

## Applying Fuzzy Analytic Hierarchy Process for Subcontractor Selection

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**Abstract :** Textile and clothing manufacturing industry is based largely on subcontracting system. Choosing the right subcontractor became a strategic decision that can affect the financial position of the company and even his market position. Subcontracting firms in Tunisia are lead to define an appropriate selection process which takes into account several quantitative and qualitative criteria. In this study, a methodology is proposed that includes a Fuzzy Analytic Hierarchy Process (AHP) in order to incorporate the ambiguities and uncertainties in qualitative decision. Best subcontractors for two Tunisian firms are determined based on model results.

**Keywords :** AHP, subcontractor, multicriteria, selection

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