AI Predicted Competency Model to Maximize Job Performance

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Abstract

Human resources are concerned with recruiting, training and keeping talent. The correct selection of personnel is key to the success of a business because regardless of the outstanding business strategy, those who put it into practice are most important. A carefully developed strategy is as bad as having no strategy if the wrong person is placed in the wrong position. There are no studies to predict the competency of job applicants based on dimensional values such as level of knowledge, self-motivation, self-concern and role perception. This study proposes a prediction model that uses AI (Artificial Intelligence), this includes a quantitative mathematical model that identifies the level of personnel competency to optimize job performance. The model verifies the discrete and continuous relationship between competency dimensions and their synergetic effects. Four AI algorithms are used to train a data set that contains 362 data elements, consisting of two optimized combinations of dimensional values in step 1, and 360 data elements that are derived from the dimensional relationship that produces the synergetic effects. The proposed model predicts the competence of job applicants and compares this competence with the value gives optimized job performance to optimize the selection of human resources.

Keyword: Competency, Job Performance, Mathematical Model, Artificial Intelligence, Human Resource Management