

Supply Chain Resource Optimization Model for E-Commerce Pure Players

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Abstract : The arrival of e-commerce has changed the supply chain management on the operational level as well as on the organization and strategic and even tactical decisions of the companies. The optimization of resources is an issue that is needed on the tactical and operational strategic plan. This work considers the allocation of resources in the case of pure players that have launched online sales. The aim is to improve the level of customer satisfaction and maintaining the benefits of e-retailer and of its cooperators and reducing costs and risks. We first modeled the B2C chain with all operations that integrates and possible scenarios since online retailers offer a wide selection of personalized service. The personalized services that online shopping companies offer to the clients can be embodied in many aspects, such as the customizations of payment, the distribution methods, and after-sales service choices. Every aspect of customized service has several modes. At that time, we analyzed the optimization problems of supply chain resource in customized online shopping service mode. Then, we realized an optimization model and algorithm for the development based on the analysis of the of the B2C supply chain resources. It is a multi-objective optimization that considers the collaboration of resources in operations, time and costs but also the risks and the quality of services as well as dynamic and uncertain characters related to the request.

Keywords : supply chain resource, e-commerce, pure-players, optimization

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