



## Mini Review

# Talent Recruiting Innovations and High Start-Ups

Sehar Shahzad Farooq<sup>1\*</sup>, Irfan Mehmood<sup>2</sup> and Soon Ki Jung<sup>1</sup>

<sup>1</sup>School of Computer Science and Engineering, Kyungpook National University, Daegu, Korea

<sup>2</sup>Lecturer Applied Artificial Intelligence, Faculty of Engineering & Informatics, University of Bradford, United Kingdom

Received: 22 September, 2020

Accepted: 05 October, 2020

Published: 06 October, 2020

\*Corresponding author: Sehar Shahzad Farooq, School of Computer Science and Engineering, Kyungpook National University, Daegu, Korea, E-mail: [sehar146@knu.ac.kr](mailto:sehar146@knu.ac.kr)

ORCID: <https://orcid.org/0000-0002-2571-9121>

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The talent management market is increasing rapidly, and the software and platform part of the market consists of recruitment tools, job interviewing tools, social media advertising, assessments, and Artificial Intelligence (AI) based systems [1]. The growth in talent recruiting is driven by the recent innovations in AI such as deep learning and convolutional neural networks [2]. Current, AI-based solutions are ranging from intelligent search engines [3] to various intelligent data analytics methods [4]. The industry is going through a massive replacement of legacy systems such as Oracle/ Taleo and IBM/BrassRing [5]. Talent recruiting is the priority feature for start-ups as mentioned in youngest Chinese unicorns survey. Attracting top talent and building a corporate culture are strategic priorities for high start-ups [6]. Industries and firms that seeks to attain competitive human resource services using communication and information retrieval technologies rely on the most important strategy known as E-HRM [7]. And it is necessary essential to consider local idiosyncrasies and adequate recruiting tools [8]. In the first phase of AI; *automation* has already started and is playing into every aspect of daily life [9]. The efficient recruitment process has fuelled an additional interest in computerisation of all other industries procedures [10]. However, the difficulty lies in the selection of employees having the correct mixture of skills, enthusiasm and mature expertise possessing several challenges to AI due to its subjective nature [11,12].

According to CEO of IBM Ginni Rometty, human resources modelling methods that has traditionally been used losing success, requiring assistance from machine learning based methods. In IBM 30% of staff has been replaced with intelligent agents, which is helping its employees to identify advanced skills, training and education, job promotions criteria, and up-raises. Hirevue, the US company comes amongst the first few companies to develop interviewing technologies claims

that it has enabled reliable and suitable objective indicators of candidates for future performance. "Facial expressions indicate certain emotions, behaviours and personality traits," said Nathan Mondragon, Hirevue's chief psychologist. This AI-driven video analytics framework analyses the language, ascent, facial expressions of candidates and their tone upon inquiring a set of identical job questions. This AI model is trained on 25,000 samples of facial and linguistic information compiled from previous interviews of those candidates, who were proved to be right/good at their jobs. Unilever UK is the first organization that used this tool in job interviews.

ARYA by LEFORCE uses AI for recruiting by organizing the data, learning, and retaining from it in almost every field including communication, software development, arts, culture & design, public relations, marketing advertising, copy writing, and journalism. It then delivers the relevant and candidate job intelligence directly into the industries pipeline, so to begin engaging with the right talent before other competitors even find that candidate [13]. ARYA also claims to predict even the employees suspecting to quit their recent jobs by analysing candidate's current achievements, promotions, changing of their role within an organization, their social interests & discussions, and other open web platforms along with industries/ companies expected to be fit for new positions [14].

Life changing connections are only found with AI that transforms dispersed data into a story not only using machine learning but also incorporating the cutting-edge methods including natural language processing, deep learning, predictive analytics, proprietary algorithms, behavioural pattern analytics and neural networks. The deeper and smarter analysis tools have reduced the time of selection of potential candidates from 60% to 10% i.e. faster than humanly possible. Although far-reaching R&D has commenced regarding the



E-HRM and talent recruitment, yet a significant gap remained in regards to E-HRM and its possible impact on potential start-ups [15]. Carrie Bermingham has done a study on investigating the impact that E-HRM has on start-ups with an emphasis on e-recruitment [16]. The data establishes the fact that start-ups are marginally utilising E-HRM as suitable practice in recruitments due to lack of expertise. In this context, AI-assisted recruiting tools can play a major role in high potential start-ups, identifying and selecting the most desirable candidates. AI with recent innovation of deep learning is still in its infancy stage, meaning most of the AI systems in all industries are still in the learning phase and HR AI might not be 100% accurate but once it gets matured and properly trained on big datasets, it will assist HR discipline in a highly significant way.

## Acknowledgements

This research was supported by Basic Science Research Program through the National Research Foundation of Korea (NRF) funded by the Ministry of Education, Science and Technology (NRF-2019R1A2C1010786). This study was also supported by the BK21 Plus project (SW Human Resource Development Program for Supporting Smart Life) funded by the Ministry of Education, School of Computer Science and Engineering, Kyungpook National University, Korea (21A20131600005).

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**Citation:** Farooq SS, Mehmood I, Jung SK (2020) Talent Recruiting Innovations and High Start-Ups. *Trends Comput Sci Inf Technol* 5(1): 065-066. DOI: <https://dx.doi.org/10.17352/tcsit.000025>