Abstract

Supply chain is a network of organizations that are directly or indirectly involved in fulfilling the customer requirements. Bullwhip effect in a supply chain is having negative impact on the performance of the supply chain. One of the reasons for its occurrence in supply chain is lack of customer demand information at all stages and lead time. So, the objective of the present study is to know the impact of sharing history of Customer Demand Information (CDI)
on bullwhip effect in a four stage serial supply chain and to evaluate its performance by conducting experiments similar to beer distribution game with one week lead time. History of CDI can be shared easily because of advancements in information technology. Various performance measures used for the evaluation are fill rate, variance of orders, total inventory at each stage and Total Holding Cost of the Supply chain (THCS). Results show that sharing history of CDI improves the performance of the supply chain.

Reference

- Massachusetts Institute of Technology http://web.mit.edu/jsterman/www/SDG/beergame.html
Impact of History of Customer Demand Information in Supply Chain Performance


Index Terms

Computer Science  Wireless

Key words

Supply chain  Bullwhip effect
Customer
demand information sharing