

## عنوان مقاله:

A CRITIC-based improved version for multiple criteria ABC inventory classification

## محل انتشار:

فصلنامه پیشرفتهایی در ریاضیات مالی و کاربردها، دوره 6، شماره 4 (سال: 1400)

تعداد صفحات اصل مقاله: 12

## نویسنده:

Amir Mohamadghasemi - Department of Industrial Engineering, Zabol Branch, Islamic Azad University, Zabol, Iran

## خلاصه مقاله:

In this paper, we present an improved version of the Ramanathan [R. Ramanathan, ABC inventory classification with multiple-criteria using weight linear optimization, Computer and Operations Research, ۲۰۰۶, ۳۳, ۶۹۵-۷۰۰] and Zhou and Fan models [P. Zhou and L. Fan, A note on multi-criteria ABC inventory classification (MCABCIC) using weighted linear optimization, European Journal of Operation Research, ۲۰۰۷, ۱۸۲, ۱۴۸۸-۱۴۹۱]. The model that Ramanathan [۱] offered, hereafter the R-model, in spite of its advantages may be led to a situation in which the weights of some criteria regarding an item would not play any role in determining its overall score. On the other hand, for the R inventory items, the Zhou and Fan [۲] approach, hereafter the ZF-model, may be resulted to a situation where an item with the high value for an unimportant criterion is inappropriately classified as class A. Moreover, none of the above studies take into account the ranking order (RO) of criteria. Hence, in order to remove drawbacks of both approaches, an integrated model based on criteria importance through inter-criteria correlation (CRITIC) is applied. At last, the proposed method is implemented in an illustrative example and the results are compared with the others.

## کلمات کلیدی:

Multi-criteria ABC inventory classification, linear programming, The CRITIC approach

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1275190>

