

Decision making in supply chain: Recent trends and applications of Nash game

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Abstract. With the increasing complex and decentralized SC environments, decision-making often involves multiple stakeholders with conflicting objectives, it's imperative then to apply robust decision-making strategies to coordinate. This paper explores a narrative literature review of recent developments and applications of Nash game models in SC management, with a particular focus on pricing, quality control, investment management, advertising strategies, and sustainability initiative. Furthermore, the paper discusses the evolution of Nash game through dynamic, stochastic, and learning-based approaches that enhance decision-making in a SC. The findings demonstrate the growing relevance of Nash game theory in decision making within a SC as it becomes more and more diverse.

Keywords: Nash game, supply chain, game theory.