



### **SEMINARIO:**

# PLANNING ISSUES AND SOLUTION APPROACHES IN MANUAL ORDER PICKING SYSTEMS

#### Relatore

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#### Abstract

Order picking is a warehouse function critical to each supply chain. Underperformance results in unsatisfactory customer service (long processing and delivery times, incorrect shipments) and high costs (labor costs, costs of additional and / or emergency shipments), both being a significant threat to the total chain. Despite of its criticality, order picking is not really a topic of major interest, neither in industrial practice, nor in academic research. Like other warehouse functions, it appears to be one of the most frequently overlooked, underfunded, and inadequately planned corporate functions (cf. Tompkins et al. 1996). Both researchers and managers seem to be unaware of advanced planning techniques and their potential with respect to reducing costs and improving customer service (Petersen 1999).

The aim of this presentation, therefore, is to review these planning techniques and to demonstrate what benefits can be expected from their use in practice. We will focus on manual order picking systems and particularly address problems of (customer) order batching.

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