

# **Application of Analytic Hierarchy Process Techniques in Multi-Criteria Decision Making Problems**

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## **Abstract**

Decision making techniques range from dependence on chance (for example; flipping a coin) to the utilization of more organized tools. However, sound decision making involves the utilization of knowledge, insight and innovativeness and takes account of measuring all the significant factors. In the presence of inherently perplexing multi-criteria decision problems, making the right decision requires an evaluation of numerous factors that must be weighed against contending priorities. It is quite remarkable that the utilization of statistics and probabilities for conventional correlation analysis has been considered inadequate in handling uncertainties associated with failures in data and modeling. The Analytic Hierarchy Process (AHP) has been practical and useful Multi Criteria Decision Making (MCDM) tool which provides the foundation for making such evaluations in decision making. AHP problems techniques have been seen to be far reaching in real life decision making circumstances and focus on discovery of desirable solution from a limited number of feasible alternatives evaluated on multiple properties (Criteria), both quantitative and subjective. In this paper, MCDM-AHP framework methodology has been proposed as very practical and most of the time utilized MCDM methods for group decision making. Finally, highlights on the techniques and importance for the framework application have been outlined.

## **Keywords**

Decision Making, Multi-Criteria Decision Making (MCDM), Analytic Hierarchy Process (AHP), Criteria and Alternative.

## **Biography**

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