

Selecting The Contractor using Multi Criteria Decision Making in National Gas Company of Lorestan Province of Iran

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Abstract : In this modern fluctuating world, organizations need to outsource some parts of their activities (project) to providers in order to show a quick response to their changing requirements. In fact, a number of companies and institutes have contractors do their projects and have some specific criteria in contractor selection. Therefore, a set of scientific tools is needed to select the best contractors to execute the project according to appropriate criteria. Multi-criteria decision making (MCDM) has been employed in the present study as a powerful tool in ranking and selecting the appropriate contractor. In this study, devolving second-source (civil) project to contractors in the National Gas Company of Lorestan Province (Iran) has been found and therefore, 5 civil companies have been evaluated. Evaluation criteria include executive experience, qualification of technical staff, good experience and company's rate, technical interview, affordability, equipment and machinery. Criteria's weights are found through experts' opinions along with AHP and contractors ranked through TOPSIS and AHP. The order of ranking contractors based on MCDM methods differs by changing the formula in the study. In the next phase, the number of criteria and their weights has been sensitivity analysed through using AHP. Adding each criterion changed contractors' ranking. Similarly, changing weights resulted in a change in ranking. Adopting the stated strategy resulted in the facts that not only is an appropriate scientific method available to select the most qualified contractors to execute gas project, but also a great attention is paid to picking needed criteria for selecting contractors. Consequently, executing such project is undertaken by most qualified contractors resulted in optimum use of limited resource, accelerating the implementation of project, increasing quality and finally boosting organizational efficiency.

Keywords : multi-criteria decision making, project, management, contractor selection, gas company

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