ISIR Newsletter



2/2015

ISIR Workshop on Sustainable Logistics and Supply Chain Management

October 7-9, 2015 – Lyon, France



The ISIR Workshop will be a special meeting of both economists and operational analysts, attempting to bring together two streams of research within the ISIR Community.

Papers on all topics related to the main theme are invited, however preference will be given to papers focusing on inventory related issues of sustainability:

- Analysis of hidden costs impact on sustainable supply chains' decisions
- Resource-efficient production, inventory and routing decisions
- Sustainable design of production and supply chain networks
- Measurement of supply chain environmental footprint
- Performance measures, metrics, and impact of sustainable supply
- Reverse logistics and green considerations
- Sustainability issues in manufacturing and services sector

- Lean management and its relationship with the sustainable supply chain
- Information systems for sustainable supply chain
- Socially responsible supply chains
- Reference models for green production and supply chains
- Strategies and decision making for resource efficient supply chains
- The impact of e-commerce on logistics
- Urban Logistics

Important Dates

August 15, 2015

Deadline for submission of abstracts

September 10, 2015

Notification of acceptance

September 20, 2015

Deadline for registration

The number of spaces is limited and if you wish to participate you only have to pay a nominal administration fee of 50 euros!

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UPCOMING ISIR EVENTS

August 17-21, 2015 - Hamburg, Germany

12th ISIR Summer School

October 7-9, 2015 - Lyon,

ISIR Sustainabilty Workshop

January, 3-5, 2016 – San Francisco, CA, USA

ISIR session at the ASSA meetinas

MARK YOUR CALENDAR!

The dates are set for

19th International Symposium on **Inventories:**

August 22-26, 2016

Budapest, Hungary

Event link: http://bit.ly/1gDxFw6

NEW MEMBERS OF THE ISIR EXECUTIVE COMMITTEE 2014-16

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CHRISTIAN LARSEN, Aarhus University, Denmark JOHAN MARKLUND, Lund University, Sweden

CALL FOR PAPERS

3rd International Workshop on Successful Strategies in Supply Chain Management

January 7-8, 2016 – Hong Kong

The workshop will be organized by The Hong Kong Polytechnic University.

The aim is to provide a forum for academics and practitioners, from Hong Kong, Mainland China, and other Southeast Asian countries as well as those from other parts of the world, to share their experiences and latest developments in the area of supply chain management and its applications.

Important dates:

1st October, 2015 - Deadline for submission of abstract

15th November, 2015 - Deadline for submission of full paper

1st December, 2015 - Early registration due

For more details visit the website:

http://www.polyu.edu.hk/ama/IW SSSCM3/

JOB VACANCY

Ph.D. and Postdoc Positions at TUM

Application deadline: September 1, 2015

The Logistics and Supply Chain Management research group at <u>TUM School of Management</u> has several vacancies for a Postdoc and a Ph.D.-student/research assistant.

The major research and teaching fields are global supply chain design, transportation optimization, and inventory management using methods of operations research, in particular stochastic models and methods.

Besides being fluent in English, successful applicants will have graduated among the top of their class at a university in Business Administration, Industrial Engineering, Computer Science, Mathematics, or another program with a clearly quantitative focus. Programming skills and experience with the application of operations research methods in one of our scientific fields of interest are a plus.

The successful applicant will be working in a part-time position with a salary according to the TV-L pay grades. Handicapped persons will be given priority if they have the same qualifications and competence. The Technical University of Munich is an equal opportunities employer and places particular emphasis on fostering career opportunities for women. Qualified women are therefore strongly encouraged to apply.

Please send your applications with the usual documents (application letter, CV, theses or working papers on interesting topics if available) in electronic form **before September 1** to:

Prof. Dr. Stefan Minner

Logistics & Supply Chain Management, TUM School of Management Arcisstr. 21, D-80333 München, Germany

E-mail: logistics.wi@tum.de

Report on the 22nd International EurOMA Conference

EuroMA 2015 Neutrinos Securitarios June 26th - July 1st, 2015 WELCOME

June 26-July 1, 2015 – Neuchâtel, Switzerland



The conference was hosted by the Université de Neuchâtel (UNINE). There were 375 full papers in the scientific programme presented to more than 500 participants from all continents.

The Scientific Programme incorporated 134 Parallel Sessions and was enriched by three keynote speakers, *Prof. Robert D. Klassen* (Ivey Business School, Canada), *Frank Binder* (Executive Director, International Supply Chain of the pharmaceutical company Celgene), and *Richard Strohmeier* (Chief Financial Officer of Longines), who provided insightful reflections from their academic and industry perspectives respectively. In addition there were 6 Special Sessions (including the ISIR Special Session) providing unique opportunities for engagement and insights. We closed the conference with two plant tours: LONGINES and STRAUMANN. *Gerald Reiner* (Chair) & Milad Zarin (Vice-Chair)

Papers in the ISIR Special Session

There were three papers presented in the special sessions using different perspectives and methodologies to investigate issues in the field of inventory management. Below you can read the details of the three papers.

Jürgen Strohhecker, Andreas Größler: Dynamic Life Cycle Inventory Policies for Consumer Goods with Severe Production Disruptions

The purpose of the presentation was to investigate the effect of infrequently happening, but severe production stops on operational and financial performance of a pharmaceutical product. Furthermore, it identified dynamically adjusting safety stock levels as a reaction to production disruptions. The paper employed simulation experiments based on system dynamics. Findings have shown that (i) the optimal safety stock level does not depend on the moment in time of the product's life cycle and (ii) dynamic adjustments of optimal safety stock coverage improves financial performance but only to a relatively small degree.



Johannes Fichtinger: The impact of economic changes on global sourcing: An inventory management perspective

Recently, business news and academic research has identified a trend to reshoring of sourcing and manufacturing volumes from low cost countries to the US and Europe. Commonly reported reasons include diminishing cost advantages of offshore locations due to shrinking labour cost differentials and increasing transport cost. Reshoring often happens within a segmented supply chain context, for example by using dual sourcing. Current total landed cost frameworks for evaluating sourcing cost, however, do not adequately consider dual sourcing strategies. The presentation proposed a total landed cost framework for evaluating reshoring with dual sourcing and analysed it using a short case study.

Zaza Nadja Lee Hansen, Martin Czichy Jensen, Laura Ramos Sancho: Inventory strategy: Balancing efficiency and customer needs in the building insulation industry

The insulation industry is characterized by the need for a leveled production output, quick delivery expectations, and products of large physical volume but low density. Inventory issues within this industry are largely unexplored in literature. The research question is "What is a cost-effective inventory strategy for a global insulation manufacturer wishing to fulfill customer needs while lowering inventory costs?" The presentation identified the key challenges within the inventory strategy for a large global Danish insulation manufacturer. Then analyzed possible decision outcomes so the company can create a cost-effective inventory strategy fulfilling customer needs at lower inventory costs.

Krisztina Demeter

Special ISSUE on Computers & Industrial Engineering Human factors in industrial and logistic system design

Aims and Scope

Despite the opportunities the automation of industrial and logistic systems offers, many companies still rely on human work and manual materials handling in many areas. Most decision support models that were proposed in the past to assist managers in designing industrial and logistic systems have neglected the specific characteristics of human workers, which often led to unrealistic outcomes. To guarantee a high level of productivity and efficiency and to make sure that decision support models better reflect reality in daily operations, an interdisciplinary perspective is necessary that considers human factors in addition to economic aspects in designing industrial and logistic systems.

There seems to be a large gap in the literature concerning the integration of human factors into decision support models for industrial and logistic systems design. In addition, the impact of systems design parameters on the human operators has not been sufficiently analyzed. In general, human factors (perceptual, mental, physical and psychosocial) determine the performance of industrial and logistic systems to a large extent if human operators are employed. This aspect becomes more challenging in light of demographic changes such as the aging workforce and international differences amongst system operators in a global supply chain environment. These trends will put human factors-related issues in logistics – such as the risk of developing musculoskeletal disorders in labor-intensive work environments - on top of the agendas in many companies. In addition, the consequences of using innovative technical solutions to support the design of high reliability industrial and logistics processes is not yet fully understood in light of human performance and errors.

This special issue aims to publish innovative approaches for the integration of human factors into industrial and logistic systems design. Submissions should develop and analyze analytical models, present case studies on the integration of human factors into decision support models, or apply simulation approaches for designing and coordinating industrial and logistic systems to gain insights into the interaction of human factors and logistic systems design.

Topics may include, but are not limited to:

- Human Factors in operations and logistics management
- Ergonomics methods for industrial systems design
- Quantitative assessment of injury risks in material handling operations
- The impact of demographic changes on industrial and logistic systems

- Human performance and error reduction in industrial systems design and management
- New technologies for increasing human performance and reducing human errors
- Social sustainability aspects in operations and logistics management

The editors of the special issue intend to publish a range of different topics and reserve the right to limit the number of papers included in any one topic.

Submission

Manuscripts should be submitted via Elsevier Editorial System http://ees.elsevier.com/caie/.

Please indicate in the Article Type "SI: Human Factors". Manuscripts should not have been previously published nor be currently under consideration for publication elsewhere. For Guide for Authors, please refer to the webpage:

http://www.elsevier.com/wps/find/journaldescription.cws_home/399/authorinstructions.

Deadline

The submission deadline is February 29, 2016. The Special Issue is scheduled for publication in early 2017.

Special Issue Editors:

Prof. Christoph H. Glock, TU Darmstadt, Germany. Managing Guest Editor

Prof. W. Patrick Neumann, Ryerson University, Canada Prof. Fabio Sgarbossa, University of Padua, Italy Dr. Eric Grosse, TU Darmstadt, Germany

ISIR membership

If you wish to continue your membership in ISIR you are kindly requested to fill the membership renewal form, state which membership category you belong to and move on to the payment of your dues.

Please note that the membership year runs from 01 September to 31 August!

News from Henk Zijm



At the end of 2014, Henk Zijm resigned from his position as Scientific Director of the Dutch Institute for Advanced Logistics (DINALOG) but continues to be a full professor in Logistics and Supply Chain Management of the University of Twente. In addition, he was re-elected on July 7, 2015 in Paris as vice-chair of the European Technology Platform (ETP) for Logistics ALICE. The ETP is designing the roadmaps for logistics and supply chain management that form the basis for current and future calls for proposals as part of the European HORIZON 2020 research program.

Together with three German colleagues, Henk Zijm acts as editor of a contributed volume on Logistics and Supply Chain innovation, in which 24 projects are described. All projects were carried out as part of two public-private partnership based innovation programs, conducted by the Dutch Institute for Advanced Logistics (the Netherlands) and the Effizienzcluster LogistikRuhr (North-Rhine Westphalia, Germany), in which industry and academic institutes cooperate. The book (around 400 pages) will be published by Springer International and officially launched on September 8, 2015.

BOOKSHELF

INVENTORY MANAGEMENT

by Geoff Relph and Catherine Miller

Advanced Methods for Managing Inventory within Business Systems

Effective inventory management can increase revenue, reduce costs, and improve cash flows. Endorsed by Institute of Operations Management and CILT, *Inventory Management* shows managers how to take control of their inventory system and ensure operations run smoothly.

Looking beyond the complexity and theory of inventory management, Geoff Relph and Catherine Milner focus on the most important decisions managers need to make when managing inventory. They examine how inventory management should work, how to control it, and how to balance it, through their use of revolutionary k-curve methodology. They include case studies from various industries, looking at inventory management in diverse areas such as supermarkets and aerospace. The book also includes numerous figures and diagrams as well as valuable online material.

If you would like an inspection copy, you should be able to get via the following link:

http://www.koganpage.com/product/inventory-management-9780749473686



Contribute to the ISIR Newsletter

If you wish to share news with the ISIR community about yourself, your research, your department, a conference you consider worth attending, a new publication, or job vacancies, please do not hesitate send it to the isir@isir.hu.