



**Kühne Foundation Endowed Chair of Logistics Management
Kühne Institute of Logistics Management**

**Activity Report 2013
September 1, 2012 – August 31, 2013**



From left to right:
Matthias Winkenbach, Linda Stein, Ingmar Ritzenhofen, Professor Spinler, Alexander König, Daniel Hach

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Preface

This report covers the period from September 2012 to August 2013. In this period, the chair's team continued to produce exciting research results which were published in a broad range of high-quality journals, to offer attractive lectures related to logistics and supply chain management and demonstrate impact in practice.

As far as teaching is concerned, the following lectures are offered in the Bachelor of Science Program at the WHU: a popular real options analysis class, a seminar on the quickly evolving topic of multi-modal logistics as well as a literature seminar which introduces students to quantitative research in supply chain management. In the Master's program, this is followed by the logistics and supply chain management course and an advanced course on real options, which, with a different focus, has proven successful in the MBA curriculum, too. Last, a doctoral seminar on supply chain management is taught, again with an emphasis on quantitative methods in logistics research. Quite a number of international students groups visiting from, among other places, Pittsburgh and Michigan, were introduced to the specifics of European operations and supply chain management and the challenges as well as opportunities that come along with concerns about sustainability. Two courses on transportation and distribution management are well received at the Kühne Logistics University in Hamburg.



Publications in top-ranked journals such as Decision Sciences, EJOR, MSOM and POM, indicate the quality of the research carried out at the chair. The topics range from the optimal design of maintenance contracts to supplier selection under CO₂ abatement considerations. A fair amount of research is dedicated to the issue of sustainability. An ongoing research relationship with INSEAD and La Poste is – subsequent to the successful completion of the electric vehicle project – dedicated to explore opportunities arising from urban delivery constraints and requirements. Matthias Winkenbach, dedicated to his city logistics research, was invited to join for four months MIT's Mega-City Logistics Group headed by Dr. Edgar Blanco, where he left a lasting impression. The research on humanitarian logistics, pursued primarily by Andreas Kretschmer, has led to an encompassing framework for school feeding projects which helps to transition programs to a more sustainable set-up. It is expected that this framework will prove helpful in guiding program design and performance measurement for organizations such as the World Food Program (WFP) and Partnership for Child Development (PCD). Dr. Andrei Neboian's dissertation was awarded a second prize in the prestigious George B. Dantzig Dissertation award, given by INFORMS to the best dissertation in OR and Management Science which is innovative and relevant to practice. With the first place given to a researcher at Purdue and the third place to one from MIT, he is undoubtedly in excellent company. Notably, Daniel Hach and Ingmar Ritzenhofen were invited for research stays at Cambridge University and the University of Chicago, respectively.

A total of eight dissertations were finished this past year – with most of them yielding significant and managerially relevant research results. I do look forward to an ongoing fruitful exchange with these alumni and would like to wish them all plenty of success and pleasure with their endeavors, currently ranging from 3D printing to warehouse operations.

I would like to thank the entire team at the chair for their dedication and energy they bring to their work and for the delightful atmosphere they help to create. This is the basis for the good work that is being done here. Linda Stein does an excellent job to assure smooth operations at the chair.

The multitude of research and teaching activities would not have been possible without the ongoing and generous support of the Kühne Foundation. My wholehearted thanks go to Prof. Dr. h.c. Klaus-Michael Kühne and to the managing director of the foundation, Mr. Martin Willhaus. Not only is the financial support greatly appreciated, but also the tireless efforts which Mr. Willhaus makes to provide contacts with practitioners within the logistics industry. The Kühne Foundation's credo to make logistics research relevant to practice is thus supported in an excellent manner.

This report is meant to provide an overview of the chair's activities. We all look forward to new exciting logistics research and teaching.

Vallendar, September 2013



Univ. Prof. Dr. Stefan Spinler

Note: All activities related to the issue of sustainability have been marked by a symbol.



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Professor Dr. Stefan Spinler
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Professor Stefan Spinler holds the Kühne Foundation Endowed Chair of Logistics Management at WHU - Otto Beisheim School of Management. He received a master's degree in electrical engineering from Friedrich-Alexander University in Erlangen, with research stays at University College London and Bell Labs (USA). In 1997, he was awarded the diploma in electrical engineering. Subsequently, he joined Infineon Technologies with responsibilities in process integration, quality, and supply chain management. From October 1999 to August 2002, Prof. Spinler was a doctoral student in the department of Production Management and taught at WHU and Leipzig Graduate School of Management (HHL). His research on options on capacity has been presented at international conferences and leading US business schools. Moreover, his research was awarded a number of prizes, most notably the Management Science Strategic Innovation Award (from EURO) as well as the GOR dissertation award. Upon the completion of his doctoral studies, Prof. Spinler spent a year as a lecturer at the Wharton School, where he taught classes in the MBA and PhD programs and developed a real options class for executives. He continues teaching as a guest professor this latter class in Wharton's Executive Masters of Technology Management. He has been invited to teach the real options class at MIT as a guest professor in their Leaders for Manufacturing Program. He was awarded the best guest lecturer award twice at HHL. His postdoctoral degree (Habilitation) covered aspects of market-based supply chain coordination and was completed in September 2008. In January 2009, Prof. Spinler was appointed to the Chair of Logistics Management at WHU, which is sponsored by the Kühne Foundation. In 2011, a research team consisting of Paul Kleindorfer, Andrei Neboian, Alain Roset and Stefan Spinler was a finalist in the Daniel H. Wagner Prize for Excellence in Operations Research.

Linda Stein
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Since the appointment of the Chair of Logistics Management by Prof. Spinler in 2009, Linda Stein has been the chair's secretary. She is returning to the WHU after a two years of maternity leave, where she was previously employed as Personal Assistant to Prof. Frenkel at the Chair of Macroeconomics and International Economics.

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Daniel Hach (born 1985) is a doctoral student and research assistant at the Chair of Logistics Management (Otto Beisheim School of Management) since October 2010. His research is focused on integrating renewable energies in the electricity market using quantitative models. Daniel Hach studied Information Systems at the University of Mannheim. During his studies he spent one semester abroad at the University of Sydney (Australia) and did parts of his diploma thesis at the University of California, Berkeley (USA). In terms of work experience he did several internships including McKinsey & Company, the Center for Strategic Projects (formerly Inhouse Consulting) of Deutsche Telekom AG, and the sales department of T-Systems GmbH. Prior to his studies he completed a vocational education as an IT-specialist. After his studies Daniel Hach worked as a consultant for McKinsey & Company in the Frankfurt Office where he belonged to the Business Technology Office. He worked with clients in the Energy and Public Sector as well as in the High-Tech and Financial Institutions area. He focused on strategy, process and organization topics.

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Ingmar Ritzenhofen (born 1985) graduated as Master of Science in International Business from HEC Paris and Master in International Management from the CEMS program in 2010. In 2009 he earned a Bachelor of Science from WHU with specializations in Finance, Supply Chain Management and Strategy. In his Bachelor thesis, Ingmar Ritzenhofen studied the real options value of flexibility in supply chains at the example of a major international automotive supplier. In his Master thesis at the chair of Finance & Energy at HEC he analyzed the relationship between power forward sales and the price of carbon emission certificates. In the course of his studies Ingmar Ritzenhofen spent two semesters at Universidad Adolfo Ibañez in Viña del Mar in Chile and ESADE Barcelona. After his studies Ingmar Ritzenhofen worked as a consultant for McKinsey & Company from 2010 to 2012. He was primarily involved in projects in the automotive and logistics industry in Germany and China. Already during his studies he gained significant work experience during internships: 2009 for McKinsey & Company in Cologne in the automotive and logistics industry, 2008 for Morgan Stanley in Frankfurt in the area of Mergers and Acquisitions and 2007 at CNC-Communications and Network Consulting in the area of strategy and communications in New York City.

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Matthias Winkenbach (born 1986) studied Business at WHU – Otto Beisheim School of Management in Vallendar, Germany, from 2006 to 2011 when he received his Master's degree. He graduated with majors in Finance and Economics. The main focus of his Bachelor Thesis written at the Chair of Production Management at WHU was the evaluation of supply chain flexibility using a real options approach. In his Master Thesis written at the Chair of Monetary Economics at WHU, Mr. Winkenbach focused on the relation between monetary policy and asset prices. During his studies, Mr. Winkenbach spent two semesters abroad at HEC Montréal, Canada, and NYU Leonard N. Stern School of Business, New York City, USA. In the course of his studies, Mr. Winkenbach worked as an intern for several large and medium-sized companies both in Germany and abroad. For example, he worked on a consulting project for a leading global automotive group with McKinsey & Company in the United States, with Deutsche Telekom AG in the field of strategy development in Bonn, Germany, and with Volkswagen AG in the field of product development and component localization in Port Elizabeth, South Africa. In July 2011, Mr. Winkenbach joined the Chair of Logistics Management at WHU as a research assistant and Ph.D. student. He is involved in a cooperation project with INSEAD and La Poste in the field of specialized Urban Logistics Services. In 2013, Mr. Winkenbach has been a visiting Ph.D. Candidate at the Center for Transportation & Logistics (CTL) at the Massachusetts Institute of Technology (MIT), Cambridge, USA, where he conducted a research project on macroscopic traffic flow modelling for emerging market mega-cities. The aforementioned projects also correspond to his major research topics.

Team

Dipl.-Wirt.-Ing. Benjamin Gürtler
Doctoral Student

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Mr. Benjamin Guertler (born 1985) studied industrial engineering and management at the university of applied sciences in Esslingen. He finished his studies in August 2008, specializing in production management. His diploma thesis provides an approach for holistic performance monitoring of suppliers and was written in cooperation with the MBtech Consulting GmbH. Among others, Mr. Guertler has worked at Behr Industry GmbH & Co. KG within development and at Robert Bosch GmbH within sales.

Between October 2008 and June 2011, Mr. Guertler worked as Consultant at the MBtech Consulting GmbH within Purchasing and Supply Chain Management. He supported the implementation of supplier management and supplier risk management at major companies in automotive industry and engineering. Furthermore, Mr. Guertler was responsible for the consulting approaches within supply risk management. In July 2011, Mr. Guertler took over a new responsibility at the parent company, MBtech Group GmbH Co. KGaA as Representative of the President and CFO and since January 2013 as Head of Corporate Risk Management.

Dipl.-Kfm. Alexander König
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Alexander König (born 1984) studied from 2004 until 2008 Business Administration at the WHU - Otto Beisheim School of Management in Vallendar, Germany. He spent his semesters abroad at Queen's University in Kingston, Canada and at Universidad Adolfo Ibáñez in Viña del Mar, Chile. His advanced studies were focused on Production Management, Controlling, as well as Technology and Innovation Management. He wrote his master thesis about Six Sigma in the German healthcare sector at the chair of production management at WHU. During his studies Mr. König pursued several internships, amongst others with Porsche Consulting and Booz & Company. After his studies he joined Booz & Company and worked for clients in the fields of financial services, pharma, IT Services and the manufacturing industry. His main project activities were around strategy development, supply chain management, sourcing, as well as risk and project management. In January 2012, Mr. König joined the chair of Logistics Management at WHU as external doctoral student. His research topic is Supply Chain Risk Management of Logistics Service Providers.

Team

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Andreas Kretschmer (born 1981) studied business administration at the Leipzig Graduate School of Management (HHL) and completed a semester abroad at the Hong Kong University of Science and Technology. He wrote his diploma thesis on logistics costs in the automotive industry in cooperation with Invest in Germany. After graduating in 2007 he joined The Boston Consulting Group and worked on projects in the aviation industry and consumer goods industry. Since January 2010, Mr. Kretschmer studies as an external PhD student at the Department of Logistics Management. His research focuses on supply chain management at humanitarian organizations.

Silke Malina, MBA
Doctoral Student

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Silke Malina (born 1972) studied economics at the European-Business-College in Wuerzburg and finished with a Bachelor of Commerce at the Hogeschool van Utrecht (NL). In 2007 she obtained her Master of Business Administration (MBA) from the University of Surrey (UK). Her master thesis was about "Lean Management and its Effectiveness in Organizations". During her studies she made several traineeships in the consumer and investment goods industry, e. g. at the subsidiary of Michael Weing AG in Singapore. Mrs. Malina works for Bosch Rexroth AG. Initially, she worked several years in controlling and currently she is responsible for various international projects in logistics. In January 2011, Mrs. Malina joined the chair of Logistics Management at the WHU in Vallendar as an external doctoral student. Her research topic is the management of supply chain complexity.

Team

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Benjamin Punge (born 1983) studied Industrial Engineering and Management at the University of Technology Hamburg-Harburg and the University of Hamburg with majors in logistics and chemical engineering. In his diploma thesis, which he conducted in cooperation with Airbus Germany, he analyzed the supplier risk management in the Supply Chain for the cabin interior of the wide body aircraft A380. During his studies, Mr. Punge completed internships in the automotive industry and in the finance controlling department of Bayer Materialscience in Shanghai, China. He also worked as assistant to the CEO of a trading company in Hamburg. After the completion of his studies in 2009, Benjamin was hired by EADS for the groups' management development program and worked as a project manager for Airbus España in Madrid, Spain and Eurocopter Deutschland in Donauwoerth, Germany before starting in his current position in the Aerostructure Procurement for Airbus Operations in Toulouse, France where he is now responsible for different international sourcing projects. In January 2012, Mr. Punge joined the chair of Logistics management at the WHU in Vallendar as an external Ph.D. Student. His research topic is Supply Chain Risk Management and Supplier Selection in the aerospace industry.

Dipl.-Wirt.-Ing. Johannes Teutsch
Doctoral Student

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Mr. Johannes Teutsch (born 1982) studied business and engineering at the University of Karlsruhe focused on production and logistics. His diploma thesis ("Economic analysis of an intermodal transportation network") was developed in the context of the research project "LogoTakt". He gained practical experience in the automotive industry and in the consultant sector. Currently, Mr. Teutsch is working as Senior Consultant at CBS Corporate Business Solution Unternehmensberatungs GmbH. Since April 2010 Mr. Teutsch has been an external doctoral student at the Chair of Logistics Management at WHU Vallendar. He is examining the interaction of Supply Chain Risks and Lean Production.

Alumni

Start-up in the course of incorporation
Austria, Vienna

Dr. Andrei Neboian



CEO

Dr. Robert Hein



CTO

After leaving the WHU at the end of 2012, we founded a high-tech start-up in Vienna, Austria. Our company's goal is the development, production and sales of professional 3D printers for engineers, architects, designers, etc., who wish to make highly detailed plastic models with different materials in a quick, easy and reliable way. We will start selling our products in 2014. We are passionately developing our venture and have just been granted public funding. We often think back to the great time with our colleagues at the WHU, which we are still benefiting from. We would like to use this opportunity to express our thanks to Professor Spinler for the long-lasting support and confidence in us as well as for the inspiring and fun time we had working with him.

Junior Executive SCM department
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Dr. Sebastian Theißen



After finishing the Ph.D. studies with distinction in the area of Supply Chain Management (SCM) strategies, Dr. Sebastian Theißen continued his career at the L'Oréal Group. In the position as Junior Executive in the SCM department, Dr. Sebastian Theißen is responsible for projects on international level for one of the four divisions; for instance the optimization of forecast processes. Apart from this function, Dr. Theißen is also in charge of the supply and demand planning management of three brands including the analysis and improvement of KPIs such as service level and safety stocks as well as the interaction between controlling and product management groups. In the beginning of 2013, a cooperation between the Chair of Logistics Management and L'Oréal SCM Operations has been established, providing an opportunity for future research with value for industry practice.

Kühne Institute of Logistics Management



Logistics has become a key enabler in today's global trade. And while today's value creation networks exploit to the extent possible local business advantages, the challenges that come with these dispersed structures have grown substantially over the last ten years. Recognizing this trend, the WHU – Otto Beisheim School of Management founded the Kuehne Institute for Logistics Management, which comprises two endowed Chairs (Prof. Dr. Stefan Spinler and Prof. Dr. Carl Marcus Wallenburg) and currently 20 PhD students. The institute was inaugurated in March 2012.

Our objectives are to generate new insights for the management of logistics and to disseminate this state-of-the-art knowledge into the research and business community.

To this end, we conduct high quality and internationally visible research, which is analytical, conceptual, or empirical in nature. Further, we provide specialized courses and lectures at various educational levels (BSc, MSc, MBA, Executive Education) and organize conferences for the business community and students in the area of logistics and supply chain management.

Current research projects are dedicated to the following areas:

- Management of logistics services
- Management of vertical and horizontal cooperation
- Logistics and supply chain controlling
- Sustainability in supply chains
- Risk management in supply chains
- Real options based supply chain modeling



Teaching

Lectures in the context of Logistics- and Supply Chain Management were offered in the Bachelor-, Master-, FTMBA- and Doctoral-Program.

Courses BSc-Program

Real Options Analysis

This course deals with investment decisions as they arise in the context of international production and logistics networks, R&D projects and raw materials exploitation. The traditional discounted cash flow method is unable to account for the value of managerial flexibility. Real options, which aims at translating much of the methodology established for financial options valuation to real investment projects, allows to properly capture the value of flexibility. Several case studies exemplify the steps that need to be undertaken to perform a full-fledged real options valuation.

Seminar Multi-Modal Logistics Platforms

This seminar is meant to familiarize students with multi-modal logistics platforms. Among the objectives of this course is getting acquainted with the different modes of transportation and their proper coordination. Furthermore, students will learn why many of the EU funded projects related to multi-modal logistics have been blessed with mixed success thus far.



Literature Seminar SCM 2

The purpose of this seminar is to provide examples of state-of-the-art quantitative research in supply chain management. Students are expected to be able to fully understand technically challenging papers and relate the papers' findings to practical management challenges. The outputs of this seminar comprise a seminar paper and a presentation which includes a short Q&A session.

Courses MSc-Program

Real Options Models and Applications

Based on the introductory course in the bachelor's program, this course extends previous models and provides a thorough theoretical basis. Several case studies allow the students to understand the implications of real options in practical circumstances and the need for advanced modeling techniques.

Integrated Logistics and Supply Chain Management

In this course, the key pillars of supply chain management are studied. The levers which companies have to support their supply chain strategy are inventory and transportation management, network design and information management. Case studies allow the students to understand the challenges associated with greening the supply chain and with proper hedging of supply chain risks induced by, for instance, natural disasters.



Teaching

Transportation Management – held by Guest Lecturer Dr. Jürgen Ringbeck, Booz & Company GmbH

Transportation is one of the fastest growing global industries. Travel and logistics are the major backbone of our global business and a core element of private life. The objective of this course is to give a comprehensive introduction into the challenges and best-practices of management and principles of global industry players like passenger airlines or logistics companies. Such management best-practice includes a deeper understanding of the underlying industry dynamics, and the outline of superior strategies as well as commercial and operational management methods of selected industry segments. The course will also highlight some specific management approaches which illustrate a way to a long-term sustainable industry.

Course FTMBA-Program

Real Options Analysis

This course deals with investment decisions as they arise in the context of international production and logistics networks, R&D projects and raw materials exploitation. The traditional discounted cash flow method is unable to account for the value of managerial flexibility. Real options, which aims at translating much of the methodology established for financial options valuation to real investment projects, allows to properly capture the value of flexibility. Several case studies exemplify the steps that need to be undertaken to perform a full-fledged real options valuation. In the MBA program this type of course is particularly meaningful as most participants have already project management experience and thus have been exposed to the shortcomings of traditional NPV analysis.

Course Doctoral-Program

Quantitative Supply Chain Models

The purpose of this seminar is to expose students to the most recent advances in management science and operations research. The methods presented are key building blocks of the participants' dissertations.

Teaching

Guest Lectures

The close contact with decision makers in the industry ensures the practical relevance and the relevance of management research and teaching. For this reason, regular guest speakers are involved in the different lectures.

MSc-Lecture “Transportation Management”

Dr. Alexander Hedderich, CEO DB Schenker Rail Deutschland AG and Head of Region Central:
Opportunities of European Rail Transport and the Strategy of DB Schenker Rail

KLU-MSc-Lecture “Transportation Management and Distribution Systems”

Andreas Bunnemann, Kühne & Nagel, Hamburg: Transportation management
Marcus Dodt, Branch Manager, Dachser GmbH & Co. KG: Distribution management

NetloP-Seminar of the Kühne-Foundation

For the NetloP-Seminar, which is very successfully run by Mr. Martin Willhaus, we provide content for the introductory week in Schindellegi and the final part of this seminar in Vallendar. This year, Prof. Wallenburg ran the basic seminar in Schindellegi. The first day of the seminar in Vallendar, co-organized by Prof. Wallenburg and Prof. Spinler, is devoted to the issue of information technology and novel uses in industry. Moreover, a field trip to the Globus GmbH warehouse in Bingen allowed the students to grasp the intricacies of a fast moving consumer goods retailer.



Kühne Logistics University, Hamburg

MSc in Global Logistics Management

Transportation Management and Distribution Systems

The objectives of this course are twofold: first, to familiarize students with concepts of transportation planning, management and deployment. Second, to provide students with insights H combination of case studies, theoretical concepts from business and economics and guest lectures by experienced industrial managers. A number of case studies and guest speakers provided additional insights into the intricacies of transportation and distribution management.

Research

Our research activities focus on the topics sustainable logistics, risk management and humanitarian logistics.

Sustainability is a key concern for today's and even more so for tomorrow's businesses. Together with INSEAD and La Poste we continued our joint research on sustainability matters related to postal delivery. Matthias Winkenbach has developed a quantitative model for the optimal deployment of different types of vehicles (bikes, vans, pedestrians) for urban deliveries. The model results help to understand what the impact of time windows on the optimal network structure is. A key requirement during the model development, which was performed in close collaboration with Alain Roset and Bernard Lemarié (both of La Poste), was the need to be able to apply the model to practical circumstances.



A holistic view on supply chain risk management to date does not exist in either the academic literature or business practice. To close this gap, a number of research projects have been defined to develop quantitative models for supply chain risk and thus provide optimal hedging opportunities for firms.

The topic area of humanitarian logistics is an emerging field which on the one hand benefits greatly from knowledge developed for commercial logistics, but on the other hand also requires fresh approaches given, for instance, the limited information often available or the project-based financing due to donor requirements. Andreas Kretschmer has collaborated with the WFP and the PCD to thoroughly understand the context of school feeding initiatives in a broad range of settings. To date, supply chain aspects have often been neglected in the design of school feeding projects. With the framework developed by Andreas Kretschmer and his advisors Luk Van Wassenhove and Stefan Spinler, key supply chain characteristics can be incorporated into the delivery model, thus increasing both efficiency and effectiveness of this kind of humanitarian aid.

Research

Main Focus - Sustainability

**“Fleet renewal with electric vehicles”, Andrei Neboian
(from 01-2010 to 11-2012, co-sponsored by La Poste)**

In this work, we develop three distinct replacement models for La Poste, the French postal operator, considering fully electric vehicles (EVs) and internal combustion engine vehicles (ICVs). We design a strategy to acquire new and salvage old vehicles in the face of technological evolution and, more recently, sustainability concerns, while pursuing the primary objective of minimizing total fleet costs, subject to cost uncertainty and managerial flexibility. The model has been used by la Poste in their purchasing decision of 10,000 electric vehicles.



**“Optimal Infrastructure Design for Increased Sustainability in the Provision of Urban Logistics Services”, Matthias Winkenbach
(started in 01-2011, ongoing, co-sponsored by La Poste)**

Due to trends and developments such as the ongoing urbanization and the sustained boom in e-commerce, we can observe a continuous increase in the amount and fragmentation of demand for urban goods transportation. Thus, tighter coordination and consolidation of individual consignments is a requirement for a sustainable development of urban transport. At the same time, postal operators (POs) are currently facing significant threats to their long-term profitability. Given the deterioration of their revenue base from established business models e.g. due to electronic substitution, they have to find ways to broaden their product and customer. Moving into the field of urban logistics services (ULS) as an overarching consolidator of item flows may be an attractive strategic option for them, offering both additional revenues for the company and welfare improvements for the society as a whole.



This dissertation project aims at developing optimization and simulation tools to quantitatively evaluate the potential strategic moves of postal operators when moving into the domain ULS. It shall support their decision making in designing an optimal facility infrastructure and fleet for the centralized consolidation of urban freight flows. Further, we seek to determine optimal quality positioning and pricing policies for POs in a competitive market for ULS. Also, the impact of ULS on traffic, congestion rates, emissions and fuel consumption shall be assessed quantitatively.

Research

“Theorising institutional processes and strategies with bearing on sustainability: A case study of Chinese, US and German climate policy and of green supply chain management in a global logistics company”, Judith Berndroth (from 01-2010 to 12-2012)

The dissertation project explores change processes that evoke new rules, practices and structures (institutionalization). The research builds a bridge between institutionalization of sustainability in the broader field of social, political, and economic changes and in the organizational field. It gives attention to governments and companies instituting a course of sustainable development. For this purpose, the dissertation project investigates the temporal dynamics of institutionalization and the strategic responses to the collision of economic and institutional determinants. It develops an integrative framework how different types of power affect the institutionalization process. Moreover, it enhances our understanding on what strategy a company follows when green activities will not pay off economically, but due to social beliefs are a must for modern organizations. The work shows how both in combination, institutional and economic determinants play a decisive role in the strategic approach. A qualitative case study method is used to gain new theoretical insights in addition to drawing on practical contributions in the fields of sustainability and supply chain management. In a first step, the research starts with an investigation on the macro level of climate change governance prior to examining the organisational level at Deutsche Post DHL.



“Reuse and Remanufacturing”, Robert Hein (from 01-2010 to 12-2012, partly co-sponsored by La Poste)

Due to increasing environmental concerns and dwindling resources, sustainability-related issues receive more and more recognition in industrial applications. Within his dissertation project, Mr. Hein focuses on two ways to reduce raw material consumption and waste generation, i.e. reuse and remanufacturing. The first topic is based on a concrete application and investigates whether it is technologically feasible and economically reasonable to reuse the batteries of electric vehicles, which are replaced eventually to guarantee a certain driving range, for stationary energy storage applications. The corresponding article, which has been published in the International Journal of Technological Forecasting and Social Change, finds that even if the technological challenges may be overcome, the economic benefits are not compelling. The second and third articles, which focus on remanufacturing issues, take a more general approach. A remanufacturer faces the question at which price to buy which used products, how much to improve their quality by remanufacturing, and at which price to resell the remanufactured products. Supply of used products and demand of remanufactured products are dependent on the corresponding prices and qualities. While the second article assumes quality-dependent remanufacturing costs, the third article considers a quality-dependent remanufacturing yield. Analytical models are developed to maximize the remanufacturer's profit by making the optimal quality and pricing decisions.



Research

“CO₂ reduction within FMCG supply chains through collaboration”, Sebastian Theißen (from 05-2010 to 10-2012)

CO₂ reduction has emerged as a key challenge for companies in the fast-moving consumer goods industry; currently, this sector ranks among the ten largest sources of CO₂ emissions worldwide. In particular, manufacturers are now looking beyond their corporate boundaries to find new ways to reduce emissions along the supply chain. To close the gap between what we know and what we need to know to help firms initiate an effective collaboration approach to reduce CO₂ emissions, this quasi-cumulative dissertation examines the following issues in three successive papers:

First, we examine factors that influence a manufacturing organization's readiness to engage in a collaborative CO₂ reduction management (CCRM) approach. The research methodology applied in this paper is a multiple case study approach that relies on the relational view theory. Second, we analyze what similarities and difficulties may arise when introducing a CCRM approach between manufacturers and its suppliers. For that purpose we contrast suppliers with the findings gained from the manufacturer study to understand their needs thereby taking a dyadic perspective on CCRM. Third, we introduce a decision methodology that allows manufacturing firms to evaluate which supplier is the most suitable partner for the implementation of a CCRM approach. The evaluation and selection is performed using the analytic network process (ANP), a decision-making technique that allows practitioners to solve complex decision structures. By applying this framework to a leading manufacturer in the FMCG sector, we demonstrate the practicability of the model and show its potential to aid managerial decision-making.



“CO₂-Hedging for airlines”, Daniel Girardet (from 07-2010 to 09-2012)

Airlines with flights to and from Europe have been subjected to the EU's Emission Trading System (ETS) since the start of 2012. In addition to the existing risks of variation in input factors such as kerosene and currencies, the fluctuating price of CO₂ is an additional risk factor for airlines. The dissertation project aims to analyze various non-financial hedging techniques against the risks of the ETS. One of the techniques could be the ability of airlines to pass on price changes of CO₂ on to customers with a surcharges. However, price increases induce demand reactions and therefore the optimal surcharge has to be strike a balance between these two effects. An additional technique could be biofuels, which are credited with zero emission in the ETS. The adoption of biofuels, however, is dependent on actual CO₂ costs, which are a result of the CO₂ price, actual amount of CO₂ emissions and the free allocation. Lastly, new and more efficient airplanes reduce the cost exposure of airlines. Their financial evaluation is influenced by the actual CO₂ costs, which affects both present values and the pricing of purchase options. The mentioned hedging techniques are analyzed based on real data from the airline industry and discussed extensively with partners from the industry as well as relevant academic institutions.



Research

“Integrating renewables into the electricity market – a quantitative approach”, Daniel Hach (started in 10-2012, ongoing)

We assess the effect of capacity mechanisms on investments in gas-fired power plants in the presence of different degrees of renewable energy technology (RET) penetration. Low variable cost renewables increasingly make investments in gas-fired generation unprofitable. At the same time, growing feed-in from intermittent RETs amplifies fluctuations in power generation, thus entailing the need for flexible buffer capacity---currently mostly gas-fired power plants. A real options approach is applied to evaluate investment decisions and timing of a single investor in gas-fired power generation. We investigate the necessity and effectiveness of different capacity mechanisms. Our model incorporates multiple uncertainties and assesses the effect of capacity mechanisms under different degrees of RET penetration. In a numerical study, we implement stochastic processes for peak-load electricity prices and natural gas prices. We find that capacity mechanisms are an effective measure to promote new gas-fired generation projects. Especially in times of high renewable feed-in, capacity mechanisms are required to incentivize peak-load investments.



“Investments in renewable energy sources under market and regulatory uncertainty – a real options analysis”, Ingmar Ritzenhofen (started in 10-2012, ongoing)

Global investments in renewable energy sources (RES) have grown constantly in the last decade reaching 257 Billion USD in 2011, a sixfold increase over 2004 levels. Many researchers attribute this investment boom to RES support schemes such as Feed-in-tariffs (FITs) that have proliferated globally. FITs are the most widespread RES support scheme, adopted by at least 65 countries. While FITs have proven effective in promoting RES investment, governments have continuously revisited them in order to better achieve their initial goals of increasing RES capacity under cost efficiency. In this dissertation, we aim at quantifying the impact of RES support schemes such as FITs on the propensity to invest. We apply real options approaches to capture the uncertainty surrounding RES investments, as they are subject to multiple sources of market uncertainty such as electricity prices or regulatory uncertainty. We aim at contributing to explaining currently observed investment behavior, investigate alternative regulatory regimes and thus provide insights both to investors and regulators.



Research

Main Focus – Green Logistics

“Decision models in green logistics – An extended economic optimization model for mode choice selection and analysis of transportation chains in the European consumer goods industry”, Katharina Grobleben (from 09-2009 to 10-2012)

Macroeconomic concerns drive political efforts towards a modal shift in European freight transport. Nonetheless only mediocre success has been achieved so far. From three different perspectives intermodal freight transport (IFT) is studied to identify bottlenecks impeding a modal shift. First, the analysis of transport modelling in freight transportation with particular focus on the specificities of IFT is embedded in a review of the novel research field of IFT and concluded with a three-pronged research agenda. Second, a single-item inventory-theoretic model is proposed, which compares three transport options considering transport relevant and service-alternative criteria. In a multi-site European based case study approach, the model is empirically tested with the objective to identify levies to increase cost competitiveness of IFT. In the third part, the scarce acceptance of the “Guidelines on funding for the construction, extension and reactivation of private railway sidings”, which could mitigate the issue of costly short legs and thereby increase access to and usage of intermodal railway transportation in Germany, is analyzed in a game-theoretical approach. As a hold-up problem may impede a large-scale modal shift towards railway transportation, the influence and potential of currently existing and alternative legislative parameters towards a modal shift are studied in a sensitivity analysis. Lastly, the influence of public funding schemes on the public social welfare effect are examined.



Main Focus – Risk Management

“Supply Chain Risk Management“, Doreen Diehl (from 03-2009 to 09-2012)

The research project has the goal to develop and test a holistic supply chain risk management framework. In recent years, supply chains have become more efficient and leaner but also more vulnerable by reducing buffer inventories and redundancies. The increased number of natural catastrophes, terrorist attacks as well as the high economic volatility put further pressure on the supply chain. In academia it was shown that supply chain glitches are penalized by the capital market and lead to deteriorating operational and share performance. It is therefore crucial for companies to have an effective supply chain risk management program in place. The existing elements of risk identification, assessment and aggregation, mitigation and monitoring are adapted to the special requirements of the supply chain. The cooperation with a leading consumer goods company allows the research project to identify the critical elements and risks of a complex global supply chain as well as using company specific data to analyze risk mitigation strategies and their implications. Contribution to the literature will be a holistic analysis of supply chain risks, their qualitative and quantitative assessment as well as their relationships.

Research

“Supply Risk Management – New directions to Supply Risk Identification and Monitoring”, Benjamin Gürtler (started in 07-2009, ongoing)

Increasing product and service complexity, outsourcing and globalization lead to complex and dynamic supply networks. Within supply networks, interrelationships and mutual connections of supply risks often create additional challenges for risk monitoring. During normal operation, interrelationships of risks largely remain hidden until the occurrence of a specific risk. To increase the effectiveness of risk monitoring, their understanding is important.

In the first step of this research, the interrelationships between supply risks are quantified and supply risks are categorized according to their role within the system. We follow a network oriented approach as defined by system theory. Empirical data gained from expert interviews show the relevance of our framework as early indicator for supply risks. This is particularly relevant for companies that exhibit a high degree of interconnectedness with their suppliers caused by high product complexity as is the case in the automotive industry. In the second step, the sensitivity of supply risks is analyzed based on their frequency distributions, in order to investigate the reliability of supplier ranking methods.

Finally, we link interrelationships and probability distribution functions and derive recommendations and levers to improve early identification of supply risk and to increase the efficiency of monitoring and ranking methods.

“Supply Chain Risk Management and Lean Production“, Johannes Teutsch (started in 04-2010, ongoing)

In the context of the arising globalization, there are two essential trends for the industrial production sector existing: First, the supply chains and, as a result, the links between customers and suppliers become more and more complex and difficult to manage. As a consequence, the risks of the supply chain and the risk management process are important influence factors for the success of a company. Second, the production systems are optimized by Lean tools and the waste in production systems is eliminated. These trends influence the supplier-customer relationship: There are dependencies between production systems, the risks in supply chains and the consequences of incidents. The dependency is more and more important for the success of a company. So there are fundamental questions which have to be answered: How do Supply Chain Risks and Lean Production Systems interact? What types of links between Lean Production elements and Supply Chain Risks are existing and essential? What implies the decision for a Lean Production System for Supply Chain Risks? The goal of the dissertation project is to find answers for the questions above.

Research

“Management of Supply Chain Complexity: A Study in the Drive and Control Industry”, Silke Malina (started in 01-2011, ongoing)

Supply chains are more and more challenged by increasing complexity caused through product variety, processes and structures. This raises the question how firms manage supply chain complexity and remain competitive. To answer this question it is essential to research the drivers of complexity and to develop a framework of how to control and manage structural as well as dynamic impacts. Firms may use complexity to differentiate from others, if they apply appropriate measures to control the supply chain. A case study is provided to conduct the analysis qualitatively and quantitatively. The contribution to academic literature is the limited research of supply chain complexity to date. Based on the results practical recommendations for managerial decisions are developed.

“Supply Chain Risk Management of Logistics Service Providers”, Alexander König (started in 01-2012, ongoing)

The increased risk for disruptions of supply chains (e.g. by natural disasters, terrorist attack) has been further intensified by trends in supply chain management (SCM) including outsourcing and partnering, globalization, single sourcing and inventory reduction. However, this traditional focus of SCM to optimize cost, time and quality has been extended by the task to make the supply chain resilient, resulting in the new domain of supply chain risk management (SCRM). SCRM is relatively new and still in its infancy. With the before described trend of outsourcing, logistics service providers (LSPs) have an increasingly important role in most supply chains, providing not only transportation and warehousing, but also other services such packaging and reverse logistics. Thus the question arises how LSPs and shippers are managing risks and use SCRM to avoid or minimize disruptions in today's supply chains. We will investigate the role of LSPs in supply chains and risk management by using different methodologies such as literature review, case studies and application of other relevant business theories to this question.

“Supply Chain Risk Management in the Aerospace Industry”, Benjamin Punge (started in 01-2012, ongoing)

Modern aircraft manufacturing relies on a global web of suppliers whose number can be more than 10,000. To assure timely delivery of new airplanes, supply chain risk management is of primary importance for OEMs. The goal of this dissertation is to build a model relying on the notion of complex adaptive systems to represent the interdependencies among the various tiers of suppliers and to simulate appropriate hedging strategies.

Research

Main Focus - Contract design and evaluation

**“Pricing of full service repair and maintenance contracts”, Sebastian Huber
(from 03-2009 to 12-2012)**

Full service repair and maintenance contracts have become increasingly popular, especially in conjunction with leasing contracts for technical devices. Such contracts transfer the operating risks partially or completely to the service provider: customers pay one flat fee for all repair services required over the equipment lifetime, instead of paying volatile, variable costs for individual repairs as need arises. In the service portfolio of the service provider, full service repair contracts compete with existing, on call service relationships priced on the basis of time and materials used. Based on risk aversion and mean variance utility theory, the choice behaviour of a heterogenous customer group drives the pricing of the service contracts. While simple in their essence, guaranteed service times in combination with multiple service priorities and multiple service points require advanced queuing models. Learning effects based on adapted repair strategies or optimized maintenance schedules create an expectation of lower full service prices with customers. Forecasting the cost of contracts based on stochastic cost and failure distributions is crucial for the service provider to balance the product portfolio. Competition under time and materials service further influences the profitability of the service product portfolio. By internalizing the decision of customers to leave the service provider based on the number of experienced failures and based on the experienced repair times the effect can be included into the pricing of the contracts. The dissertation aims at creating analytic and simulative models to capture the complexity of the pricing situation in a single period and multi-period pricing situation.

Main Focus – Humanitarian Logistics

**“Supply Chain Management at Humanitarian Organizations – The Case of School Feeding”,
Andreas Kretschmer (started in 01-2010, ongoing)**

Supply chains are central for the success of humanitarian interventions run by international organizations such as the World Food Programme (WFP). In the area of development aid logistics school feeding is an established intervention with multiple objectives including education, nutrition, and value transfer. Recently the focus shifted to develop sustainable local programs and supply chains. In this research the critical factors of school feeding supply chains that are relevant for program sustainability are examined. A framework of critical factors based on multiple sources of input is proposed. Furthermore, case study research is used to gain more insights on the proposed critical factors.

Research

Research stays abroad

Research Collaboration with the Massachusetts Institute of Technology (MIT)

From February 23 to June 08, 2013, Mr. Matthias Winkenbach, Ph.D. student and Research Assistant at the Chair of Logistics Management at WHU, stayed as a visiting Ph.D. student at the Center for Transportation & Logistics (CTL) of the Massachusetts Institute of Technology (MIT) in Boston, USA. At MIT, Mr. Winkenbach collaborated with Dr. Edgar Blanco, Research Director and Executive Director of MIT Global SCALE Latin America at MIT CTL, and head of the MIT Megacity Logistics Lab, on a joint research initiative on macroscopic traffic flow modeling.

Being part of Mr. Winkenbach's dissertation project, this ongoing research initiative shall yield insights in the effectiveness of Urban Logistics Services (ULS) in reducing congestion, pollutant emissions and fuel consumption caused by traffic disruptions due to freight deliveries in urban road networks.

Besides his own research, Mr. Winkenbach took part in other research activities of the MIT Megacity Logistics Lab and had the chance to exchange insights and ideas with many other colleagues at the Institute. He also had the chance to present the results of a research project he conducted with French Groupe La Poste on infrastructure and fleet optimization for ULS in front of an extended audience at MIT CTL.



Mr. Winkenbach (in the middle) with his colleagues from the MIT Megacity Logistics Lab in front of MIT's Maclaurin Building

About MIT CTL

"For more than four decades, the MIT Center for Transportation & Logistics (MIT CTL) has been a world leader in supply chain management education and research. MIT CTL has made significant contributions to supply chain logistics and has helped numerous companies gain competitive advantage from its cutting-edge research."

(Yossi Sheffi, CTL Director, Elisha Gray II Professor of Engineering Systems at MIT)

About the MIT Megacity Logistics Lab





"Megacities – cities with a population of at least 10 million people – are increasing in both number and size, and their share of world GDP is expected to grow from about 14% to over 20% in a decade. Most of the 23 megacities that currently exist are located in emerging markets.

Up until now research on the megacity phenomenon has centered on the urban landscape, people mobility and managing traffic congestion. The MIT Megacity Logistics Lab at the Center for Transportation and Logistics focuses on understanding and transforming the supply chains that interface with these sprawling urban centers."






(Edgar E. Blanco, Research Director, Executive Director of MIT Global SCALE Latin America at MIT)

Research



Working papers

- Hach, D. and S. Spinler: Capacity Payment Impact on Gas-Fired Generation Investments under Rising Renewable Feed-In – A Real Options Analysis. Submitted to *Energy Economics*. 
- Ritzenhofen, I. and S. Spinler: Optimal design of feed-in-tariffs to stimulate renewable energy investments under regulatory uncertainty – a real options analysis. Submitted to *Energy Economics*. 
- Winkenbach, M., P. R. Kleindorfer and S. Spinler: Enabling Urban Logistics Operations at La Poste through Integrated Location-Routing. Under review at *Transportation Science*, R & R. 
- Winkenbach, M., S. Spinler and A. Roset: Optimal Quality Positioning and Pricing of Urban Logistics Services - a Spatial Competition Approach. Submitted to *Decision Sciences*. 

Publications

- Diehl, D. and S. Spinler (2013): Defining a common ground for supply chain risk management –a case study in the consumer goods industry. *International Journal of Logistics Research and Applications*, 16 (4), 311 – 327.
- Drake, D. and S. Spinler (2013): Sustainable Operations Management: An enduring stream or a passing fancy? *Manufacturing and Service Operations Management (MSOM)*, forthcoming. 
- Girardet, D. and S. Spinler(2013): Does the aviation ETS influence the financial evaluation of new airplanes? An assessment of present values and purchase options. *Transportation Research, Part D: Transport and Environment*, Issue 20, 30-39. 
- Girardet, D. and S. Spinler (2013): Surcharge management of kerosene and CO2 costs for airlines under the EU's emission trading. *Journal of Air Transport Management*, 26, 25-30. 
- Hein, R., P. R. Kleindorfer and S. Spinler (2012): Valuation of electric vehicle batteries in vehicle-to-grid and battery-to-grid systems. *International Journal of Technological Forecasting and Social Change*, 79 (9), 1654-1671. 
- Hellermann, R., A. Huchzermeier and S. Spinler (2013): Options contracts with overbooking in the air cargo industry. *Decision Sciences Journal*, Vol. 44 (2), 297-327.
- Huber, S., S. Spinler (2013): Pricing of full-service repair contracts with learning, preventive maintenance, and information asymmetry. *Decision Sciences Journal*, forthcoming.
- Kleindorfer, P.R., A. Neboian, A. Roset and S. Spinler (2012): Fleet renewal with electric vehicles at La Poste. *Interfaces*, Vol. 42 (5), 465-477. 

Research

- Kretschmer, S. Spinler and L.N. van Wassenhove (2013): A School Feeding Supply Chain Framework: Critical Factors for Sustainable Program Design. Forthcoming in *Production and Operations Management (POMS)*.
- Theißen, S. and S. Spinler (2013): Strategic analysis of manufacturer-supplier partnerships: An ANP model for collaborative CO₂ reduction management. *European Journal of Operational Research, forthcoming*. 
- Van Zee, R. and S. Spinler (2013): Real option valuation of public sector R&D investments with a down-and-out barrier option. *Technovation, forthcoming*. 

Excursion

Lignite power plant visit



In the course of our research on future sustainable electricity supply, we visited the modern lignite power plant Niederaußem and the adjacent opencast lignite mine of Garzweiler in August 2013. Both are operated by the utility RWE. Lignite plants, which are often criticized as major polluters, still account for more than 25% of the German electricity production. The newest block of the Niederaußem plant belongs to a new generation of lignite plants featuring significantly increased levels of efficiency (~43%) and flexibility compared to previous generations (~36% efficiency). Nonetheless in terms of flexibility as well as efficiency,



lignite generation continues to lack behind modern gas-fired power plants, which are often claimed to be needed for Germany's energy transition. The opencast lignite mine of Garzweiler is a main supplier for lignite plants in that region. The mine employs 1,700 people and is cut up to 160m below the surface. In terms of logistics, the mine is directly linked to the power plants by conveyor belts and trains to guarantee a steady flow of coal. This is essential, because a 1 GW lignite power plant burns one wagon load of coal within only 7 minutes – and there are about 15 GW of generation capacity installed in the Cologne region.



Examinations

Co-advisor for dissertations

- Braun, Simon:
“Information technology capabilities of logistics service providers: Concept development and analysis of antecedents and consequences”
Advisor: Prof. Wallenburg
- Diermann, Christoph:
“Demand Forecasting in Direct Sales under Uncertainty: Using Judgmental Demand Forecasts at Canyon Bicycles”
Advisor: Prof. Huchzermeier
- Bernhard, Rainer:
“Hybridisierung kommunaler Fuhrparks”
Advisor: Prof. Huchzermeier
- Difrancesco, Rita Maria:
“Quality of Returned Products in Closed-Loop Supply Chains with Secondary Markets”
Advisor: Prof. Huchzermeier
- Häntsch, Marius:
“Strategic Capacity Planning under Risk in the Automotive Industry”
Advisor: Prof. Huchzermeier
- Heilmann, Lucas:
“Einsatz von ökonomischen Nutzenrechnungen im technischen Vertrieb und Marketing”
Advisor: Prof. Jensen
- Jankowski, Kathrin:
“Identifying impacts on buyer's risk identification and perception: Bridging micro and macro approaches”
Advisor: Prof. Wallenburg
- Singh, Maurizio:
“The logistics organization of young Internet retailers – an examination of its development in the early stages of the company”
Advisor: Prof. Wallenburg
- Zhao, Lima:
“On The Interaction between Operational Flexibility and Financial Hedging in Global Sourcing”
Advisor: Prof. Huchzermeier

Examinations

- Arne Gausepohl:
“The implementation of salesforce optimization methods: A sales leader’s perspective”
Erstbetreuer: Prof. Dr. Ove Jensen
 - Dipl.-Kfm. Johannes Georg:
“The Social Construction of Sustainability and the Role of Management Accounting Practices: Insights from a Neoinstitutional Perspective” Erstbetreuer: Prof. Dr. Dr. h.c. Jürgen Weber
-

Bachelor-Theses

- Christian Knopf
 - Justus Vogel
 - Claus Zebe
-

Master-Theses

- Nils Rehn
- Alida Müller – Wehlau (KLU)
- Isabel Walther (KLU)

Activities for WHU

Group Speaker of the Supply Chain Management-Group

The group includes professors Arnd Huchzermeier, Lutz Kaufmann, Carl Marcus Wallenburg, Stefan Spinler and Assistant Professors Matthias Ehrgott and Felix Reimann. The Speaker of the Group has a coordinating role with respect to teaching and to extend the faculty in the group.

Campus for Supply Chain Management

The 2013 Campus for Supply Chain Management was dedicated to the issue of collaboration and communication in supply chains. The students' team that organized the event, headed by Lara Gatzke and Kilian Martin, did an excellent job in getting aboard relevant companies, practitioners and academics. Guest speakers such as Roland Scheffler (IBM), Thilo Koch (Schenker AG) and Bernhard Kindelbacher contributed their view on collaborative supply chains.

The next issue of the Campus is currently being planned. The discussions next year will focus on the topic "Velocity –accelerating supply chains at any price?" We are looking forward to a key-note speech by Karl Gernandt, Chairman of the Board of Directors at Kühne & Nagel.

I would like to take the opportunity to thank Mr. Martin Willhaus, Managing Director of the Kühne Foundation, for his efforts to make this event a success. He continues to provide invaluable support for the students organizing the event to get in touch with industry leaders and thus fosters the exchange between academia and (logistics) industry.

Activities for the scientific community

Conference papers

- INFORMS Annual Meeting 2012, Phoenix, Arizona / USA, October 17, 2012
“Enabling Urban Logistics Operations at La Poste through Integrated Location-Routing”
Winkenbach, Matthias, Kleindorfer Paul R. and Spinler, Stefan
- IPC/EPFL TIP Conference on Trends and Innovation in the Postal Market, Lausanne / Switzerland, September 12-14, 2012
“Solving large-scale integrated location-routing problems for urban logistics applications at Groupe La Poste”
Winkenbach, Matthias, Kleindorfer Paul R, Roset, Alain and Spinler, Stefan
- 24th Annual POMS Conference, Denver, Colorado / USA, May 03-06, 2013
Humanitarian Operations and Crisis Management track
"Sustainable Program Design for School Feeding Supply Chains: A Case-Based Analysis of Critical Factors"
Kretschmer, Andreas and Spinler, Stefan
- 24th Annual POMS Conference, Denver, Colorado / USA, May 03-06, 2013
"Optimal quality positioning and pricing of Urban Logistics Services – a spatial competition approach"
Winkenbach, Matthias and Spinler, Stefan
- 24th Annual POMS Conference, Denver, Colorado / USA, May 03-06, 2013
"The impact of Urban Logistics Services on emerging market megacities – a traffic flow model"
Winkenbach, Matthias, Blanco, Edgar E., and Spinler, Stefan
- Conference of the EURO Working Group on commodities and Financial Modelling (EWGCFM), London / England, May 16-18, 2013
“Optimal design of feed-in-tariffs to stimulate renewable energy investments under regulatory uncertainty – a real options analysis”
Ritzenhofen, Ingmar and Spinler, Stefan
- Conference of the EURO Working Group on commodities and Financial Modelling (EWGCFM), London / England, May 16-18, 2013
“Capacity payment impact on gas-fired generation investments under rising renewable feed-in – a real options analysis”
Hach, Daniel and Spinler, Stefan

Activities for the scientific community

Conference papers

- 20th EUROMA Conference, Dublin / Ireland, June 09-12, 2013
“A Risk Management Perspective on Supplier Ranking and Selection”
Gürtler, Benjamin and Spinler, Stefan
- EURO-INFORMS Conference, Rome / Italy, July 01-04, 2013
“Management of Supply Chain Complexity: A Study in the Drive and Control Industry”
Malina, Silke and Spinler, Stefan
- EURO-INFORMS Conference, Rome / Italy, July 01-04, 2013
“Optimal design of feed-in-tariffs to stimulate renewable energy investments under regulatory uncertainty – a real options analysis”
Ritzenhofen, Ingmar and Spinler, Stefan
- EURO-INFORMS Conference, Rome / Italy, July 01-04, 2013
“Capacity mechanism impact on gas-fired generation investments under rising renewable feed-in”
Hach, Daniel and Spinler, Stefan
- EURO-INFORMS Conference, Rome / Italy, July 01-04, 2013
“The impact of Urban Logistics Services on emerging market megacities – a traffic flow model”
Winkenbach, Matthias, Blanco, Edgar E., and Spinler, Stefan
- EURO-INFORMS Conference, Rome / Italy, July 01-04, 2013
“Optimal quality positioning and pricing of Urban Logistics Services – a spatial competition approach”
Winkenbach, Matthias and Spinler, Stefan

Conference participations

- Herbsttagung der Wissenschaftlichen Kommission für Produktionswirtschaft
- Innovative Produktionswirtschaft, Nuremberg, Germany
November 09 – 10, 2012
Malina, Silke
- 16th BVL International PhD Candidates Workshop, Berlin, Germany
October 16, 2012
König, Alexander
- 29th International Supply Chain Conference, Berlin, Germany
October 17-19, 2012
König, Alexander

Activities for the scientific community

Conference participations

- 47th Symposium Purchasing and Logistics, Berlin, Germany
November 07-09, 2012
König, Alexander
 - 8th Supply Chain Conference, Oestrich-Winkel, Germany
March 21, 2013
König, Alexander
 - WHU Campus for Supply Chain Management, Vallendar, Germany
March 22-23, 2013
König, Alexander
 - Exchange – The Supply Chainer’s Convention, Frankfurt/Main, Germany
June 18-19, 2013
König, Alexander
-

Nomination

- Nominated for the best dissertation at the “Scientific Award 2013” of GS1-Germany and EHI-Retail Institute
“Collaborative CO₂ Reduction Management in FMCG Supply Chains”
Theißen, Sebastian
-

Awards

- George B. Dantzig Dissertation Award: 2nd Prize for Dr. Andrei Neboian for his dissertation
“Fleet renewal with electric vehicles”
- Francesco Paris Annual Award (Best paper Award) for Ingmar Ritzenhofen at the EWGCFM in London “Optimal design of feed-in-tariffs to stimulate renewable energy investments under regulatory uncertainty – a real options analysis”

Activities for the scientific community

Memberships

- BVL, Bundesverband für Logistik (German Logistics Association)
 - DHV, Deutscher Hochschulverband (Association of German Universities)
 - GOR, Gesellschaft für Operations Research (German Operational Research Society)
 - INFORMS, Institute for Operations Research and Management Science (USA)
 - POMS, Production and Operations Management Society
 - VHB, Verband der Hochschullehrer für Betriebswirtschaft (German Association of Business Professors)
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Referee activities

Prof. Spinler regularly acts as a referee for the following journals:

- Decision Sciences
- European Journal of Operational Research
- Management Science
- Operations Research
- Production and Operations Management Journal

Appendix: List of acronyms and abbreviations

ANP	Analytic Network Process
BUGA	Bundesgartenschau
CCRM	Collaborative CO ₂ Reduction Management
BVL	Bundesverband für Logistik
DHV	Deutscher Hochschulverband
ETS	Emission Trading System
EV	Electric Vehicles
EWGCFM	Euro Working Group on commodities and Financial Modelling
FMCG	Fast Moving Consumer Goods Industry
FTMBA	Full-Time Master of Business Administration
GOR	Gesellschaft für Operations Research
ICV	Internal Combustion Vehicle
IFT	Intermodal Freight Transport
INFORMS	Institute for Operations Research and Management Science
LSP	Logistics Service Provider
NetloP	Netzwerkmanagement für logistische Prozesse
NGO	Non-Governmental Organization
OEM	Original Equipment Manufacturer
PCD	Partnership for Child Development
POMS	Production and Operations Management Society
PTMBA	Part-Time Master of Business Administration
SCM	Supply Chain Management
SCRM	Supply Chain Risk Management
VHB	Verband der Hochschullehrer für Betriebswirtschaft
WFP	World Food Program