

# A Hybrid Model of ANP and TOPSIS (MADM) for Ranking Suppliers in Sustainable Supply Chain Management

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## Abstract:

This study presents a theoretical approach of A Hybrid Model of ANP and TOPSIS Multiple Attribute Decision Making for Ranking Suppliers in Sustainable Supply Chain Management. The sustainable supply chain management is calculated through the interactions between criteria and sub-criteria with ANP; and finally sustainable supply chain management is calculated by using ranking suppliers TOPSIS method. The population in this study was comprised of suppliers of Textile Company. The instrument used in this study was a questionnaire. ANP and TOPSIS methods were used in this study. The results showed that the criteria “Culture and Strategy Dimensions” is the most effective and “Risk Management System Dimensions” had the next effectiveness level. Finally suggestions were presented to improve sustainable supply chain management.

**Keywords:** Supply Chain Management, Sustainable Supply Chain, Sustainable Supply Chain Management and Ranking Suppliers