

Multi-Criteria Decision Making in the Patent Process: Application in an R&D Firm

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Abstract

The TOPSIS method, which adopts the principle of reaching ideal and non-ideal solutions in the order that the alternatives make by considering their relative closeness to the best solution (positive ideal solution), can present it in a simple mathematical form while determining the relationship of decision alternatives and give simple outputs, without making a qualitative transformation using numerical values, directly It is one of the multi-criteria decision-making methods that can be applied to data. The AHP method, on the other hand, is a multi-criteria decision-making method that structures and visualizes complex, multi-criteria and multi-period problems hierarchically and determines the appropriate decision alternative by calculating the criterion weights to determine the contribution of the criteria to the goal. The most distinctive feature of AHP is that it appears as a method in which the thoughts and intuitions of the decision maker are combined logically.

In this study, it is aimed to prevent time loss and disruption of the process by planning to include the patenting process in an appropriate stage of the company's workflow process by using multi-criteria decision-making techniques to solve the problem of patenting, which is the problem of the company. Existing projects in line with the company's goals and strategies is evaluated and listed with the TOPSIS method. Before the TOPSIS method, the AHP method is used to give weight to the criteria. By using these methods, a decision support system is developed that prioritizes which project is patented and that is allow it to be used by different companies.

Keywords

Patent, AHP, TOPSIS, Decision Support System, R&D Project

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Biography

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