

*Present*

## Cross-dock and Storage Systems: Application of Research

Friday, February 22, 2013, 14:30-17:00

T Building, Room T03-42, Burgemeester Oudlaan 50, 3062 PA Rotterdam

Program:

14:30-14:35

### Introduction

#### **René De Koster**

Professor of Operations management and Logistics  
Rotterdam School of Management  
Erasmus University



14:35-15:10

### Market-based Task Allocation in Warehouses

#### **John Bartholdi**

Professor of Supply Chain Management  
School of Industrial and Systems Engineering  
Georgia Institute of Technology



15:10-15:45

### E-commerce Logistics

#### **Kees Jan Roodbergen**

Professor of Quantitative Logistics  
Faculty of Economics and Business  
University of Groningen



15:45-16:00

Break

16:00-16:35

### Lean Warehousing and Flexible Automation

#### **Kai Furmans**

Professor of Logistics  
Institute of Material Handling and Logistics Systems  
Karlsruhe Institute of Technology



16:35-17:05

### Fresh Produce Cross-docking

#### **Nima Zaerpour**

Post-doctoral Fellow of Operations Management  
Rotterdam School of Management  
Erasmus University



## **Abstracts:**

### **Market-based Task Allocation in Warehouses**

By **John Bartholdi**

One philosophy of process control in the warehouse is to direct each activity based on instantaneous activity-based costing. We show an example in a case-picking operation of how this can work, and of how to organize the warehouse to support it.

### **E-commerce Logistics**

By **Kees Jan Roodbergen**

Consumers are rapidly raising their expectations with regards to the services they expect from e-commerce companies. Products ordered as late as 11 PM are still to be delivered the next day and consumers would like to be able to specify the delivery time slot. And evidently, consumers expect a product that is labeled on the website as "in stock" to actually be in stock. E-commerce companies and their logistics service providers are trying to keep up with these demands. Research is needed to determine how to make the IT, warehousing and transportation processes effective, efficient and sustainable. In this presentation, challenges will be highlighted as well as solutions from a practical and academic point of view.

### **Fresh Produce Cross-docking**

By **Nima Zaerpour**

We study temporary storage of fresh produce in a cross-dock center. In order to minimize cooling cost, compact storage systems are used. A major disadvantage of these systems is that additional retrieval time is needed, caused by necessary reshuffles. In practice therefore, a dedicated storage policy is used in which every storage lane accommodates only one product. We propose a shared storage policy that allows different products to share the same lane. The policy provides near optimal solutions and is generally robust against disturbances in arrival times of the trucks.

### **Participation in the seminar?**

Participation in the seminar is free, but the number of places is limited. Registration on first-come-first-serve basis at: Carmen Meesters, [cmeesters@rsm.nl](mailto:cmeesters@rsm.nl), +31-10-4081719.