

ANP AND RATINGS MODEL APPLIED TO SUPPLIER SELECTION PROBLEM

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ABSTRACT

The Supplier Selection Problem (SSP), for many specialists, is one of the most important functions of the purchase sector. It can be defined as the process by which suppliers are reviewed, selected and evaluated into the supply chain company context. The SSP is defined in literature as a complex decision problem because it contains multiple alternatives and multiple criteria.

This paper proposes an approach based on the Analytic Network Process (ANP) with Ratings for the final supplier selection. Ratings consist in assigning categories to previously defined criteria for alternatives selection. This approach reduces the number of judgements required for a decision and allows the analysis of cases with high number of alternatives.

Keywords: Supplier Selection Problem, ANP, Ratings.