USING ANP FOR THE SELECTION OF GREEN SUPPLY CHAIN MANAGEMENT STRATEGIES

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ABSTRACT

This study aims to designate the appropriate green supply chain management (GSCM) strategies for electronic industries to control their business functions and activities effectively. Because many previous works mixed up green strategies, regulations, and activities, we propose an integrated network model from the aspect of product development so that four business functions, i.e., design, purchasing, manufacturing, and marketing, and their activities can be identified. These functions and activities under strategies are considered to be clusters and elements of the network. Some dependent relations are processed by analytic network process (ANP) with pair-wise comparison, and suitable alternatives will be selected. In the final section, the model is employed by one leading electronic company in Taiwan.

Keywords: Green strategy, Analytic network process, Green management, Business function, Dependence, Electronic industry.

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