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Adaptive, Hybrid Reasoning Support System for Personnel Hiring (UMD16-11)

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Technology Description

The invention addresses problems that organizations may face in managing pools of candidates for open positions. Because of the importance of having the best available talent for all positions, particularly at strategic positions, it is often important for companies to be able to assess the suitability of internal candidates as well as external candidates, including internal candidates who are not aware of, or who have not applied for, the position.

The invention is based on the use of a decision support tool that combines both case-based and rule-based reasoning to help users rapidly arrive at informed decisions. The rule engine is used to specify the job qualifications (hiring criteria), while the case base is used to specify the external applicant profiles and the current employee profiles that might be a fit for the job qualifications. For internal candidates, hiring information could be augmented by data such as productivity or other aspects of past performance. The DSS contemplated for this use has a user-friendly interface to assist hiring managers of a company to find a best match for a current job opening considering both internal and external candidates.

Features and Benefits

- The system uses semantic technology to define open positions and desired job skills, and allows users to use the DSS to select candidates for open positions. *This ensures a unified human resources language across the company*.
- The system can be consulted by a hiring manager to identify relevant job qualifications relevant job qualifications for a given job opening, utilizing the semantic backbone of the DSS. *This allows Intelligent position entry*.
- The method allows the use of existing employee profiles along with those of outside candidates, to guide the new employee selection process. *Access to "raw" employee information allows a hiring manager to view individual characteristics of outstanding employees and hire accordingly*.
- The system is capable of learning which job qualifications are most relevant to each job description. *This would enable the company to create agile, evolvable job descriptions*.
- The system features multi-factor monitoring of hiring activity, which can be correlated with business metrics, such as sales metrics. *This enables the creation of an agile loop between human resources information and business performance*.

UMass and Aretisoft LLC jointly own a pending U.S. provisional application claiming this Personnel Hiring System, which is available for exclusive or non-exclusive licensing. A more general Decision Support System is covered by US Patent Nos. 8,244,733. and 8,504,514, which are also available for licensing from UMass.

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