

عنوان مقاله:

(An Aggregated Supplier Selection Method Based on QFD and TOPSIS (Case Study: A Financial Institution

محل انتشار:

دوفصلنامه بهینه سازی در مهندسی صنایع, دوره 12, شماره 1 (سال: 1398)

تعداد صفحات اصل مقاله: 10

نویسندگان:

Mohammad Ali Sobhanallahi - Faculty of Engineering, Department of Industrial Engineering, Kharazmi University, Tehran, Iran

Neda Zندهدل Nobari - Faculty of Engineering, Department of Industrial Engineering, Kharazmi University, Tehran, Iran

Seyed Hamid Reza Pasandideh - Faculty of Engineering, Department of Industrial Engineering, Kharazmi University, Tehran, Iran

خلاصه مقاله:

With daily development of information technology supply chain of service-based organizations like financial institutions and the increased value of outsourced activities, also the importance of customer satisfaction, outsourced affairs must have done by the suppliers who have the ability of accomplishing the organizational demands. To mitigate the risk of invalid supplier selections, verification and selection of the suppliers should be performed with an optimized and systematic solution. In order to help the selection of suppliers in the IT department of financial organizations, a different model by using a hybrid QFD-TOPSIS solution in MCDM methods is suggested, in this study. First goal of the provided model is finding the most related criteria and the second one is offering an optimized solution to the supplier selection problem. To begin the QFD part in the mentioned method, two categories of criteria are needed. Then, after the formation of the House of Quality, in a real case study that was performed in a private bank in Iran, the suppliers are ranked by using the proposed method. The greatest efficiencies of this method are not only finding the best supplier by measuring the nearest distance to the ideal and the farthest one to the negative-ideal solution but also closing the opinions of employers to the technical requirements (sub-criteria) of information technology supplier qualifications. Finally, a model reliability part is designed to indicate the validation of the proposed method and a sensitivity analysis is implemented to find the most sensitive sub-criteria. That is the results of ranking alter if sensitive sub-criteria change.

کلمات کلیدی:

Supply Selection, Multiple Criteria Decision Making, Information Technology, Quality function deployment, TOPSIS

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/867970>



