Intelligence heuristics to solve a Balanced Routing Problem in Supply Chain

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Authors:
N. Kannan, S. Jayanthi, R. Dhanalakshmi

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Abstract

In today’s business system, supply chain competitiveness greatly depends on its capability to handle the challenges of cost reduction, service level improvement and quality enhancement. In this competitive market, customer service level is the most significant factor for the success of the firm. Supply chain network needs to be efficient enough to handle the changing demand patterns. Balanced routing of goods among supply chain entities will improve the asset utilization and customer service level in a supply chain system. Over or under utilization of the supply chain entity will impact the customer service. We develop a decision support system based on three-stage heuristics to solve this balanced routing problem. A case study is illustrated and the DSS is validated for this case study.

References


Index Terms

Computer Science  Information Sciences

Keywords

Balanced Routing Problem; Supply Chain System; Decision Support System