عنوان مقاله:

System Dynamic Simulation Approach for Analysing of Bullwip Effect in Supply Chain

محل انتشار:

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خلاصه مقاله:

The competition between enterprises has already entered the period of competition between supply chains through developing of information technology and economy. Risk management of a supply chain (SC) has a great influence on the stability of dynamic cooperation among SC partners. One of the most important risk and disturbing sources of SC is order fluctuations along when move up in supply chain. Bullwhip Effect is a phenomenon that the demand amplification and fluctuation from supply chain origin to supply chain terminal. In this research we use the system dynamics approach for investigating the bullwhip effect in supply chain. We study the impact of information sharing level, forecasting accuracy, and safety stock level using the order-up to-S policy on the bullwhip effect with the systems dynamic simulation approach using VENSIM software in the three-echelon supply chain consisting of a distributer, a retailer and a manufacturer. This paper illustrates that, with the high forecasting accuracy, the high level of the customer data sharing does not necessarily reduce the bullwhip effect. We noted that variations in demand .have been cancelled out through repeated forecastings when forecasting data is not shared

کلمات کلیدی:

Bullwhip Effect, Supply Chain, Systems Dynamic Simulation