

Order Optimization of a Telecommunication Distribution Center through Service Lead Time

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Abstract : European telecommunication distribution center performance is measured by service lead time and quality. Operation model is CTO (customized to order) namely, a high mix customization of telecommunication network equipment and parts. CTO operation contains material receiving, warehousing, network and server assembly to order and configure based on customer specifications. Variety of the product and orders does not support mass production structure. One of the success factors to satisfy customer is to have a proper aggregated planning method for the operation in order to have optimized human resources and highly efficient asset utilization. Research will investigate several methods and find proper way to have an order book simulation where practical optimization problem may contain thousands of variables and the simulation running times of developed algorithms were taken into account with high importance. There are two operation research models that were developed, customer demand is given in orders, no change over time, customer demands are given for product types, and changeover time is constant.

Keywords : CTO, aggregated planning, demand simulation, changeover time

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