

Asian Social Science 2015 vol.11 N11, pages 142-147

Economic-mathematical methods of forming the optimal assortment plan trade enterprises

Shabanova L., Gafurov I., Safiullin N., Salimov L.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© 2015, Asian Social Science. All rights reserved. The article provides a critical analysis of the existing economic and mathematical models, summarizes the main deficiencies identified by various researchers and authors themselves, which allowed to recommend greater use of methods of linear programming. In a highly competitive consumer market, and most importantly, in the context of the dynamic expansion and deepening of product range, it is impossible to form the optimal assortment plans, focusing only on maximizing profits, it is also necessary to minimize distribution costs. According to the authors duality theory solves both of these problems. An algorithm for creating the optimal assortment plan commercial enterprise, based on the solution of the primal and dual linear programming problem. Given the economic interpretation of the possible reasons for which the task will not have a solution. Existing computer technologies allow to realize the proposed algorithm and provide a high reliability of the results.

<http://dx.doi.org/10.5539/ass.v11n11p142>

Keywords

Algorithms, Duality theory, Economic and mathematical models, Methods of linear programming, The assortment plan