

## عنوان مقاله:

Finding a Probabilistic Approach to Develop a Fuzzy Expert System for the Assessment of Research Projects using ANP Approach

## محل انتشار:

فصلنامه بین المللی مهندسی صنایع و تحقیقات تولید، دوره 23، شماره 2 (سال: 1391)

تعداد صفحات اصل مقاله: 12

## نویسندگان:

H. Khademizare - *Department of Industrial Engineering, Yazd University, Yazd, Iran*

T. Aliheidari bioki - *Department of Economics, Science and Research Branch, Islamic Azad University, Yazd, Iran*

## خلاصه مقاله:

Nowadays, project selection is a vital decision in many organizations. Because competition among research projects in order to gain more budgets and to attain new scientific domain has increased. Due to multiple objectives and budgeting restrictions for academic research projects have led to the use of expert system for decision making by academic and research centers. The existing methods suffer from deficiencies such as solution time inefficiency, ineffective assessment process, and unclear definition of appropriate criteria. In this paper, a fuzzy expert system is developed and improved for decision making in allocating budgets to research projects, by using the analytic network process(ANP). This has led to fewer rules and regulation, faster and more accurate decision-making, fewer calculations, and less system complexity. The rules of the expert system exacted in C# environment, consider all of the conditions and factors affecting the system. We describe the results of proposed model to measure its advantages and compare to existing selection processes for 120 projects. We also discuss the potential of proposed expert system in supporting decision making. The implementation results show that this system is significantly valid in selecting high-priority projects with respect to the known criteria , decision making regarding the determination of the assessment factors, budget allocation, and providing the appropriate initiatives for the improvement of the low-priority projects.

## کلمات کلیدی:

Fuzzy expert system; ANP; Assessment of research project

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/281392>

