**عنوان مقاله:**

A Three-Echelon inventory allocation and Supplier and Distribution Center location in Uncertain Environment with Considering Transportation Co2 Emission

**محل انتشار:**

هفدهمین کنفرانس بین المللی مهندسی صنایع (سال: 1399)

تعداد صفحات اصل مقاله: 9

**نویسندگان:**

Sepideh Aghajani

Reza Samizadeh

**خلاصه مقاله:**

Facility location and order allocation are two important decisions in operational supply chain management. The location selection of supplier and distribution center is critical issues for logistic managers. This article is proposed to solve the supplier and distribution center location selectionproblem under stochastic environment. The problem has been formulated as a multi-objective optimization model that aims at minimizing mean and variance of establishment cost, inventory cost and transportation cost. Furthermore, the capacities of supplier and DC are limited. This mixed integernonlinear program is solved as a single objective mixed integer programming model applying LPmetrics and T-H method. Finally solution quality and computational time are compared for two methods. In this manner a statistical hypothesis test is executed to compare two methods and twomulti criteria decision making methods (VIKOR and PROMETHEE II) is applied to rank the capability of methods. Thirty sample problems presented in the study verify the validity of proposed model.

**کلمات کلیدی:**

Supplier, Distribution center, Location selection and order allocation, Multi objective optimization.

**لینک ثابت مقاله در پایگاه سیویلیکا:**

https://civilica.com/doc/1161038