Abstract

This paper develops Fuzzy inventory model to determine the relevant profit maximizing decision variable values. The model proposed is based on individual profits of vendor and buyer and joint total profit of them which finds out optimal ordering quantity, selling price and shipment policies. Shortages are allowed for both of them. Production rate, ordering quantity, shortage and holding cost of buyer and vendor are taken as triangular fuzzy numbers. Graded mean integration representation method is used for defuzzification. The conclusion drawn from Numerical example is, it is more beneficial for the buyer and vendor to co-operate with each other when the demand is more selling price sensitive.

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Index Terms

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