Abstract

It is the purpose of this paper to investigate the integrated cost minimizing strategy with supplier's trade credits offer under fuzzy environment. Supplier permits the retailer a certain fixed period to settle the amount owed to him for the items supplied. Expressions for average integrated inventory cost in fuzzy sense are derived. Signed Distance Method is used to defuzzified total fuzzy cost and its optimization with respect to the decision variable is carried out. A numerical example is cited to illustrate the model. A comparison is made between integrated cost policy and the individual cost policies. It is shown that integrated cost policy results in impressive cost reduction. Computer software Mathematics 7.0 is used to derive the optimal policies.

References

- Chang H. C., Yao J. S., Quyang L. Y., 2004. Fuzzy mixture inventory model with variable lead-time based on probabilistic fuzzy set and triangular fuzzy number. Computer and
Mathematical Modeling, 39, 287-304.

**Index Terms**

Computer Science
Applied Mathematics
Keywords
Supply Chain Management  Permissible Delay  Signed Distance Method