). TM is crucial for companies to identify, manage, determine, assess, and recommend talent (in this case, it can be employees) for their company's sustainability. The application of family planning in TM is not as extensive as thought, but this study tries to review the latest research that adapts AI to a very complex TM process. The results of this review are at least 11 articles involved in the use of family planning. These 11 articles certainly discuss one or more processes in TM, such as talent identification, talent matching or mapping, and talent recommendations. Some critical studies in the future are that in practice, AI needs to be widely used, especially to handle large-scale data management (data intelligence), in addition to intelligent system methods, and AI can be used for all processes in TM, proven to be accurate, efficient, safe, and fast in practice.*

**Keywords:** Artificial Intelligence, Business Intelligence, Data Intelligence, Human Resources Management.

### ABSTRAK

Penggunaan teknologi informasi dalam bidang manajemen manusia dewasa ini telah meningkat, seiring dengan implementasi sistem cerdas yang umumnya menggunakan kecerdasan buatan dalam penerapannya. Salah satu bidang manajemen manusia yang telah mengadaptasi kecerdasan buatan (KB) ialah manajemen talenta (MT). MT merupakan faktor krusial bagi perusahaan untuk mengidentifikasi, mengelola, menentukan, menilai, dan merekomendasi talenta (dalam hal ini dapat berupa karyawan) untuk keberlanjutan perusahaannya. Penerapan KB dalam MT tidak seluas yang dikira, namun studi ini mencoba mengulas riset-riset terkini yang mengadaptasi KB dalam proses MT yang sangat kompleks. Hasil ulasan ini setidaknya terdapat 11 artikel yang terlibat dalam penggunaan KB. Ke-11 artikel ini tentunya membahas salah satu atau beberapa proses dalam MT, seperti identifikasi talenta, pencocokan atau pemetaan talenta, dan rekomendasi talenta. Beberapa hal yang menjadi kajian penting di masa mendatang ialah dalam prakteknya, KB perlu secara luas digunakan khususnya untuk menangani manajemen data berskala besar (kecerdasan data), selain itu dengan metode-metode sistem cerdas dan AI dapat digunakan untuk semua proses dalam MT, terbukti secara akurasi, efisiensi, aman, dan cepat dalam prakteknya.

**Kata Kunci:** Kecerdasan Buatan, Kecerdasan Bisnis, Kecerdasan Data, Manajemen Sumber Daya Manusia.

### 1. Introduction

The role of information technology (IT) today has helped many things in human work [1]. One of them is artificial intelligence (AI) which can help computer systems analyze human problems based on their knowledge base [2]–[4]. Artificial intelligence (AI) as an intelligent system can replace conventional human work, where with AI, human work is much more efficient and fast and according to the standards set in

their work, including applicable in terms of human management [5], [6]. Besides, AI is a data science system-based that can produce many types of data intelligence. One of the crucial things in management or business intelligence, including data intelligence, was the main topic for the successful organization that aims to achieve the business or goals.

Furthermore, in today's 21st century, several surveys in Indonesia and overseas show increasing awareness of