Analytic Network Process in Location Selection and Its Application to a Real Life Problem

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Abstract : Location selection presents a crucial decision problem in today's business world where strategic decision making processes have critical importance. Thus, location selection has strategic importance for companies in boosting their strength regarding competition, increasing corporate performances and efficiency in addition to lowering production and transportation costs. A right choice in location selection has a direct impact on companies' commercial success. In this study, a store location selection problem of Carglass Turkey which operates in vehicle glass branch is handled. As this problem includes both tangible and intangible criteria, Analytic Network Process (ANP) was accepted as the main methodology. The model consists of control hierarchy and BOCR subnetworks which include clusters of actors, alternatives and criteria. In accordance with the management's choices, five different locations were selected. In addition to the literature review, a strict cooperation with the actor group was ensured and maintained while determining the criteria and during whole process. Obtained results were presented to the management as a report and its feasibility was confirmed accordingly.

Keywords : analytic network process (ANP), BOCR, multi-actor decision making, multi-criteria decision making, real-life problem, location selection

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