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Selecting the Best Software Product Using Analytic Hierarchy Process and Fuzzy-Analytic Hierarchy Process Modules

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Abstract : Software applications play an important role inside any institute. They are employed to manage all processes and store entities-related data in the computer. Therefore, choosing the right software product that meets institute requirements is not an easy decision in view of considering multiple criteria, different points of views, and many standards. As a case study, Mutah University, located in Jordan, is in essential need of customized software, and several companies presented their software products which are very similar in quality. In this regard, an analytic hierarchy process (AHP) and a fuzzy analytic hierarchy process (Fuzzy-AHP) models are proposed in this research to identify the most suitable and best-fit software product that meets the institute requirements. The results indicate that both modules are able to help the decision-makers to make a decision, especially in complex decision problems.

Keywords: analytic hierarchy process, decision modeling, fuzzy analytic hierarchy process, software product

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