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خلاصه مقاله:

In an uncertain and competitive environment, product portfolio management (PPM) becomes more challenging for manufacturers to decide what to make and establish the most beneficial product portfolio. In this paper, a novel approach in PPM is proposed in which the environment uncertainty, competitors' behavior and customer's satisfaction are simultaneously considered as the most important criteria in achieving a successful business plan. In terms of uncertainty, the competitors' product portfolios are assumed as different scenarios with discrete occurrence probabilities. In order to consider various customer preferences, three different market segments are assumed in which the sensitivity of customers towards the products price are considered as high, medium and low and modeled by means of a modified utility functions. The best product portfolio with minimum risk of loss and maximum customer satisfaction is then established by means of a novel regret minimization index. The proposed index aims at finding the best product portfolio which minimizes the total possible loss and regret of the manufacturer, with respect to the other competitors of the market. To better illustrate the practicality of the approach, a numerical example is presented. The results show that the selected products in the suggested portfolio have the highest utility value in all market segments and also they are expected to achieve the highest expected payoff in each possible marketing scenario.

کلمات کلیدی:

Product portfolio management, Price-sensitivity, Regret minimization, Customer Satisfaction, utility function, uncertainty