A COMBINED FUZZY DECISION MAKING PROCESS FOR THE PERSONNEL SELECTION OF HUMAN RESOURCE MANAGEMENT

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ABSTRACT

Until the last decades, human resource management departments have been selecting the necessary personnel for the suitable jobs by using traditional methods. However, traditional human resource management methods for the personnel selection can be incompetent in today’s world. The main reasons of this insufficiency are increasing importance of specialization, developing and rapidly changing technologies, globalization of world, etc. All these reasons are also affecting and increasing the evaluation criteria of personnel. Besides, there are many main evaluation criteria directly and indirectly related with job requirements. Another crucial issue during these processes is subjective judgements of the decision makers of human resource management departments. Existence of wrong or biased subjective judgements can cause the wrong personnel selection that also means selecting personnel not suitable with the job requirements. The purpose of this study is to conduct a combined fuzzy decision making process, especially to decrease the bias of subjective judgements. In accordance with this purpose, evaluations of human resource management experts are done by using linguistic scales. Evaluating personnel by using linguistic scales makes the process easier and understandable by the human resource management experts. Then, all the evaluations are represented with fuzzy numbers to combine them and do analyzes. Fuzzy set theory has been commonly used to decrease the subjectivity of evaluations of experts. After obtaining a combined single evaluation with all subjectivity reduced, fuzzy based ELECTRE method is used to select the most appropriate personnel meeting the job requirements.

Keywords: Human resource management, personnel selection, fuzzy system, multi-criteria decision making.

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