

订单不确定条件下的供应链协同决策研究

黄焜¹, 马士华¹, 冷凯君², 张得志^{1,3}

1. 华中科技大学管理学院 湖北 武汉 430074;
2. 湖北经济学院湖北物流发展研究中心 湖北 武汉 430205;
3. 中南大学交通运输工程学院 湖北 长沙 410075

Supply Chain Coordinated Decision with the Uncertainty in the Soft Order

HUANG Kun¹, MA Shi-hua¹, LENG Kai-jun², ZHANG De-zhi^{1,3}

1. Management School, Huazhong University of Science & Technology, Wuhan 430074, China;
2. Research Center of Hubei logistics development, Hubei University of Economics, Wuhan 430205, China;
3. School of Traffic & Transportation Engineering, Central South University, Changsha 410075, China

- 摘要
- 参考文献
- 相关文章

Download: PDF (0KB) HTML (1KB) Export: BibTeX or EndNote (RIS) Supporting Info

摘要 在产品客户化程度较高的装配生产中,制造商在获得客户的订单需求信息,但订单尚未签订的情况下,往往就要求供应商开始生产订单所需的零部件,以便客户订单签订后可以立刻开始产品的装配生产,从而实现尽快向客户交付订单的目的。但是,在客户订单不确定条件下,供应商提前生产零部件存在着一定的风险。一旦客户订单最终未能签订,由于零部件客户化程度一般也比较高,在相当长一段时间内很难被其它订单消化,从而形成呆滞库存。本文基于这样的运作环境,通过数学建模分析,研究了制造商何时向供应商下达零部件订单最优,以及供应商的最优生产决策问题,并给出了具体的决策方法。最后通过算例验证了模型的结论,并分析了生产延滞成本分担系数对供应商和制造商双方期望利润的影响。

关键词: 订单不确定 提前订货 提前生产

Abstract: In an assembly system whose product is highly customized, in order to deliver the final product as soon as possible, the assembly plant usually release the component order to the supplier when the detailed demand of the customer was clear but the customer order is still unconfirmed (soft order). However, due to the uncertainty in soft orders, the supplier has to take the risk of production in advance. In case that the soft order is canceled ultimately, as the component is also highly customized, the component is difficult to be consumed by the other orders and turn to the inactive stock. Under this circumstance, we studies the optimal time to release the component order and the optimal decision of supplier. The decisionmaking procedure is given in this paper, and the expected profit of assembler and supplier is analyzed by considering the sharing ratio of production delay costs with a numerical example.

收稿日期: 2009-12-21;

基金资助:

国家自然科学基金资助项目(71072035,71071050); 中国博士后科学基金(20090460941)

作者简介: 黄焜(1982-),男(汉族),湖北人,华中科技大学管理学院,博士研究生,研究方向:供应链与物流管理。

引用本文:

黄焜, 马士华, 冷凯君等. 订单不确定条件下的供应链协同决策研究[J] 中国管理科学, 2011,V19(1): 62-68

Service

- 把本文推荐给朋友
- 加入我的书架
- 加入引用管理器

Email Alert

RSS

作者相关文章

- 黄焜
- 马士华
- 冷凯君
- 张得志

Copyright 2010 by 中国管理科学