

17th International Symposium on Inventories

August 20-24, 2012 - Budapest, Hungary

PRELIMINARY PROGRAM 0.1

Track titles of the symposium

Economics = Economics of Inventories

Management = Inventory Management

Modelling = Mathematical Modelling

Forecasting = Forecasting for Inventories

Service = Service Logistics

Emergency = Emergency Actions in Inventory Management

Modelling = Modelling & Simulation of Multi-Echelon Inventory Systems

Environment = Inventory and the Environment

Hours/Date	August 20			
	Opening Plenary Session / Chair: Stefan Minner			
9.00-9.30	<p>Welcome: Attila Chikán <u>Louis Maccini</u> - Bartholomew Moore - Huntley Schaller Inventory behavior with permanent sales shocks</p>			
9.30-10.00	<p>Alan Stenger The Role of Supply Chain Management Initiatives in Achieving Competitive Advantage</p>			
10.00-10.30	<p>Ruud Teunter Forecasting intermittent demand for inventory management</p>			
10.30-11.00	Coffee			
	Plenary session / Chair: Louis Maccini			
11.00-11.30	<p>Stefan Minner Managing Energy Storages – Lessons from Inventory Theory & Research Agenda</p>			
11.30-12.00	<p>Geert-Jan Van Houtum Dynamic demand fulfillment in spare parts networks with multiple customer classes</p>			
12.00-12.30	<p>James Kahn Durable Goods Production and Inventory Dynamics: An Application to the Automobile Industry</p>			
12.30-14.00	Lunch			
	Management 1	Modelling 1	Economics 1	Environment 1
	Chair: Soren Glud Johansen	Chair: Henk Zijm	Chair: David Bivin	Chair: Maurice Bonney
14.00-14.30	<u>Frank Chen</u> - Quan Yuan: Analysis of supply contracts with a minimum quantity commitment and fixed order costs	<u>Maximiliano Udenio</u> - Jan C. Fransoo - Nico P. Dellaert: An analysis of the effect of response speed on the bullwhip effect using linear control theory	<u>Luca Benati</u> - Thomas Lubik : Sales, inventories, and real interest rates: A century of stylized facts	<u>Hiroaki Fujikawa</u> – Etsubi Xing – Yuki Umeda: CO2 reducing VRP algorithm development by ACO
14.30-15.00	<u>Josephine Clemens</u> – Karl Inderfurth: Supply chain coordination through risk sharing contracts under different forms of yield uncertainty	<u>Christian Larsen</u> - Marcel Turkensteen: A vendor managed inventory model with transportation to geographically dispersed retailers	<u>Ram Ganeshan</u> - Tonya Boone: The economics of membership based loyalty programs	<u>Danuta Kisperska-Moron</u> : Inventory management and corporate social responsibility standards in a distribution company
15.00-15.30	<u>Suresh Sethi</u> - Jun Zhang - Tao Li: Supply diversification with responsive pricing	<u>Shi W. Lee</u> - Ilkyeong Moon - Jeong-Hun Lee: Sea-based military logistics for aerial distribution to support combat units		<u>Daniel Kovacic</u> - Marija Bogataj: Simulating the impact of environmental factors on the extended MRP model
15.30-16.00	Coffee (Foyer)			

Hours/Date	August 20			
	Service 1	Modelling 2	Emergency 1	Forecasting 1
	Chair: Kalevi Kylaheiko	Chair: Robert Grubbström	Chair: Dogan Serel	Chair: Aris Syntetos
16.00-16-30	Ahmad Al Hanbali - Matthieu van der Heijden: Interval availability analysis of a two-echelon, multi-item system	Patrick Beullens - Gerrit Janssens: On the equivalence of inventory models based on classic and net present value principles	Nagihan Comez – Metin Cakanyildirim - Kathryn E. Steckel: Negotiated transshipment prices	Imre Dobos – Andrea Gelei: Forecasting of products with intermittent demand: A case study from pharmaceutical industry
16.30-17.00	Marco Bijvank - I.F.A. Vis – J. Boter: Investment decisions in collections for rental companies under customer choice behavior	Koichi Nakade - Hiroki Niwa: Customer satisfaction and lead-time quotation in an M/M/1 base-stock system	Fredrik Olsson: Emergency lateral transshipments in inventory systems with positive transshipment leadtimes	Nikoletta Zampeta Legaki - Fotios Petropoulos - Vassilios Assimakopoulos: An alternative implementation of Croston's methodology through a wide range of time series methods
17.00-17.30	Christoph H. Glock – Eric H. Grosse – Rafael Ballester: A simulated annealing approach for improving order batching in manual order picking systems	Mojtaba Farvid - Peter Berling: Lead-time investigation and estimation	Benhür Satir - Secil Savaseneril - Yasemin Serin: Value of information sharing in an inventory system with lateral transshipments	Rob Basten - Erwin van Wingerden - Rommert Dekker - Jan Willem Rustenburg: Forecasting demand for slow-moving spare parts: A comparative study at three companies
17.30	Welcome drink (Foyer)			

Hours/Date	August 21			
	Management 2	Management 3	Multi-Echelon 1	Service 2
	Chair: Jacob Wijngaard	Chair: Lucio Zavanella	Chair: Hiroaki Ishii	Chair: Alan Stenger
9.00-9.30	Avijit Banerjee – Ruo Du - Xiangrong Liui: Buyer-supplier coordination for continuously stocked items via retail pricing and revenue sharing	Artur Swierczek : The role of supply chain integration in increasing the "Snowball Effect" in the transmission of disruptions	Ahmed Shaban - Francesco Costantino - Giulio Di Gravio - Massimo Tronci : Simulation model to analyze bullwhip effect under classical and information sharing ordering policies	Rommert Dekker - Taoying Farenhorst-Yuan – Farid Mardin : Joint optimization of maintenance and spare parts: the value of plannability
9.30-10.00	Chul Ung Lee – Ek Peng Chew – Rujing Liu: Optimal dynamic pricing and ordering decisions for perishable products	Attila Chikán - Zsolt Matyusz: Company competitiveness and inventory performance	Daniel Schneider - Kirsten Tracht - Michael Mederer: Introduction of ratios to a simulation model of a closed-loop supply chain with customer-owned stock	Mustafa Hekimoglu – Rommert Dekker - Taoying Farenhorst-Yuan : Optimum control policy for spare part inventory in existence of supply risk and secondary market
10.00-10.30	Jaehun Park - Hyerim Bae- Sungmook Lim – Joonsoo Bae : A fuzzy cross-evaluation approach for multi criteria ABC inventory classification	Ruggero Golini – Krisztina Demeter: Determinants of input, work-in-process and output inventory levels: An international study of manufacturing industries	Ehab Bazan - Mohamad Y. Jaber – Simone Zanoni – Lucio Zavanella : Consignment stock policy for a two-level supply with an imperfect production process	Sina Behfard - Matthieu van der Heijden - Ahmad Al Hanbali - Henk Zijm: Last time buy and re-use of spares for advanced capital goods
10.30-11.00	Coffee (Foyer)			
	Management 4	Economics 2	Environment 2	Service 3
	Chair: Avijit Banerjee	Chair: Ram Ganeshan	Chair: Mohamad Jaber	Chair: Danuta Kisperska-Moron
11.00-11.30	Manuel Riel – Nils Loehndorf – Stefan Minner: Simulation optimization for the stochastic economic lot scheduling problem with sequence-dependent setup times	David G. Bivin : Production chains, demand, and output volatility in the durables sector: 1967-2011	Lakdere Benkherouf - Konstantina Skouri - Ioannis Konstantaras : Optimal lot sizing for a production-recovery system with time varying demand over finite planning horizon	Petra Pekkanen – Petri Niemi - Martikainen Antti: Developing a service offering for a logistical service provider - case local food supply chain
11.30-12.00	Lucio Zavanella – Simone Zanoni – Ivan Ferretti: Inventory policies for ameliorating items	Phillipe de Rougemont - Vincente Labhard: The role of inventories in the great recession and the recovery	Ioannis Mallidis - Rommert Dekker - Dimitrios Vlachos: Tactical decision making for designing green logistics networks	Adriana Gabor - Guangyuan Yang : Risk pooling in service logistics
12.00-12.30	Christoph Glock – Jörg M. Ries: A newsvendor model with dual sourcing under risk aversion and order-dependent lead times	Attila Chikán - Erzsébet Kovács - Zsolt Matyusz - Magdolna Sass : Inventories in national economies: A cross country analysis of macroeconomic data	Katja Rettke : Optimal two-stage ordering policy with information update and carbon emissions	
12.30-14.00	Lunch			
	Management 5	Multi-Echelon 2	Modelling 3	Service 4
	Chair: Jukka Korpela	Chair: Sven Axsäter	Chair: Ilkyeong Moon	Chair: Gudrun Kiesmüller
14.00-14.30	Oded Berman – Dmitry Krass – Alex Shlakter: Inventory location and transshipment problem	Olof Stenius – Christian Howard: Partial or complete deliveries in two-echelon divergent inventory systems	Lakdere Benkherouf : Optimal replenishment schedule for finite horizon models	Maarten Driessen - W.D. Rustenburg - G.J. van Houtum - V.C.S. Wiers : An empirical study on repair shop control in maintenance spare part environments
14.30-15.00	Geraldo Ferrer : Facility location for inventory reduction: A practical update on p-median heuristics	Yong He - Houfei Song - Lili Ren: Pricing and inventory decisions in a dual-channel supply chain with lateral transshipment	Joaquim Vicente - Susana Relvas - Ana Barbosa-Póvoa: Dynamic supply chain inventory management under deterministic and uncertain conditions: A generic mathematical programming approach	Christian Larsen – Lars Relund Nielsen – Hartanto Wong: Spare parts sharing with joint optimization of maintenance and inventory policies
15.00-15.30			Jacob Wijngaard : On optimal policies for production-inventory systems: The combination of set-up costs and order acceptance	Francesca Plebani - Nicola Sacconi - Andrea Bacchetti: Improving service parts inventory management for technological products. A simulation-based case study
15.30-16.00	Coffee (Foyer)			

August 23				
Hours/Date	Environment 3	Forecasting 2	Service 6	Modelling 6
	Chair: Mehmood Khan	Chair: John Boylan	Chair: Marco Bijvank	Chair: Karl Inderfurth
9.00-9.30	Imre Dobos - Mária Csutora - Gyöngyi Vörösmarty: A sustainable economic order quantity model with carbon footprint	Mohamed Zied Babai - Aris Syntetos – Ruud Teunter: Forecasting in the presence of inventory obsolescence: empirical findings and impact of the smoothing constants	Joachim Arts – Rob Basten - Geert-Jan van Houtum: Optimal and heuristic repairable stocking and expediting policies in a fluctuating demand environment	Jan A. Van Mieghem - Robert Boute: Global dual sourcing and order smoothing
9.30-10.00	Jörg Ries - Johannes Fichtinger - Emel Arikan: Impact of transportation lead-time variability on the economical and environmental performance of inventory systems	Aris Syntetos - John Boylan - Maryam Mohammadipour: Inventory forecasting: approaches to dealing with seasonality	Sven Axsäter: An improved decision rule for emergency replenishments	Rene Haijema: Optimal issuance and depletion of perishable products under a periodic order-up-to S policy
10.00-10.30		Karel van Donselaar: Forecasting demand during promotions for perishable items	Refik Gullu - M. Guray Guler - Taner Bilgic: Joint pricing and inventory decisions with delay sensitive customers	Mojtaba Farvid - Kaj Rosling: Customer waiting time in (nQ,R) inventory systems with compound Poisson demand
10.30-11.00	Coffee (Foyer)			
	Management7	Economics 3	Modelling 7	Modelling 8
	Chair: Petri Niemi	Chair: James Kahn	Chair: Christian Larsen	Chair: Sandra Transchel
11.00-11.30	Harmen Bouma – Ruud Teunter: A heuristic approach to the inventory pooling and routing problem	Felipe Schwartzman: Time to produce and emerging market crises	Robert W. Grubbström: Cumulative staircase considerations for dynamic lotsizing when backlogging and/or lost sales is allowed	Søren Glud Johansen: Emergency orders in an inventory system facing compound Poisson demand
11.30-12.00	Anders Segerstedt: A simple heuristic for vehicle routing and keeping low transport inventories – A variant of Clarke and Wright’s saving method	Guido Voigt - Robin Hartwig - Karl Inderfurth - Abdolkarim Sadrieh: Strategic inventories and supply chain behavior	Onur A. Kilic: A new heuristic for the dynamic lot sizing problem with returns and remanufacturing	Gudrun P. Kiesmüller: The fill rates for a critical level policy when demand is modeled as a compound Bernoulli process
12.00-12.30	Maurice Bonney - Mohamad Jaber: Deriving research agendas for manufacturing and logistics systems: a methodology	Chul Ung Lee - Ek Peng Chew - Rujing Liu: Coordinated dynamic pricing and ordering decisions for perishable products with multiple demand classes	Karin Pauls-Worm – René Haijema - Eligius M.T. Hendrix – Roberto Rossi - Jack G.A.J. van der Vorst: Production planning of a perishable product with lead time and non-stationary demand	Dagin Wang – Ou Tang: Inventory stacking with stochastic arrivals and departures
12.30-14.00	Lunch			
	Management 8	Forecasting 3	Management 9	Emergency 2
	Chair: Krisztina Demeter	Chair: Karel van Donselaar	Chair: Anders Segerstedt	Chair: Nagihan Comez
14.00-14.30	Emel Arikan - Werner Jammerneegg: The single period inventory model with product carbon footprint constraint	John E. Boylan: Empirical distribution functions for inventory management	Peng Sun – Paul Zipkin: A new algorithm for lost-sales inventory control	Nagihan Comez - Hilal Dag - Alper Sen: Optimal assortment planning for retailers using transshipments
14.30-15.00	Christoph H. Glock – Taebok Kim: A joint economic lot size model with returnable transport items	Mohammad Ali - Mohammed Zied Babai - Mona Mohammadpuri - John Boylan - Aris Syntetos: Analysis of the bullwhip effect in an intermittent demand context	Grigory Pishchulov – Knut Richter – Sougand Golesorkhi: A single supplier-single buyer bargaining model with asymmetric information and partial vertical integration	Peter Kelle – Helmut Schneider – Yi Huizhi: What does the public tolerate? Balancing between cost optimization and worst case scenario in emergency supply
15.00-15.30	Jekaterina Ossipova: Case study: Inventory optimization using ABC/XYZ matrix analysis for a furniture retailer	Annastiina Kerkkänen – Janne Huiskonen: Linking customer-specific demand information into spare parts inventory management - A case study	Mikael Collan - Kaj-Mikael Björk - Kalevi Kyläheiko: Evaluation of an information systems Investment into reducing the bullwhip effect	Nathan Kunz - Gerald Reiner: Capabilities investment versus prepositioning inventory: a new approach to disaster preparedness
15.30-16.00	Mirzapour Al-e-hashem -Yacine Reikik: A robust stochastic programming model for a transshipment enabled Inventory Routing Problem	Natalia Szozda - Artur Świerczek: The effect of demand planning process on operational risk in supply chains	Chul Ung Lee – Shuai Yang: Supply chain coordination with stock-dependent demand rate and credit incentives	Yoshiki Matsui: The impact of disasters on supply chain inventory management

Hours/Date				
16.00-16.30	Coffee (Foyer)			
16.30-17.00	General Assembly Meeting ()			
17.00-17.30				
17.30				

Hours/Date	August 24			
	Management 10	Environment 4	Service 7	Modelling 9
	Chair: Ruud Teunter	Chair: Gyula Vastag	Chair: Matthieu van der Heijden	Chair: Ou Tang
9.00-9.30	Karin de Smidt-Destombes - I.F.A. Vis: Sequencing methods for storing and retrieving inventories	Imre Dobos - Gyöngyi Vörösmarty - Mária Csutora: Sustainable supplier selection and evaluation using DEA-type composite indicators	Frank Karsten - Rob Basten : Spare parts inventory pooling: how to share the benefits?	Chi Chiang - Hui-Lan Hsu : An order fulfillment model with a periodic allocation review mechanism in foundry fabs
9.30-10.00	Andrea Ferrara – Andrea Grassi – Elisa Gebennini : Joint design of LGV pallet shuttle fleets for warehouse automation	Mehmood Khan - Mohamad Y. Jaber - Christoph H. Glock : Impact of learning on the environmental performance of a two level supply chain	Elisa Alvarez - Matthieu Van der Heijden – Ingrid Vliegen – Henk Zijm : Service differentiation through selective lateral transshipments	Hiroaki Ishii : The airline yield management with early discount setting
10.00-10.30	Steffen Klosterhalfen – Josef Kallrath – Gerd Fischer : Rail car fleet design: Optimization of structure and size	Arjaree Saengsathien - David Z. Zhang : An inventory and sourcing decisions model with a temporary price discount for improved sustainability in food supply chains	Guangyuan Yang : Risk management in performance based logistics	Sandra Transchel - Saurabh Bansal : Managing supply risk during the life-cycle of technology products
10.30-11.00	Coffee (Foyer)			
	Management11	Management 12	Emergency 3	
	Chair: Chul Ung Lee	Chair: Yoshiki Matsui	Chair: Peter Kelle	
11.00-11.30	Stephanie Vogelgesang – Ian M. Langella – Karl Inderfurth : Solving the disassemble-to-order problem under yield process misspecification	Geoffrey Relph - Michael Newton : Both Pareto and EOQ have limitations, combining them delivers a powerful management tool for MRP and beyond	Wanrong Ju : Inventory control with dual-sourcing under yield uncertainty	
11.30-12.00	Shuoguo Wei - Ou Tang : Managing cores for remanufacturing during the product life-cycle	Alexander Dobhan – Michael Oberlaender : Behavioral analysis and adaptation of a negotiation based, quantitative planning approach for hybrid organizations	Dogan SereI - Nagihan Comez : Emergency procurement planning in a single-period problem	
12.00-12.30				
12.30-14.00	Farewell drink & Lunch			