

## Article Abstract

Title:	A multiple choice decision analysis: an integrated QFD – AHP model for the assessment of customer needs
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Abstract:	The aim of this work is to propose a new methodological approach to define customer specifications through the employment of an integrated Quality Function Deployment (QFD) – Analytic Hierarchy Process (AHP) model. The model, which is loosely based on QFD, incorporates the AHP approach to delineate and rank the relative importance weight of expressed judgments for customer needs and functional characteristics. The Analytic Hierarchy Process is very useful for this aim because it is a mathematically rigorous, proven process for prioritization and decision-making. By reducing complex decisions to a series of pair-wise comparisons, then synthesizing the results, decision-makers arrive at the best decision with a clear rationale for that decision. The methodology adopted in this work is directed to evaluate as well as rank the definition of the customer's needs and functional characteristics among several alternatives. The approach has been validated in a real case study concerning the filter in ceramic material production.
Keywords:	Quality Function Deployment, Analytic Hierarchy Process, Multi Criteria Decision Analysis.