An Optimization model for Triple Sourcing, Supply Chain under Disruption

Abstract

The trade-off among ordering policies and disruption risks in sourcing networks is a critical issue. This research proposes a generic newsvendor type model for triple sourcing, supply chains where all of the three chains subjected to disrupt events. It is assumed that each supply channel is susceptible to network, operations, and external risks or a combination of all of them. Optimal solutions are obtained in the ordering quantities and the total expected profit is computed. An illustrative numerical example is performed to help managers in balancing the ordering strategies under supply chains' risks.

References

supply chain networks.


11. Xia, Y. 2015. Responding to supplier temporary price discounts in a supply chain through ordering and pricing decisions.


Index Terms

Computer Science Information Sciences

Keywords

Demand uncertainty, triple sourcing, supply chain risk management, stochastic model