

## عنوان مقاله:

Optimization in Supply Chain Design of Assembled Products: A Case Study of HEPCO Company

## محل انتشار:

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## خلاصه مقاله:

HEPCO is an Iranian corporation that manufactures construction equipment and holds a supply chain with a traditional, non-integrated approach. The materials come from four different sources, including an engineering and parts company, domestic vendors, international vendors, and the company itself supplying the materials and components needed for assembling of products and delivering to customers. Having a non-integrated supply chain has led to an increase in total cost. Therefore, in order to reduce supply chain cost in this company, a three-level model including suppliers, manufacturers, and customers was used. Different ways also were applied to minimize chain cost, including purchase cost, transportation cost, inventory cost, assembly cost, and shortage cost, based on an integer linear mathematical model. It also considered such constraints as balance inventory, assembly capacity, storage capacity, amount of safety stock, and shortage, which were solved by MATLAB software. The results of proposed model were compared with the actual amount of variables in the study period, which indicated a significant reduction in the cost of proposed model compared to the conventional methods.

## کلمات کلیدی:

Supply Chain Management, supply chain costs, Mathematical model

## لینک ثابت مقاله در پایگاه سیویلیکا:

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