

EVALUATION OF SERVICE SUPPLY CHAIN PERFORMANCE CRITERIA WITH DANP METHOD

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Abstract

Despite the service industry composes large part of the world economy, the academic studies and applications on supply chain are mainly about production industry. Because of the different structure of services, the service supply chain and also performance criteria-metrics differ from the product supply chain. The aim of this paper is to evaluate the supply chain performance metrics for restaurant sector. For this purpose in the first part of the paper the service supply chain concept and service performance metrics that has been widely accepted in the literature are explained. Due to the non-hierarchical structure of performance criteria and metrics, the hybrid multi criteria decision making method DANP (DEMATEL Based Analytic Network Process) is used to weight the criteria and the information about the method is given in the second part. Then in the third part theoretical framework an empirical study is illustrated. In the application part, with the data received from the expert group about a restaurant supply chain, firstly the direct relaxation matrix has been generated and relations between main performance criteria are determined with DEMATEL (Decision Making Trial and Evaluation Laboratory) method. Then the weights of per performance metric and criterion were computed with DANP. Analysis results have demonstrated that the “customer satisfaction, flexibility and customer query time” are the most important criteria impacting the restaurant supply chain performance.

Keywords: Service Supply Chain Performance, DANP (DEMATEL Based Analytic Network Process)

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