Multi-Criteria Selection Decision for the Optimal Allocation of the Concrete Batch Plant-A Comparison Study of Applying ANP and AHP

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Abstract

The selection of optimum location for concrete batch plant (CBP) became very important problem that needs a right decision to avoid many difficulties and problems may results due to select wrong location. For that we can use the analytic network process (ANP) in decision making process. The ANP is more generalized than the analytic hierarchy process (AHP). This paper shows a form of questionnaire to identifying the factors affecting CBP location to deal with it or to construct a new batch plant after sending it to expert engineers and workers. By applying SUPERDECISION software the ANP model presents the framework criteria and available alternatives ad feedback which can help to choose the best alternative. The difference between these two methods papers in this paper by modeling the problem and determine the final priorities for the alternatives and the importance of each criteria by evaluating process. This paper gives a brief look at the difference of AHP and ANP.

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