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How can HR practitioners complement search algorithms in recruitment of high potentials?

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In the past decade, we have witnessed the increased application of search algorithms in the human resources (HR) recruiting process. In fact, this data-driven technology has become somewhat of a permanent fixture in the HR recruitment practitioners' toolbox for identifying and selecting high-potential employees. As a result, an important HR question has emerged in recent years about the role of HR practitioners: Will the use of sophisticated data-driven technology potentially replace HR practitioners by using a predefined set of criteria to identify, prescreen and select high-potential candidates who fit the profile of a company?

In simple terms, *search algorithms* are a set of computer-generated instructions that use selected variables to build a profile of a prospective high-potential candidate. These variables include the language the potential candidate uses to describe technology, work projects, websites consulted and even self-reported skills listed on social networking sites such as LinkedIn (Rothbard, 2013). In fact, using algorithms has the potential to shift the recruitment emphasis from markers such as academic titles or

social traits that reflect the types of attributes a company seeks in its new hires. Gild and Sutro are two search algorithms that were built, in part, to reduce some of the tedious tasks HR practitioners often encounter in the recruitment process. Companies such as SAP (2015) and Google (Hafen, 2016) have developed automated search algorithms. SAP (2015) has incorporated recruitment algorithms, developed in conjunction with interviews with HR practitioners, as part of its college recruitment process. For Rothbard (2013, p. 1), "discovering the algorithm to reflect the desired attributes of the company" will be very meaningful for the automated search algorithms technique.

However, the use of search algorithms in the HR recruitment process has some operational glitches. Clarity and transparency of the selection process are two major issues. These issues become a serious obstacle, as research indicates that HR practitioners often use different criteria from what they verbalize (Posthumus *et al.*, 2016). Accordingly, the correct and clear application of criteria in search algorithms is imperative if they are to replace HR professionals in the identification and selection of future employees and to manage

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the later stages of the recruitment process. For instance, validated tools such as cognitive ability tests and situation judgment tests can be used to evaluate potential candidates in assessment centers in these later stages. Therefore, it is essential to account for the differences between used and verbalized criteria underlying the development of these automated search algorithms. Knowing the criteria that comprise into the algorithms helps HR practitioners to learn more about the process of recruitment and management of potential candidates and current employees.

Our recent exploratory study (Posthumus et al., 2016) investigated the implications for the development of automated search algorithms on the recruitment of high potentials in the US and European pharmaceutical sector. In that study, most HR recruiting practitioners had difficulty describing the characteristics of a high-potential employee, but they had implicit assumptions about the key characteristics of a high potential in mind. Participants HR practitioners have used different groups of characteristics for high potentials such as intelligence and agility, ability to manage one's self, readiness and ability to function in various settings and engagement. These findings are consistent with Ready et al. (2010) who define high potentials as people who have the ability to perform in various environments (adaptability) are smart and clever (efficiency) and have the ability to survive in turbulent situations.

As more HR practitioners move to design and apply search algorithms to make recruitment of high potentials more effective, we recommend that they undertake five actions:

1. Algorithms should be built modularly to adapt to the specific needs, values, context and recruitment of the company.

2. Tools should not be designed using criteria built only on the answers to direct questions from HR practitioner but should be validated with data from observations or sets extracted by indirect techniques.

3. These designed tools should integrate decision support systems with electronic information sources, such as internal anonymous HR records.

4. A recruitment search algorithm should be combined with a data-mining technique to analyze the performance of the recruits. Such actions could improve the recruitment performance over time, especially in larger companies where information is plentiful.

5. The use of search algorithm criteria and their underlying methods should be crystal clear to prevent any discriminatory actions on the part of HR practitioners. Clarity, coupled with equal employment opportunity legislation, should increase both the formality and transparency of the recruitment and selection process (Aycan, 2005).

To conclude, automated recruitment algorithms complement HR practitioners in their "war for talent", but they cannot replace the strategic role HR practitioners play in an organization. Applying appropriate and transparent identification practices of high potentials and talent in an organization and making the

correct alignment between management and HR practitioners remains a strategic prerequisite for a well-designed and well-functioning high-potential management system.

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