Agent-Based Conceptual Model of Coordination Collaborative Production Planning In Divergent Two-Tier Supply Chain

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Abstract

Coordination members in supply chain need effective communication and information flows. One of tools which can support the coordination is agent-based model. In this study, it is considered independent partners consisting of one manufacturer and two suppliers which have individual decision for its production planning and the decision must be synchronize each other to achieve supply chain goal particularly to have higher service level for customer order. Agents represent supply chain members aforementioned who will exchange information and decision related to production planning. In this conceptual model, it will be described the production planning decision of individual participant which will be exchanged between supply chain members by agent-based modelling. Collaborative production planning is useful to achieve mutual benefit supply chain member by synchronizing their plan and deciding the most beneficial production planning.

Keywords
Agent-based, coordination, collaborative, production planning

Biographies

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