

# Establish A Supplier Evaluation System For Hand Tool Industry

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## ABSTRACT

Along with the industrial competition pressure, the enterprise currently enters meager profit period. To meet the competition of cost, management and lead-time, the traditional enterprises that only take the self-control will be unable to win the orders. Supplier's selection to an enterprise is quite important but actually it also is a complex decision-making problem. Currently, the existing hand tool companies in Taiwan perform selecting suppliers based on the personal feelings frequently. However, the evaluation criteria of this problem are usually mutually conflicts and some of factors are not quantified. This makes the policy-maker is unable to establish an objective and concrete procedure to select the best suppliers. This research proposed a multi-criteria decision-making approach by incorporating the group AHP and TOPSIS methods to analyze the selection process. This suggested evaluation procedure could assist the enterprise to carry on the supplier selection more effectively.

Keywords : Multi-criteria decision-making analysis ; AHP ; TOPSIS

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