

# **The Application of Fuzzy Programming Models in Solving Multi- Objective Problems of Production and Distribution in Supply Chains with Respect to Fuzzy Delivery Date**

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## **Abstract**

Production and distribution planning has a great importance in supply chain, because on the one hand it provides production plan of manufacturing factories and on the other side it offers a plan for distribution of products from manufacturing factories to each of sales centers and distributors. The present study proposes a multi-purpose production-distribution planning model in supply chain in which the delivery date is considered to be fuzzy. The proposed production-distribution planning model aims to minimize the Production costs and product delivery time to customers according to Capacity of machineries, work force, storage space and also taking into account the time value of money. In order to analyze the validity of proposed model, a solving method is provided in the study and it is solved with a numerical example. The results of numerical examples demonstrate the validity of the mathematical model and the solution proposed.

## **Keywords**

Multi-objective Production-distribution planning, Supply chain, Fuzzy Models, Time Value of Money.

## **Biography**

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