

ANNUAL REPORT 2012



ERCIS

European
Research
Center for
Information
Systems



BRISBANE AUSTRALIA VIENNA AUSTRIA PRAGUE CZECH REPUBLIC COPENHAGEN DENMARK
TURKU FINLAND BORDEAUX FRANCE MÜNSTER GERMANY ROME ITALY VADUZ LIECHTENSTEIN
KAUNAS LITHUANIA ENSCHEDE NETHERLANDS HAMILTON NEW ZEALAND KRISTIANSAND NORWAY
GDANSK POLAND MOSCOW + NIZHNY NOVGOROD RUSSIA MARIBOR SLOVENIA ST. GALLEN
SWITZERLAND MANCHESTER UNITED KINGDOM NEW JERSEY USA

www.ercis.org



The ERCIS – European Research Center for Information Systems – is an international network of scientists, conducting cooperative research in the field of Information Systems. The network was founded in 2004 at the University of Münster, funded by the German State of North Rhine Westphalia and the University of Münster, with Prof. Dr. Jörg Becker as its Academic Director.

The network provides new ways of thinking and multidisciplinary approaches for finding solutions to the problems arising from the ongoing transformation of society and organizations due to the growing impact of IT. The ERCIS has dedicated itself to dealing with these challenges through the collaboration and exchange of information between research and practice.

What sets ERCIS apart is its excellent collaboration and the uncomplicated initiation of research cooperation and research projects. Its strengths are the personal contact between researchers, which makes ERCIS a vibrant network, as well as the wide range of different disciplines and national perspectives on IS research.

The network is headed by the board of directors in Münster, which is composed of one academic director and eight additional professors, all of them active in the research field of Information Systems. Additionally, numerous internationally renowned researchers from more than 20 associated research institutions, as well as the diverse companies from industry serving on the advisory board, belong to the ERCIS

network. All of them are experts in a wide variety of research areas in Business Informatics and related disciplines. Research carried out by the ERCIS covers the entire spectrum, from fundamental research to application-oriented research.

Besides the individual research activities of the members, ERCIS combines and supports selected research aspects of Business Informatics in competence centers. They serve to strengthen research in specific areas. The companies on the advisory board come from various sectors, which guarantees the relevance of research for practice. Regular meetings of the board of directors and the advisory board, as well as annual workshops with the associated partners held at different locations ensure continuous, direct and productive exchange.

Finally, young researchers also benefit from the research collaborations. Many ERCIS members offer exchange programs that last one or two semesters at a partner university so that students can acquire international experience. Joint lectures organized by several ERCIS members, as well as guest talks by ERCIS lecturers contribute to the internationalization of teaching.

The following pages provide an overview of the various activities conducted by ERCIS and its partners. If you are interested in getting in contact with the network, please feel free to contact us!

www.ercis.org



DEAR FELLOW ERCIS PARTNERS AND INTERESTED READERS OF THIS REPORT,

Another interesting year has gone by and I think we all had some really exciting months of research with a lot of new projects, publications, co-operations and ideas for further conjoint activities. This report is the fourth of its kind and it is again packed with interesting and up-to-date news from our partners. It also contains additional information about ERCIS network activities, be it research or teaching.

The year 2012 started with the final presentations of our first virtual international ERCIS seminar on the “Global Challenges” in Liechtenstein. Students from six different ERCIS partners took part in the seminar and most of them found their way to Vaduz for the final presentations and a get-together with beer and barbeque afterwards. Also during this visit in Vaduz, the first of three ERASMUS-agreements this year was signed between Münster and Vaduz. Thus, exchange opportunities for students as well as researchers have become more institutionalized now, which hopefully leads to a fruitful exchange between the partners. This is also the case for the other two ERASMUS agreements signed this year, namely the agreement between Münster and Enschede, Netherlands, and the agreement between Münster and Kaunas, Lithuania. The agreement with the Kaunas University of Technology was set up during our Annual ERCIS meeting that took place in Kaunas, Lithuania. 19 participants from 10 partner institutions came together to discuss ongoing research projects, possibilities for joint research funding and prospects for further collaboration. At this point, I and my team would like to thank Rimantas and his staff once again for hosting this year’s meeting and making it such a successful and also very pleasant event. More details about the Annual Workshop can be found in this report. Reima, our network partner from Turku, Finland, already offered to host next year’s meeting up in the north, and I would be more than happy to see all of our partners there next year!

Concerning our research projects, I would like to announce that we were able to extend our ERCIS project Networked Service Society until the end of this year with the very promising outlook of another funding for the next two years. This project is a conjoint activity of the University of Münster, the Queensland University of Technology in Brisbane, Australia, the University of Waikato, New Zealand, the Ulsan National Institute of Science and Technology and the Yonsei University in Seoul, both in South Korea. The submitted proposal for the extension of the research project involves the founding of a Global Service Research Center, dealing with joint research, joint education and joint industry projects. Furthermore, an expansion to partners of BRICS states is planned. Thus, it is very fitting that we had a workshop in Moscow this year following our rejected PropelleR (Promoting Business Process Management Excellence in Russia) project. Concerning this project, we are intensively working on the advancement of the ideas from the proposal and this workshop that hopefully leads to a second submission of the full proposal to the EU. Furthermore, I am happy to announce that we were successful with our application for hosting ECIS 2015 in Münster. Thus, we can all look forward to a great “ERCIS-ECIS”, where we can work together and present our network to the IS community.

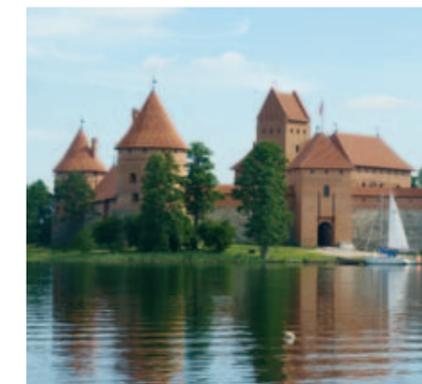
A lot of things have happened in 2012 and I am really looking forward to seeing you all in Turku, Finland next year for another interesting meeting and a lively exchange of knowledge within the network, since I always like to stress “ERCIS is what we make out of it”.

All the best, Jörg Becker

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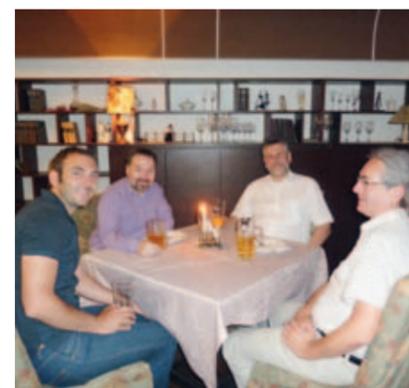
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The workshop day

Excursion to Trakai Castle



Informal meeting on the first evening

3RD ANNUAL ERCIS WORKSHOP

This year's 3rd Annual ERCIS meeting and workshop was held in Lithuania.

Rimantas Butleris from the Kaunas University of Technology kindly invited us to the beautiful city of Kaunas. In total 19 Participants from 10 different ERCIS member states came together to discuss current ERCIS activities and to think about future joint research possibilities. Representatives from Finland, Italy, Lithuania, France, Norway, Netherlands, Russia, Switzerland, Liechtenstein, and Germany were attending the workshop.

At the first evening, Rimantas invited the whole group to a classy restaurant in Kaunas where everyone had the opportunity to have some informal conversation and "first-timers" had the chance to get to know the partners.

On the next day, after a short welcome speech by Prof. Jörg Becker, the workshop began with a recapitulation of all recent and ongoing ERCIS activities presented by Armin. Besides other things, Marcel presented first results from the "Grand Challenges of IS" study that was initiated at last year's annual ERCIS workshop in Bordeaux.

Afterwards, the main part of the workshop day was dedicated to the discussion of possibilities for joint (EU) research proposals. Goals of this session were understanding how ERCIS members conduct joint research (national and internationally), identifying research funding opportunities for future joint project proposals and generating and discussing new and existing research ideas. Therefore, each ERCIS

member had the opportunity to present his ideas and to describe how they manage and apply for research funding and how they usually cooperate with other research institutions (regarding research projects, PhD exchange, etc.).

In the following workshop session our newest ERCIS member from the University of Twente, Netherlands was presented by its representative Jos van Hillegersberg.

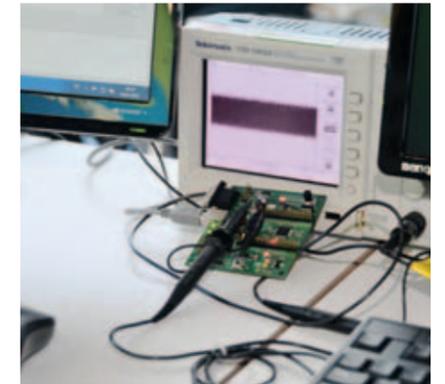
In the last workshop session, Armin talked about planned and upcoming ERCIS activities and presented next year's host of the 4th annual ERCIS workshop in Turku, Finland. Ulrich Müller-Funk took the opportunity to discuss the current and future doctoral program of the University of Münster (Department of IS) with all ERCIS members. The question at hand was "How to build up a doctoral program that meets all Bologna criteria and is still compatible with the current traditional system in Germany?"

The workshop day was concluded by a nice dinner in the old town of Kaunas where an enthusiastic saxophone player was providing nice entertainment.

The day after, the group visited Trakai Island Castle, a famous castle in the region of Vilnius. The day was concluded by a lunch in one of the nice restaurants near the lake Totoriskiu Ezeras.

Participants in 2012's workshop were Jörg Becker, Katrin Bergener, Sara Hofmann, Armin Stein, Marcel Heddier, Ulrich Müller-Funk, Gottfried Vossen, Reima Suomi, Alesio Maria Braccini, Paolo Spagnoletti, Rimantas Butleris, Kestutis Kapocius, Tomas Skersys, Oihab Allal-Cherif, Bjørn Erik Munkvold, Stig Nordheim, Fons Wijnhoven, Eduard Babkin, Robert Winter, and Oliver Müller.

The next Annual ERCIS workshop will be hosted by our partners in Turku, Finland from 23rd–25th May. Save the Date!



OUTLOOK:

ECIS 2015 WILL TAKE PLACE IN MÜNSTER

We are happy to announce that our application for hosting ECIS 2015 in Münster has been successful. Thus, we will work on having a great ECIS with the involvement of many ERCIS partners in the beautiful castle in the middle of Münster. Jörg Becker, together with Marco de Marco from Italy and Jan vom Brocke from Liechtenstein will be the conference chairs. The proposed conference theme matches the idea of our ERCIS network: "The Networked Society". ECIS 2015 should be a meeting place for European and also non-European researchers in the field of Information Systems from various cultures and countries and should reflect the specific and innovative research in Information Systems dealing with the overarching networked society.

THE ERCIS TEAM VISITS THE NETWORK PARTNERS

In order to further promote the network activities among the members, the ERCIS team has continued its series of visits to the ERCIS partners in 2012. During this year, Katrin, Sara, Armin and Marcel were in Kaunas, Bordeaux, Maribor and Vienna, where they presented the benefits of being a member in the ERCIS networks to faculty and PhD students. They exchanged ideas on how to collaborate both in the area of research as well as by joint teaching activities. Two further researches from the ERCIS headquarters gave a presentation on the network in Brisbane and Waikato.

BEST PAPER AWARD AT HICSS FOR

STEFAN STIEGLITZ AND LINH DANG-XUAN

Congratulations to Stefan Stieglitz and Linh Dang-Xuan from the ERCIS headquarters in Münster! The researchers were awarded at this year's HICSS in Grand Wailea, Maui, Hawaii. Their publication "Political Communication and Influence through Microblogging – An Empirical Analysis of Sentiment in Twitter Messages and Retweet Behavior" won the Best Paper Award in the Track "Internet and the Digital Economy".

BEST PAPER AWARD AT ECIS FOR KAREN STENDAL AND BJØRN ERIK MUNKVOLD

2012 has been a successful year for the ERCIS publications. Karen Stendal and Bjørn Erik Munkvold from the University of Agder, our ERCIS partner in Kristiansand, Norway, won the ECIS 2012 Best Paper Award. Congratulations! Their paper, titled "Virtual worlds and people with lifelong disability: exploring the relationship with virtual self and others", convinced the jury. They wrote the paper together with Judith Molka-Danielsen and Susan Balandin from the Molde University College.



NEW GENERATION OF ERCIS RESEARCHERS

We do not only talk about promoting young researchers, we actually do it. Right from the start! Thus, we are very happy to welcome Moritz and Ferdinand (from Vaduz) and Levi (from Münster) as our youngest members in the network. Let's hope that they show interest in Information Systems research!

ERCIS@ECIS IN BARCELONA

By now it has almost become a good tradition to have an informal ERCIS meeting at the ECIS conference. This year in Barcelona we met on the terrace of the cafeteria for a few drinks, a chat, and some interesting talks about new contact persons in the network, researcher exchange possibilities, and other activities that are currently going on in the network.

FAREWELL TO DUBLIN, SEOUL, MADRID

Whereas the ERCIS network has been expanding during the last years, we took leave of three partners in 2012. Together with the respective contact persons, we have taken the sad decisions that Dublin (Ireland), Seoul (South Korea) and Madrid (Spain) will be no longer members in the ERCIS network. It has turned out that the research interests as well as the goals of the network and that of the former members no longer match. In order to give way for other potential partners from their countries, the three institutions have decided to quit the ERCIS network. We would like to thank our contacts Séamas Kelly from the School of Business, University College Dublin, Jin Hyung Kim from Korea Advanced Institute of Science and Technology (KAIST) in Seoul and Julio Mariño from Universidad Politécnica de Madrid as well as their teams for their fruitful participation in the ERCIS network. and finally validate the countermeasures.

ERCIS LUNCHTIME SEMINAR AT ERCIS HEADQUARTERS

This year, the ERCIS Lunchtime seminar was held for the fourth consecutive semester and thus has become a well-established event at ERCIS headquarters. Like in previous years, a broad range of topics, such as IT Security, Game Theory, Cloud Computing, Data Marketplaces, Small and Medium-sized Enterprises (SMEs) and ICT, as well as process modelling was presented and discussed during Tuesday's Lunch Sessions. Besides several speakers from the ERCIS Headquarter, many national and international guest speakers presented their research in the IS domain. Amongst them were Dr. Joseph Bonneau from the University of Cambridge, (UK), Alexander Löser from TU Berlin (Germany), Johann-Christoph Freytag from HU Berlin (Germany), Benjamin Johnson from UC Berkeley (US), Erwin Field from QUT (Australia), Kai Riemer from the University of Sydney (Australia), Anne Laurent from the University Montpellier 2 (France), João Porto de Albuquerque from ICMC-USP (Brazil), Marcos L. Chaim EACH-USP (Brazil), Diego Ponte from the University of Trento (Italy), and Jenine Beekhuizen from Griffith University (Australia).

ERCIS BOOTH AT CEBIT

During this year's computer fair CeBIT, researchers from the ERCIS headquarters presented several innovative software solutions, amongst them the EU-funded project EMUVE (development of Multi-User Virtual Environment for Entrepreneurs in Europe) as well as the projects Virtimo and Side Channel Attacks in Automotive Security. Virtimo's aim was to develop IT-based processes in organizations considering their specific and established systems. The project Side Channel Attacks in Automotive Security integrated a common encryption algorithm on a microcontroller, trying to obtain the secret key through a so-called Side Channel Attack.

GOTTFRIED VOSSEN APPOINTED AS GI FELLOW

For the eleventh time, the German Computer Science Society (GI) has awarded fellowships to computer scientists who have served their field as well as their professional society in an outstanding fashion. This year, the committee awarded Matthias Jarke (RWTH Aachen) and Gottfried Vossen, who were appointed "GI Fellow" in a ceremony during the 2012 GI Annual Conference in September 2012. The charter stated that "in Gottfried Vossen, GI is honoring a scientist and teacher who stands out for his variety of work on transaction systems, database systems, information systems, and data modeling. His work has given a wide visibility to the topics both nationally and internationally." Gottfried Vossen has been a GI member since 1978.



ABOUT THE INSTITUTION

The Institute of Business-to-Business Marketing (IAS) is operating as one of the three chairs under the roof of the Marketing Center Münster (MCM) and is part of the ERCIS Headquarters located in Münster. Although business-to-business marketing represents traditionally the main area of research, the IAS expanded into a variety of other research fields, such as the emergence of dominant design, service marketing, and negotiation management. In doing so, the IAS is working in close collaboration with associates from industry and research that contribute to parts of the research program.

Apart from the high quality research, the IAS is characterized by outstanding educational efforts. In order to offer our students a wide range of high-class lecture series and vigorous seminars, we put a great effort in maintaining close ties to a wide range of worldwide partners from different industries and academic institutions. This winter, the IAS conducts an interactive lecture on advanced industrial marketing in which students are working in groups to solve and present various case studies with a business-to-business marketing focus.

RESEARCH TOPICS

Our main research field comprises advancements of multivariate methods for data analysis and topics of Industrial Marketing. The results of our academic work have, inter alia, been published in the following textbooks: “Hindernislauf Marketing: Erleuchtung-Ernüchterung-Durchbruch”, “Industriegütermarketing”, “Strategisches Marketing”, “Multivariate Analysemethoden”, “Fortgeschrittene Multivariate Analysemethoden”, and “Vermarktung hybrider Leistungsbündel”. Due to the high quality of these publications, the IAS has recently been honored by several awards, such as the renowned Georg-Bergler-Preis 2008 and the Transferpreis 2010 of the University of Münster for their outstanding link between practice and science within the project “H2-ServPay”.

CURRENT RESEARCH PROJECTS

Current research projects at the IAS are divided in two sections. First to mention are institutionally funded research projects that are, inter alia, sponsored by the Federal Ministry of Education and Research. Against this background, the IAS collaborates closely with industrial companies and practice-oriented associations to generate knowledge with a direct impact for the industry. The second section of research projects is focused on relevant topics in the international field of Marketing and conducted in the course of (cumulative) dissertation projects. Currently, the IAS is working on the research project Inno-GeSi.net whose main objective is to find innovative business models for security of

infrastructures in mains supply. Within the scope of this project, the IAS concentrates on a special international mega project in mains supply called Desertec. We intend to indicate the different risks in such a project and look for intelligent financial solutions by anticipating these risks. Furthermore, the IAS engages in a cooperative research project, namely it's OWL, whose focus is on intelligent technical systems that are designed to facilitate an increase of effectiveness and efficiency in new product development. The core focus of the project is the development of a complex statistical tool for innovation acceptance measuring in premature stages.

Above that, the IAS still engages in a wide variety of collaborative research projects that focus on the quantification of productivity in industrial services with the help of Data-Envelopment-Analysis (DEA) and on extending scenario analysis to assess the challenges and chances auditors will face in the year 2025.

On the other hand, the IAS has been publishing studies in the field of industrial marketing in book publications and international journals. Furthermore, we continue to deliver relevant insights in the field of dominant designs and negotiations research.

PUBLICATIONS

J. Hüffmeier, P. A. Freund, A. Zerres, K. Backhaus, G. Hertel: Being tough or being nice? A meta-analysis on hard- and softline strategies in distributive negotiations, in: *Journal of Management*

M. Eisenbeiss, K. Backhaus, B. Blechschmidt, P. A. Freund, P. A.: The (real) world is not enough: Motivational drivers and user behavior in virtual worlds, in: *Journal of Interactive Marketing*

K. Backhaus, K. Lügger, M. Koch: The structure and evolution of business-to-business marketing: A citation and co-citation analysis, in: *Industrial Marketing Management*

K. Backhaus, M. Steiner, K. Lügger: To invest, or not to invest, in brands? Drivers of brand relevance in B2B markets, in: *Industrial Marketing Management*

K. Backhaus, S. Stingel, M. Koch: Biased tariff choices: Exploring role effects in B2B settings, in: *Journal of Business-to-Business Marketing*

A. Zerres, J. Hüffmeier: Too many cooks spoil the soup: How negotiating teams deteriorate the negotiators relationship, in: *Die Betriebswirtschaft (DBW)*

DISSERTATIONS

Marco Motullo: Adoption und Nutzung sozialer Online-Netzwerke: Empirische Analysen zur Erklärung und Prognose des individuellen Nutzerverhaltens

Harald Neun: Verhandlungen im internationalen Vertrieb: Empirische Analysen kultureller Einflüsse in intra- und internationalen Verhandlungen

Alfred Zerres: Negotiation in B2B-Marketing – Cumulative Evidence and Innovative Insights from Experimental Research

HABILITATIONS

The IAS employs Dr. Michael Steiner as Assistant Professor. Michael Steiner's research activities focus on brand management and consumer behavior (especially preference measurement).



CONTACT DETAILS

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KEY FACTS

INSTITUTION

- Founded in 1986
- Researchers: 10

RESEARCH TOPICS

- Industrial Marketing
- Negotiation Behavior
- Standardization Processes
- International Marketing

EVENTS

Marketing Alumni Symposium
(Social Media – Klassisches Marketing vor dem Log-Out?)

UNIVERSITY OF MÜNSTER – CHAIR FOR INFORMATION SYSTEMS AND INFORMATION MANAGEMENT

ABOUT THE INSTITUTION

The Chair for Information Systems and Information Management at the WWU Münster, directed by Prof. Dr. Jörg Becker, Professor h.c. (NRU-HSE, Moskau), currently comprises 27 postgraduate research assistants and eight post docs as well as 28 undergraduate research assistants. The courses offered as part of the Bachelors and Masters programs on Information Systems comprise Process Modeling (Application Systems, Information Modeling, Workflow Management) and Data Modeling (Data Management, Management Information Systems and Data Warehousing) topics. Early on in their studies students can enroll in additional domain-specific courses such as Elective Modules, Project Thesis, and Seminars. Soft skills like presentation techniques and rhetoric are also conveyed. All courses consequently focus on integration with current research and industry projects.

RESEARCH TOPICS

Focus areas of research are Process Modeling and Data Modeling. Besides developing and evaluating new modeling methods, the methods are transferred into practice to generate business value for companies and governmental organizations. Focused domains of research comprise Service Science Management and Engineering (SSME), Retail/Wholesale, and E-Government. As the chair is embedded in the European Research Center for Information Systems (ERCIS), the research projects incorporate Information Systems, Computer Science, Business Administration, and legal points of view.

CURRENT RESEARCH PROJECTS

ProCom

This project on Business Process Compliance Management was funded with 330.000 by the German Research Foundation (DFG). In this project, we apply our knowledge on model querying to business process models to be checked for compliance. To be able to prove the utility of model-driven Business Process Compliance Checking, we collaborate with companies from the financial sector.



The Research Training Group

Research Training Group “Trust and Communication in a Digitized World”

The research training group examines how trust can be developed and maintained under the conditions of new forms of communication. Digitized means of communication change the structure and sustainability of trust because firstly, familiar face-to-face communication is replaced by digitized interactions, secondly, virtual social and office networks emerge and finally, because new forms of relationships between the public, organisations and individuals develop. The postgraduate programme analyses the consequences of these processes for the establishment of trust relationships by the example of four prototypical areas: media, economy, science and sports.



ServDEA

Beginning in September 2010 and continuing through June 2014, the new joint research project ServDEA will use the

operations research method data envelopment analysis (DEA) to develop a software tool that is capable of benchmarking so-called product-service-systems. The research partners of this research endeavor comprise the Chair of Prof. Wilken at the ESCP Berlin as well as the Chair of Professor Backhaus (both marketing) and the European Research Center for Information Systems (ERCIS). The professional partners that support the evaluation are DMG AG, ThyssenKrupp AG and Trumpf GmbH + Co. KG. The research project is funded by the BMBF (Bundesministerium für Bildung und Forschung) within the funding program “Productivity of Services”.

KollaPro

From September 2010 to August 2013, the new joint research project KollaPro will explore innovative strategies for collaborative business process management (BPM) in the services sector. Project partners of this research endeavor comprise the European Research Center for Information Systems (ERCIS) of the WWU Münster, DURABLE Hunke & Jochheim GmbH & Co. KG, best practice consulting AG, and Software AG. The research project is funded by the BMBF (Bundesministerium für Bildung und Forschung) within the funding program “Productivity of Services”.



We Change

In order to improve innovation capability of companies in times of demographic change, WeChange develops a demographic-sensitive social augmentation and innovation platform based on theoretical insights into augmented reality, social media, technology acceptance, and IT-based business processes. Participants in the project are the ERCIS, the University of Mannheim and CAS Software AG.

Networked Service Society

The project “Networked Service Society” contributes to the understanding and the innovative design of the relationship between Service-Networks and IT. The goal of the project is to establish a long-term research infrastructure with institutions from the Asia-Pacific region. Cooperating partners in this project are the University of Münster (Germany), the QUT in Brisbane (Australia), the University of Waikato (New Zealand), and the Korea Advanced Institute of Science and Technology (Korea). Funding has just been extended for another two years.

PUBLICATIONS

J. Becker, P. Delfmann, M. Eggert, S. Schwitay (2012): Generalizability and Applicability of Modelbased Business Process Compliance-Checking Approaches – A State-of-the-Art Analysis and Research Roadmap, BuR – Business Research, Jg. 5, Nr. 2

J. Becker, R. Knackstedt, L. Lis, A. Stein, M. Steinhorst (2012): Research Portals: Status Quo and Improvement Perspectives, International Journal of Knowledge Management, Jg. 8, Nr. 3

D. Beverungen, R. Knackstedt, A. Winkelmann (2012): Identifying e-Service Potential from Business Process Models – A Theory Nexus Approach, e-Service Journal, Jg. 8, Nr. 1, S. 45–74

Sara Hofmann, Michael Räckers, Jörg Becker (2012): Identifying Factors of E-Government Acceptance – A Literature Review, in International Conference on Information Systems (ICIS 2012)

C. Janiesch, M. Matzner, O. Müller (2012): Beyond Process Monitoring: A Proof-of-Concept of Event-driven Business Activity Management, Business Process Management Journal, Jg. 18, Nr. 4, S. 625–643

R. Knackstedt, M. Eggert, M. Heddier, E. Richter, J. Becker (2012): The Relationship of IS and Law – Insights into the German Online Car Registration Case, in European Conference for Information Systems (ECIS)

B. Niehaves, K. Ortbach, A. Tavakoli (2012): On the Relationship between the IT Artifact and Design Theory: The Case of Virtual Social Facilitation, in Peffers Ken, Rothenberger Marcus, Kuechler Bill (Hrsg.), Design Science Research in Information Systems. Advances in Theory and Practice 7th International Conference, DESRIST 2012, Las Vegas, NV, USA, May 14–15, 2012. Proceedings, Springer, S. 354–370

M. Voigt, B. Niehaves, J. Becker (2012): Towards a Unified Design Theory for Creativity Support Systems, in Seventh International Conference on Design Science Research in Information Systems and Technology, S. 152–173, Springer, Heidelberg

DISSERTATIONS

Stefan Große Böckmann: Was Prozessmanager von Programmierern lernen können: ein Modell für agiles Geschäftsprozessmanagement. Dissertation. Westfälische Wilhelms-Universität, Münster 2012.

Martin Matzner: Networked Service Business Processes: Analysis, Design, Event-driven Monitoring and Control. Dissertation. Westfälische Wilhelms-Universität, Münster 2012.



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KEY FACTS

INSTITUTION

- 24 Research Assistants
- 7 Post Docs
- 20 Student Assistants

RESEARCH TOPICS

- Information Modelling
- Service Sciences
- Process Management
- Retail Information Systems
- eGovernment

ABOUT THE INSTITUTION

In a world where computer networks are an indispensable backbone of wealth and growth, a sound understanding of the principles of security and privacy are no longer the sole domain of spies and specialists. Instead, knowing about information security belongs to the set of indispensable skills for every businessperson and citizen – just like in the offline world everyone knows how to operate a door lock, or not to issue a blank check. The IT Security Research Group at the Department of Information Systems takes an interdisciplinary approach to a range of research questions in information security and privacy, in particular economics of information security and privacy, multimedia security, cybercrime, digital forensics, privacy-enhancing technologies, and usable security. Rainer Böhme, assistant professor at WWU Münster since September 2010, heads the group.

TEACHING HIGHLIGHTS:

GAME THEORY AND LEGAL ISSUES

The summer term brought two innovative seminars, both with an interdisciplinary angle. Game theory, the math of strategic interaction between players, is predestinate to study security problems. Master students in the IS program were invited to familiarize themselves with the background in a dedicated block lecture and then to present selected research papers in a block seminar, which took place at the Northern Sea coast. We heard up to three talks per day during low tides; and students had the opportunity to take kiteboarding lessons when the tides were high (see also p. 87 REPORT on Kitesurfseminar). In another block seminar, taking place in Münster and co-organized with Thomas Horen of the local law school, pairs of IS/CS students and prospective lawyers explored topics at the intersection between law and security or privacy. The talks covered for instance anonymous communication, software liability, and the provision of secure digital identities. An overarching goal was to learn appreciating the viewpoints of different disciplines and to engage in dialogues with an audience who does not share the same terminology and mindset.



Two luminaries of information security: Ross Anderson and Bruce Schneier debating at WEIS 2012 in the famous Berlin Brandenburg Academy of Sciences and Humanities Research Training Group

RESEARCH HIGHLIGHTS:

THE SOCIAL COST OF CYBERCRIME

Advances in information technology let social interactions move online, legitimate and illegitimate alike. As a result, citizens and policy makers are increasingly concerned about cybercrime, partly by own experience but more so in response to media coverage. However, news about cybercrime often draws on reports published by security vendors. This industry obviously has vested interests in exaggerating losses to support sales. A recent trend is to frame the issue in the context of espionage and cyber warfare, which helps to tap governments' large defense budgets. Putting this kind of scaremongering aside, how much shall we worry about cybercrime? In order to answer this question, Rainer Böhme joined an international team of researchers led by Cambridge professor Ross Anderson. For the first time, the team systematically collected what is defensibly known about the social cost of cybercrime. This includes direct losses, indirect losses, and the money spent on defense technologies, such as firewalls and antivirus. The resulting report "Measuring the Cost of Cybercrime" finds that cybercriminals are best compared to metal thieves who cause relatively little direct harm (i.e., a few euros per citizen per year), but impose disproportionately high indirect costs and opportunity costs on society. For example, we know with high confidence that the cybercriminal infrastructure behind one third of all spam sent in 2010 earned its owners about US\$

2.7 million, while global expenditures on spam prevention probably exceeded a billion dollar. The report got widely recognized, including citations in the Economist, by the BBC and in the German national newspapers. It concludes that spending more on defense technology is probably less effective than increasing the effectiveness of law enforcement against cybercriminals. In a related study, Rainer Böhme and Tyler Moore conducted a secondary analysis of Eurobarometer micro-level data on citizens' perceptions of cybercrime. Their results indicate that opportunity costs of cybercrime already emerge if citizens are concerned about cybercrime, and somewhat surprisingly less so from actual experience of cybercrime. Cybercrime today might not be as dreadful as publicly depicted.



Visiting researcher Benjamin Johnson PhD

EVENTS

Studying information security and privacy from an interdisciplinary angle gains momentum in the research community as well. Jointly with DIW Berlin, the oldest and largest German economics research institute, Rainer Böhme hosted the 2012 Workshop on the Economics of Information Security, the annual flagship event for interdisciplinary scholarship on information security and privacy. In addition, he served as an expert for the Working Group on Security Economics set up by ENISA, the EU Commission's information security agency, and for an internal research project by the EU Commission on the economic value of personal information. We address a closely related topic in an event targeted to the academic information systems community: Rainer Böhme has been invited to organize a special track on Personal Data Markets for the ECIS 2013 conference in Utrecht, jointly with Carnegie Mellon professor Alessandro Acquisti and a board of top-flight international experts in this emerging field.



Visiting researcher Benjamin Johnson, a postdoc at UC Berkeley's math department has spent his summer in Münster to teach game theory in the Master program and continue a fruitful research collaboration on game theory and security with the IT Security Research Group. He remembers Münster as a likable place, albeit slightly too rainy by Californian standards.



Not exactly in Nash equilibrium: getting the kite launched is an ambitious goal for day one

PUBLICATIONS

Anderson et al. (2012): Measuring the cost of cybercrime, Workshop on the Economics of Information Security (WEIS), Berlin, June

R. Böhme (2012): Security Audits Revisited, in: A. Keromytis (ed.): Financial Cryptography and Data Security, LNCS 7397, Springer-Verlag, Berlin Heidelberg, 129–147

R. Böhme, M. Kirchner (2012): Counter-Forensics: Attacking Image Forensics, in: N. Memon & H. Sencar (eds.): Digital Image Forensics: There is More to a Picture Than Meets the Eye, Springer-Verlag, New York, 327–366

R. Böhme, T. Moore, (2012): How Do Consumers React to Cybercrime? APWG eCrime Researchers Summit, Las Croabas, PR, October

B. Johnson, P. Schöttle, R. Böhme (2012): Where to Hide the Bits?, in: J. Grossklags & J. Walrand (eds.): Decision and Game Theory for Security, LNCS 7638, Springer-Verlag, Berlin Heidelberg, 1–17

P. Schöttle, R. Böhme (2012): A Game-theoretic Approach to Content-adaptive Steganography, in: Kirchner, M. & Ghosal, D. (eds.): Information Hiding. LNCS 7692, Springer-Verlag, Berlin Heidelberg, 125–141

P. Schöttle, S. Korff, R. Böhme (2012): Weighted Stego-Image Steganalysis for Naive Content-Adaptive Embedding, IEEE Workshop on Information Forensics and Security, Tenerife, Spain, December



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KEY FACTS

INSTITUTION

- Launched in fall 2010
- 3 researchers

RESEARCH TOPICS

- Economics of Information Security
- Digital Forensics
- Cybercrime
- Steganography and Steganalysis
- Privacy-Enhancing Technologies
- Economics of Privacy
- Security and Usability



ABOUT THE INSTITUTION

The Chair for Information Systems and Supply Chain Management at the WWU Münster directed by Prof. Dr.-Ing. Bernd Hellingrath, currently comprises nine post-graduate and one post doc researchers. Major objective is to make a qualitative research contribution in the areas of supply chain, logistics, and operations management with respect to the development of new theories and concepts by means of information systems in cooperation with industrial and research organizations.

The courses offered within the Bachelor and Master degree programs on Information Systems and Business Economics focus on the principles and application of Information Systems for the design, planning and execution of supply chains. Early on their studies students can attend additional domain specific courses such as elective modules, project seminars and seminars. Especially within the project seminars students get the chance to put the learned scientific knowledge, skills and competencies to practice. One example is the project seminar “GDACSmobile”, which is set against the background of the Global Disaster Alert and Coordination System (GDACS), a joint initiative of the United Nations and the European Commission. The project seminar developed a smartphone app for affected communities and professional emergency responders which provides them with real-time information about disasters, and enables them to feedback geo-located images and/or texts from the ground.

RESEARCH TOPICS

The research of the Chair is working on the following research topics:

- Segmentation of Supply Chains: Today's supply chains are increasingly moving from a Build-to-Stock (BTS) towards a Build-to-Order (BTO) strategy as a way to gain competitive advantage. In this context our research efforts are focusing onto the question which supply chain processes should be conducted forecast-driven and which order-driven. With the development of a modeling approach for describing and calculating the relevant decision parameters we are approaching this problem.
- Supply Chain Flexibility: Flexibility in supply chains can serve as a means to cope with uncertainty. Our research in this area focuses on the questions how well a supply chain can adapt to changes, how the optimal balance between flexibility measures and flexibility costs can be determined, and how the optimal combination of flexibility measures to apply can be determined.
- Spare Parts Supply Chain Management: For maintenance it is crucial to have the required spare parts, the right equipment and the respective qualified maintenance service personal as fast as possible at the place of repair. Our research focuses on how existing planning methods and processes can be used, adapted and integrated to find an appropriate balance between the total supply chain costs and the required service level.
- Supply Chain Security: Within the last decade, security has become one of the major topics in supply chain management. It aims at protecting supply chains from

deliberate attacks and misuse, e.g. the introduction of contraband. Our current research focuses onto security in business process management, e.g. modeling security aspects and analyzing processes for security issues, and security initiatives and governance in supply chains.

- Humanitarian Logistics: Numerous studies have shown that logistics significantly contributes to the efficiency and effectiveness of humanitarian operations. Our research focuses on the modeling and performance measurement of humanitarian supply chains, their information requirements, and the development and evaluation of software for humanitarian logistics. The research outcomes enable humanitarian organizations to improve their logistics performance and reduce of logistics related costs in disaster relief.

CURRENT RESEARCH PROJECTS

The German Logistics Association (BVL) has more than 10.000 members, including many companies, service providers and researchers, who are experts on the fields of logistics and logistics software. The BVL uses this potential to support a council on the topic of humanitarian logistics, which is led by Prof. Hellingrath in 2012 and 2013. The council aims to comprehend the contribution that logistics can make to relieve suffering in sudden on-set and permanent disasters, and aims to make use of the BVL network to raise consciousness about humanitarian challenges. Started in June 2012, the Franco-German research project InPoSec (Integrated Postal Security) aims at securing the postal infra-

structure. The resulting solution will provide better protection for citizens against threats posed by any abuse of international postal services, as well as increase security in the face of terrorism and organized crime. InPoSec is funded jointly by French Agence Nationale de la Recherche and German BMBF and headed by the chair of IS and SCM. Partners in this project are, amongst others, Deutsche Post, La Poste, and Université de Bordeaux. In addition, expertise on customs law is provided by Prof. Wolfgang who leads the Department of Customs and Excise at the WWU Münster. Management of inter-organizational networks is a strategic key capability for today's companies. In this context, the increasingly important field of Supply Chain Planning (SCP) has established in recent decades. In this area, several combinatorial optimization problems exist that cannot be solved by exact mathematical optimization techniques. In order to tackle these problems a PROBRAL project started in June 2012 in cooperation with the research groups of Universidade Federal do Ceará (UFC) and Universidade de Pernambuco (UPE). Objective of the project is to adapt and apply new, promising optimization and clustering techniques for problems in SCP. In October 2012, the Brazilian-German research project I2MS2C (Integrating Intelligent Maintenance Systems and Spare Parts Supply Chains) started. Objective of this project is to improve the effectiveness and efficiency of spare parts service management operations for complex technical systems. Objective is to integrate information provided by embedded Intelligent Maintenance Systems (IMS) with improved planning and coordination methods as well as processes. The research project is funded jointly by Brazilian CAPES and German DFG. The Brazilian research partners are Prof. Pereira (UFRGS,), Prof. Frazzon (UFSC), and Prof. Espíndola (FURG).

AWARDS

This year the trade magazine VerkehrsRundschau again conducted Germany's biggest knowledge competition “Logistics Masters”, in which over a thousand students

from more than 120 universities strived to earn the title of “top logistics student 2012”. Timm Weber, an Information Systems master's student from Münster, achieved the third rank among all participants.

PUBLICATIONS

D. Espindola, E. Morosini Frazon, B. Hellingrath; C. E. Pereira (2012): Integrating Intelligent Maintenance Systems and Spare Parts Supply Chains, in: Proceedings of the 14th IFAC Symposium on Information Control Problems in Manufacturing – INCOM 2012, T. Borangiu (eds.), Bucharest, pp. 1017–1022

B. Hellingrath, C. Böhle, P. Küppers, M. Könnig (2012): Dezentrales Koordinationskonzept zur multilateralen kollaborativen Produktions- und Distributionsplanung, in: Proceedings of the Multikonferenz der Wirtschaftsinformatik – MKWI 2012, D.C. Mattfeld and S. Robra-Bissantz (eds), Braunschweig, pp. 187–199

B. Hellingrath, D. Sigge, M. Vanauer (2012): Logistics Information Systems in the Cloud – Application Areas, Potentials and Challenges, in: Proceedings of the 6th International Scientific Symposium on Logistics, W. Delfmann and T. Wimmer (eds.), Hamburg, pp. 173–204

D. Pfeiffer, D. Jorch, B. Hellingrath (2012): A Review and Classification of Measures to Adjust Supply Chain Flexibility, in: Proceedings of the Hamburg International Conference on Logistics, T. Blecker, W. Kersten, and C. M. Ringle (eds.), Hamburg, pp. 365–381

DISSERTATIONS

F. Copaciu: Analyse der Wirkzusammenhänge der Perlenkettenmethode in der Automobilindustrie, Dissertation, Technische Universität Dortmund, Dortmund 2012

K. Statkevich: Entwicklung einer Vorgehensmethodik zur Umsetzung der Belieferung nach Perlenketten in der Automobilindustrie. Dissertation, Technische Universität Dortmund, Dortmund 2011



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KEY FACTS

INSTITUTION
- Founded in 2008
- Researchers: 10

RESEARCH TOPICS
- Supply Chain
- Flexibility
- Segmentation
- Sustainability
- Central/Decentral Coordination
- Security
- Humanitarian Logistics



ABOUT THE INSTITUTION

The ITM is the leading Institute for Information, Telecommunication and Media Law in Germany. The Institute's work aims at exploring the legal framework and underlying policies of the information society with a particular focus on "information" as an economic and cultural good. The Institute emphasizes the importance of interdisciplinary work since a proper understanding of the technological or economic background is a pre-requirement for successful regulation. Many activities are carried out in close cooperation with the faculty of economics of the University of Münster. In 2002, the ITM was appointed the Competence Centre in Information, Telecommunication and Media Law for North Rhine-Westphalia.

Dr. Thomas Hoeren is a professor of civil law at the University of Münster and has been the director of the ITM since 1997. Due to international projects such as CONSENT, LAPSI, TIMBUS, and MonKA, Prof. Hoeren has become recognised as a specialist in information law throughout Europe.

RESEARCH TOPICS

Our research focuses on Information Law, Telecommunication Law and Media Law as well as related areas such as Antitrust and Consumer Protection Law. Since Information, Telecommunication and Media law is characterized as a cross-sectional matter, it cannot be fully covered by any of the traditional legal disciplines by itself. The ITM, therefore, strives for interdisciplinary research and teaching activities.

CURRENT RESEARCH PROJECTS

Currently, the ITM is involved in several EU-funded and national projects.

- CONSENT (Consumer sentiment regarding privacy on user generated content services in the digital economy) is an interdisciplinary research project on the EU-level. CONSENT aims to examine consumer sentiment regarding privacy on user generated content (UGC) services such as Youtube, Facebook and MySpace in the digital economy.
- Within the LAPSI project (Legal Aspects of Public Sector Information), the involved institutions explore the legal problems regarding Public Sector Information and means of solving them on an international level.
- TIMBUS (Digital Preservation for Timeliness Business Processes and Services) is an interdisciplinary research project promoted by the Commission of the European Union and a part of the Seventh Framework Programme for research and technological development (FP7). Project partners are research institutes, NGOs as well as reputable companies (Project Coordination by SAP AG) from Germany,

Portugal, Austria, Ireland and Great Britain. The main objective of TIMBUS is to extend the field of application of digital preservation from static data over the area of holistic and ongoing business processes. TIMBUS will explore the data filtering and data storage format for the activities and mechanisms that are considered necessary for a continuous access, retrieval and validation of current business processes. In the context of Business Continuity Management a new toolkit will be developed. This Legalities Lifecycle Management will present an innovative and comprehensive legal solution for long-term preservation of business processes and will establish the next generation Holistic Escrow Services.

- MonKA (Monitoring through fusion and classification of information for the detection of anomalies), a project funded by the German Federal Ministry for Education and Research, is conducted in cooperation with partners in the field of science and industry, namely the Fraunhofer-Institut FKIE, the Unabhängige Landeszentrum für Datenschutz Schleswig-Holstein as well as the EADS-associated enterprise Cassidian. As a result, effective procedures for the detection of security relating anomalies in networks and IT-infrastructures shall be developed and established, complying with general legal conditions and Data Protection Law in particular.

- Moreover, the ITM is part of the German Research Network (Deutsches Forschungsnetz/DFN) that supports communication and the exchange of information between representatives of science, re-

search, education and culture in national and international networks. Increasingly, our DFN-members are being faced with issues regarding legal questions of liability, telecommunications and data protection. Therefore, the ITM appears as a legal consultant in terms of information and communication services.

- Moreover, the ITM also hosts the Research Centre for Industrial Property Rights, which offers training and conducts research activities in the field of industrial property rights.

SELECTED PUBLICATIONS

T. Hoeren: Schade: Der BGH und das Ende der AGB-Kontrolle von Rechtebuyout-Verträgen, in GRUR, 17/2012, 402–404

T. Hoeren, A. Neubauer: Zur Nutzung urheberrechtlich geschützter Werke in Hochschulen und Bibliotheken, in ZUM, 2012, 636–643

T. Hoeren, S. Yankova: The Liability of Internet Intermediaries – The German Perspective, in International Review of Intellectual Property and Competition Law, 5/2012, 501–531

T. Hoeren: Der betriebliche Datenschutzbeauftragte, in ZD, 08/2012, 355–358

T. Hoeren, A. Giurgiu: Datenschutz – Der Datenschutz in Europa nach der neuen Datenschutz-Grundverordnung, in NWB Steuer- und Wirtschaftsrecht 2012, 1599–1607

T. Hoeren: ACTA ad acta? Überlegungen um urheberrechtlichen "Shitstorm", in: MMR, 2012, 137–138.

T. Hoeren: Wenn Sterne kollabieren, entsteht ein schwarzes Loch – Gedanken zum Ende des Datenschutzes, in Zeitschrift für Datenschutz, 4/2011, 145–146

DISSERTATIONS

Anna-Sophie Hollenders: Mittlere Verantwortlichkeit von Intermediären im Netz

Katharina Klabun: Die Künstlersozialklasse

Christoph Rempe: Rückruf und Entfernung – Neue Ansprüche im gewerblichen Rechtsschutz und Urheberrecht

René Michael Sandor: Datenspeicherung und urheberrechtliche Durchsetzungsansprüche

Ingmar Stein: Der Auskunftsanspruch gegen Access-Provider nach § 101 UrhG



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KEY FACTS

INSTITUTION

- Founded in 1997
- Researchers: 15
- 3 additional education programs

RESEARCH TOPICS

- Information Law
- Telecommunication Law
- Media Law
- Informatics in Legal Profession



ABOUT THE INSTITUTION

Our research studies the impact of information and communication infrastructures in an organizational context. We are interested in the development of the digital and the social organization: how do organizations and leaders respond to the challenges and opportunities of an informed society and economy. In particular we look at new modes of organizing, coordination and collaboration from the micro level of work practices, to the meso level of group practices and the macro level of infrastructure development.

We aim to understand the dynamics of transformation in a historical, societal, regulatory, and economic context. Our work is theoretically and empirically grounded, we employ multiple methods and research approaches with an emphasis on qualitative, interpretative approaches.

It is our research philosophy that the implications of innovative ICT become visible and understandable in the context of (communities of) practices. In order to study practices in situ, we advocate a Living Laboratory approach which emphasizes research and experimentation in complex real world settings addressing business or societal innovation. Typically multi stakeholders and researchers from different disciplinary backgrounds are involved.

RESEARCH TOPICS

We pursue this agenda in three, interrelated fields of research:

- The Communication & Collaboration Management group studies ambivalent consequences of ICT infrastructures –

specifically real-time collaboration (RTC) systems or social software – on new ways of organizing and work from the individual up to the network level.

- The Competence Center Smarter Work www.smarter-work.de provides an institutional framework for collaboration with academic partners and industry.
- The research group on Strategic Information Management comprises a team of researchers particularly interested in how management can make effective use of information and communication technology to develop strategies and structures that meet the challenges of the information age. The research group's current research is in the fields of IT strategy, in the benefits of IT investments, and in managing IT operations for reliable services. The research group is aiming at providing guidance to senior executives by offering recommendations that are both, theoretically well founded and carefully validated in industry practice.
- The Interorganizational Systems and Infrastructures group studies industry level transformations. In the tourism industry we have looked into cybermediation and the development of two-sided markets. We take a particular interest in the development and transformation of interorganizational infrastructures in the context of the health care system.

Specifically we study

- how to facilitate collective action in heterogeneous actor constellations,
- how standards are developed,
- how industry structures are transformed alongside the proliferation of ICT.

CURRENT RESEARCH PROJECTS

Against the backdrop of current debates about new ways of working and technologically induced stress, we acknowledge the ambivalent effects of collaboration tools on their users: on the one hand they are enabling and facilitating distributed collaboration and knowledge sharing, on the other hand they add another layer of complexity to distributed project work and still too often fail. Therefore, we are exploring the link between the technology repertoires of employees engaged in multiple project teams and their level of stress. By combining different data collection methods like interviews, observations, diaries and heart rate variability measurements, we aim to explore the effects of distributed computer-mediated project work on the perceived and evident level of strain. By improving our understanding of potential causes of stress we expect to be able to identify individual and organizational strategies to mitigate stress in the workplace www.wi.uni-muenster.de/wi/research/projects/hrv.html

Furthermore, Dr. Diego Ponte is visiting researcher from the University of Trento. He is studying incremental and radical innovation in the publishing industry and develops concrete examples of new web-based publishing models.

PUBLICATIONS

K. Riemer, N. Vehring (2012): Virtual or vague? A literature review exposing conceptual differences in defining virtual organizations in IS research, in: *Electronic Markets*

K. Riemer, R. Johnston, S. Klein (2012): Evolution of Inter-organizational Information Systems on Long Timescales: A Practice Theory Approach, in: Vaidya, K. (Hrsg.): *Inter-Organizational Information Systems and Business Management: Theories for Researchers*. IGI Global, 2012, pp. 38–54

C. Remfert, R. A. Teubner (2012): Das Projektbüro als Träger des Multiprojektmanagements, in: M. Lang, S. Kammerer, M. Amberg (Hrsg.): *Projektportfoliomanagement in der IT. Priorisierung, Investition, Steuerung*, Symposium Publishing, 2012, pp. 329–362

B. Rensmann (2012): A Multi-Perspective Analysis of Cybermediary Value Creation, Dissertation, Münster

A. Teubner, C. Remfert (2012): IT Service Management Revisited – Insights from Seven Years of Action Research, in: *Proceedings of the International Conference on Information Resources Management 2012*, Vienna 2012

A. Teubner, A. Pellengahr, M. Mocker (2012): The IT Strategy Divide: Professional Practice and Academic Debate, in: *Working Papers, European Research Center for Information Systems No. 12*. Eds.: Becker, J. et al. Münster, February 2012

N. Vehring (2012): Roll-out and adoption of corporate communication and collaboration platforms: Exploring multilevel dynamics and management implications, Dissertation, Münster

DISSERTATIONS

In her thesis “Roll-out and adoption of corporate communication and collaboration platforms: Exploring multilevel dynamics and management implications”, Nadine Vehring investigates the organizational roll-out and adoption process of novel technologies, like IBM Lotus Connections. Building on two case studies, the thesis examines the interplay between management's and employees' actions across different phases of the adoption process and takes into account the specific infrastructure or platform characteristics of the technologies. Against the backdrop of the socio-technical and multilevel dynamics of adoption, the thesis reflects on managements' role and challenges and discusses implications for the management of the organizational roll-out and adoption process. In his thesis “A Multi-Perspective Analysis of Cybermediary Value Creation”, Benjamin Rensmann provides a systematic analysis of different types of cybermediary business models in selected industries and their value creation for market participants. In particular he has looked into two-sided markets as distinct mechanism for cybermediary value creation. Benjamin Rensmann studied the growth of a cybermediary platform and how cybermediaries solve the initial chicken-and-egg problem of attracting enough users on each side of the platform. Empirical evidence from case studies on a big online hotel booking platform and a cybermediary providing a reverse auctioning platform in the Dutch market for maternity care services is used for theory development.



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KEY FACTS

RESEARCH TOPICS

- Information and Communications Infrastructures
- Strategic Alignment
- IT Value
- Organization Theory of IS
- Transformation of Work
- Appropriation of Communication Infrastructures
- Communities of Practice
- Collective Action and Standardization
- Living Lab Research Approach



ABOUT THE INSTITUTION

Since 1997, the Chair of Practical Computer Science has been led by Prof. Dr. Herbert Kuchen. He is responsible for teaching in the area of software engineering, programming languages, and programming techniques. Maintaining close partnerships and collaborations with several local companies, we are offering students the chance to write bachelor and master theses with high practical relevance.

RESEARCH TOPICS

Our research focuses on selected aspects of software engineering. Our fields of research are Business Apps, Model Driven Software Development, Domain-Specific Languages, Parallel Programming, Software Testing, Debugging, and Agile Software Development. Furthermore, we are developing new methods and techniques in the area of E-Learning and E-Assessment systems.

CURRENT RESEARCH PROJECTS

With the recent rise of smartphones and similar mobile devices, mobile applications for business purposes (so called Business Apps) have become a major topic for software vendors and IT-departments of numerous companies. In a joint project with regional companies, we investigate the status quo of Business App development as well as typical requirements and problems. As a particular focus, we explore cross-platform development approaches to handle the platform heterogeneity in the smartphone market. In this regard, we look into model-driven approaches to mobile app development. Our MD2 framework allows to

model an app in a suitable domain-specific language and automatically generates Android and iOS apps from this specification. Domain-specific process modeling languages (DSL) have potential to greatly enhance the efficiency of modeling and the quality of process models. However, developing such DSLs is time-consuming and costly. Moreover, they need to be accompanied by model-to-model transformations, e.g., to the Business Process Model and Notation (BPMN). Therefore, we develop DSLs4BPM, a framework for the integrated creation of domain specific process modeling languages and model-to-model transformations. Practical exercises play an important role in academic teaching. Our E-Assessment system EASy aims to facilitate the management of exercises and supports preparation, conduction, and postprocessing of exercises. EASy supports multiple-choice tests, programming tasks, and mathematical proofs as well as verification proofs. Currently, we are developing further modules to support additional types of exercises. Experience shows that the development of parallel programs is an elaborate and time-consuming task. The Münster Skeleton Library (Muesli) is a collection of high-level concepts that facilitate the development of parallel programs. The library contains so-called algorithmic skeletons, i.e. frequently occurring parallel programming patterns, which can be easily and efficiently combined to develop parallel applications. Recently, we have evaluated the benefits and drawbacks of making use of the Java programming language for implementing skeletal frameworks like Muesli.

Software testing is essential for the creation of high-quality software. Recently, we have improved the Münster generator of glassbox test cases (Muggl). In the past, it used a constraint solver for mixed-integer linear constraints based on a branch&bound algorithm on top of a primal simplex algorithm. The new, much more efficient approach uses a branch&cut algorithm on top of a dual simplex algorithm. In addition, we have introduced a new arithmetic, which eliminates wrong solutions caused by rounding errors. Agile methods such as Scrum, Software Kanban, or Extreme Programming appeal to an increasing number of software development projects. On a first level, we analyse the course taken by some student projects, which employed agile methods to successfully deliver their artefacts. Given that case base, we are identifying common problems and potential solution patterns.

PUBLICATIONS

S. Ernsting, H. Kuchen (2012): Algorithmic skeletons for multi-core, multi-GPU systems and clusters, *Int. J. High Performance Computing and Networking*, Vol. 7, No. 2, pp.129–138

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H. Heitkötter: A Framework for Creating Domain-specific Process Modeling Languages, in: *Proc. of the 7th International Conference on Software Paradigm Trends (ICSOT 2012)*

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K. Bergener, T. A. Majchrzak: Media Choice – Influencing Factor in Virtual Team Innovation Processes. *Proceedings of the XXIII ISPIIM Conference, ISPIIM (2012)*

M. Ernsting, T. A. Majchrzak, H. Kuchen: Test Case Generation and Dynamic Mixed-Integer Linear Arithmetic Constraint Solving, in: *Proc. of the 21st Int. Workshop on Functional and (Constraint) Logic Programming (WFLP) (2012)*

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T. A. Majchrzak: Improving Software Testing: Technical and Organizational Developments. Springer Verlag (2012)

A. Zibula, T. A. Majchrzak: Developing a Cross-Platform Mobile Smart Meter Application Using HTML5, jQuery Mobile, and PhoneGap, in: *Proc. 8th International Conference on Web Information Systems and Technologies (WEBIST)*, SciTePress (2012)

C. A. Usener, T. A. Majchrzak, H. Kuchen: E-Assessment and Software Testing, in: *Interact. Techn. Smart Edu. (ITSE)*, 9(1), Emerald (2012)

T. A. Majchrzak, A. Simon: Using Spring Roo for the Test-Driven Development of Web Ap-

plications. In: *Proc. of the 2012 ACM Symp. on Applied Computing (SAC)*, ACM (2012)

S. Dyck, T. A. Majchrzak: Identifying Common Characteristics in Fundamental, Integrated, and Agile Software Development Methodologies, in: *Proc. of the 45th Annual Hawaii International Conf. on System Sciences (HICSS-45)*, IEEE Computer Society (2012)

T. A. Majchrzak, C. A. Usener: Evaluating E-Assessment for Exercises That Require Higher-Order Cognitive Skills, in: *Proc. of the 45th Annual Hawaii International Conf. on System Sciences (HICSS-45)*, IEEE Computer Society (2012)

DISSERTATIONS

U. Wolfgang: Modellgetriebene Entwicklung daten- und prozessbasierter Webapplikationen

EVENTS

Prof. Kuchen served on the program committees of five international conferences, among them:

- 21st International Workshop on Functional and (Constraint) Logic Programming (WFLP 2012), Nagoya, Japan
- 10th International Conference on Principles and Practice of Programming in Java (PPPJ 2012), Grahamstown, South Africa

AWARDS

Dr. Tim Majchrzak and our Master student Alexander Zibula received the Best Paper Award for their contribution “Developing a Cross-Platform Mobile Smart Meter Application Using HTML5, jQuery Mobile, and PhoneGap” at the WEBIST 2012.

For his Diploma thesis “An Incremental Backtrackable Solver for Mixed-Integer Arithmetic Constraints”, our student Marko Ernsting received the award for the most innovative thesis in the field of applied computer science by the association of sponsors of the Institute for Applied Computer Science at the University of Münster in collaboration with the local chamber of industry and commerce.



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KEY FACTS

INSTITUTION

- Founded in 1997
- Researchers: 7

RESEARCH TOPICS

- E-Learning
- Model Driven Software Engineering
- Parallel Programming
- Software Testing and
- Debugging



ABOUT THE INSTITUTION

The group is part of the department of Information Systems at the WWU and, consequently a member of the European Research Center for Information Systems (ERCIS). The group's focus lies on quantitative methods in information systems.

Ulrich Müller-Funk, head of the group, is a member of various scientific societies, e.g., the German Association for Classification. He was dean of the faculty from 1999 to 2000 and prorector of Münster University from 2002 to 2006.

RESEARCH TOPICS

Our research focuses on (pre)-classification and tests, clustering and feature selection. In connection with that, we are interested in multivariate measures of correlation and association, i.e. indices based on multivariate copulas or depending on some kernel. In order to actively integrate these multivariate measures into a factor selection instance, we have proposed a semi-structured process model.

In association analysis, i.e. extension of the by now classical rules, we are especially looking at rare instead of frequent item sets.

With respect to analysis of networks, i.e. substructures ("communities") and roles, we are looking into something we call the mesoscopic view. This is motivated by the fact that usual indices focus on either a single node or just a small group of nodes in a network or describe properties of the network as a whole. We believe that bet-

ween these extremes lies an area that can describe a network in a more useful way than the two approaches at the opposite ends of the spectrum.

Within fraud detection, we now look at methods indicating a deviation from the hypothetical digit distribution. The classical approach is based on the chi-square statistic which, however, requires stochastic assumptions that are unlikely to be fulfilled in various applications. For that reason, we investigate finite sample-size procedures and try to justify and validate them.

Furthermore, we are dedicated to Information Retrieval of different variations. We have experimented with homogeneity analysis using alternating least squares (HOMALS) in this area. We have used HOMALS as a dimension reduction technique that offers an alternative to common approaches like the vector space model (VSM) or latent semantic analysis (LSA). Aside from classical textbased information retrieval we have started doing work in the area of Music Information retrieval (see the section about current research projects).

All the topics mentioned above can be subsummarized under the heading non-linear methods in multivariate data analysis.

CURRENT RESEARCH PROJECTS

Feature selection: The focus now is on the distribution theory for multiple measures of dependence. Those findings will be the basis for some sort of non-linear canonical correlation analysis and tests for (in-) dependence.

In cluster stability, a small change in the data input is supposed to result in a small change of the output provided by the algorithm. Moreover, the notion is vaguely linked to the perception that outcomes are scattered around some true value or some gold standard. Sometimes there is a purely quantitative interpretation in term of sample sizes or sample replica. With that understanding the gold standard is but a limiting theoretical quantity. In order to formulate pertaining laws of large numbers it is necessary to take a statistical data model as a basis and formulate clustering for theoretical distributions as. In another case, change in input is associated with data quality, i.e. equate stability with insensitivity w.r.t. a small change in the parent distribution or w.r.t. data contamination (outliers, noise, missing values). Here the gold standard necessarily is the result obtained by means of pure data sources. In either case changes in the data input can be measured by means of standard metrics resulting in the weak-* topology or a stronger one. We are working out an axiomatic approach to indices describing the similarity of clusterings in order to cope with the topological aspect of the matter. Based on that, we are investigating the use of (sequential) ranks for clustering. The final aim is to come up with pertaining laws of large numbers.

Fraud detection: Most articles on the subject discuss the specification of a digit-distribution modelling the behaviour of nonfraudsters. In addition, we are addressing the second problem connected with

fraud detection i.e. measuring the deviation from such a digit distribution in an individual case. The standard device is the Chi-squaretest which, however is based on stochastic assumptions that are violated in many cases. For that reason, we are investigating a finite sample procedure based on the receiver operating characteristic.

Motivated by our teaching activities – and partly deviating from our non-parametric and non-linear thinking – we are looking at o Partial least squares, i.e. a method to incorporate the path model information into block design of the outer model o Concentration indices axiomatization (theoretical quantities, limit theorem)

Music Information Retrieval: In the area of Music Information Retrieval (MIR), the group has collaborated with the Fraunhofer-Institute for Digital Media Technology (IDMT) within the REWIND project (REVerse engineering of audio-VIsual coNtent Data). As part of a master thesis tutored by the group, software for detecting plagiarism cases in audio content was developed. The thesis written by Florian Müller gave rise to further investigating suitable algorithms for plagiarism detection.

PUBLICATIONS

N. Büchel, K. F. Hildebrand, U. Müller-Funk: Factor Preselection and Multiple Measures of Dependence, in: Proc. of the 35th Annual Conference of the German Classification Society, GfKI (2011)

C. Dittmar, K. F. Hildebrand, D. Gaertner, M. Wings, F. Müller, P. Aichroth: Audio Forensics Meets Music Information Retrieval – A Toolbox for Inspection of Music Plagiarism, in: Proc. of 20th European Signal Processing Conference

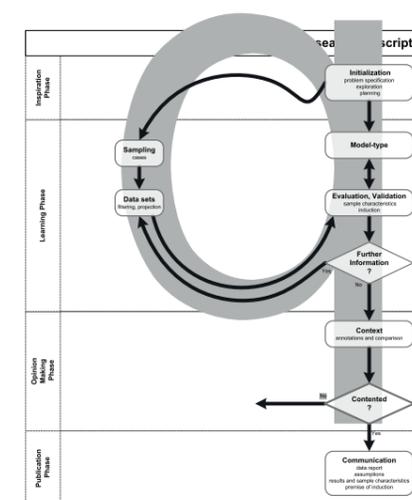
Blugosz, S., Müller-Funk, U.: Ziffernanalyse zur Betrugserkennung in Finanzverwaltungen, in: Working Papers of the Institute for Information Systems, University of Münster

H. Heitkötter, K. F. Hildebrand, C. A. Usener: Mobile Platforms as Two-sided Markets, in: Proc. of the 18th Americas Conference on Information Systems, AMCIS (2012)

K. F. Hildebrand, D. Gärtner, C. Dittmar, F. Müller: Evaluating Similarity Measures for Plagiarism Detection in Melody Transcriptions, Submitted at 36th Annual Conference of the German Classification Society, GfKI (2012)

K. F. Hildebrand: Supporting Selection of Statistical Techniques, Submitted at 36th Annual Conference of the German Classification Society, GfKI (2012)

I. Terveer, S. Terveer: Analysis-Brückenkurs für Wirtschaftswissenschaften. Konstanz und München 2011



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KEY FACTS

INSTITUTION

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RESEARCH TOPICS

- Statistical Learning
- Probability Models
- Network Theories
- Information Retrieval

UNIVERSITY OF MÜNSTER – RESEARCH GROUP FOR COMMUNICATION AND COLLABORATION MANAGEMENT

› University of Münster www.wi.uni-muenster.de/kuk



ABOUT THE INSTITUTION

Organizations are increasingly relying on information technology to support communication and collaboration among their employees. This is caused by a growing amount of distributed tasks, need for expert knowledge, and project-based work. At the same time, the use of public social media (e.g., Twitter and Facebook) and mobile services has tremendously influenced today's society and therefore strongly affects organizations.

The ERCIS Research Group Communication and Collaboration Management (RGCC) at the University of Münster, headed by Prof. Dr. Stefan Stieglitz, investigates organizational, social, and economic impacts of those massive changes of the organizational environment. The research group, now consisting of five research assistants and 12 student assistants, experienced a very busy, exciting, and successful year 2012. Two research projects funded by the German Research Association and the Federal Ministry of Education and Research started in May and August and will run until 2015. In winter term 2012/13 Stefan Stieglitz, Tobias Brockmann, Christian Meske, and Linh Dang-Xuan have been awarded the title of Visiting Scholar in the Discipline of Business Information Systems at the University of Sydney Business School. In a joint project with Dr. Riemer, the scholars investigate data derived from a large enterprise social network (Yammer).

In 2012, the research group published more than 15 research articles in journals and conference proceedings. Among others, papers were successfully published in Journal

of Management Information Systems (JMIS) and MIS Quarterly Executive (MISQE). Moreover Stefan Stieglitz and Linh Dang-Xuan were honored with a Best Paper Award at the 45th Hawaiian International Conference on System Science (HICSS).

Besides this, the research group again organized the WWU Münster Social Media Barcamp in May (see page 85). Furthermore, Stefan Stieglitz has been active as academic head in the ERCIS Competence Center Smarter Work (see page 76).

RESEARCH TOPICS

Overall, the research group is focusing on three research fields which all deal with the impacts of social media and mobile services on organizations.

As a consequence of the upcoming of social media, the traditional "speaker role" of organizations in public communication is blurring. Therefore, it is becoming increasingly important for enterprises and other organizations (particularly political organizations) to recognize relevant issues and react early on as well as to intervene in discussions if necessary. Social Media Analytics, in this context, is needed to better understand needs of employees, improve the community engineering processes, and to identify innovations within those unstructured data.

In recent years, the diffusion of smartphones and other mobile devices such as tablets has rapidly increased. This offers new potential for organizations and significantly influences the society (e.g. Work-Life

Integration). The research group investigates how mobile services like mobile application might enable business values in enterprises and how decision makers can manage the transformation process. Furthermore, impacts on the society towards the mobile use of value added services as well as changes in communication behavior are analyzed.

Communication in social networks is based on voluntariness. However, the introduction and operation of collaboration software can also be understood as a project, which requires transformation and management activities. Empirical studies are needed to investigate the contradictory contexts of voluntariness and organizational hierarchies. Mostly based on interviews and surveys, the group explores community management including benefits and risks of social media provision (e.g. social networks, microblogs, and virtual worlds) for companies and stakeholders (employees, customers, partners).

CURRENT RESEARCH PROJECTS

Dynamics of Issues in Twitter: Funded by the German Research Association (DFG) and in cooperation with the Ludwigs-Maximilians-University Munich (Prof. Dr. Neuberger) network and content analyses of ongoing topics in Twitter are conducted. Goal of the project is to find mechanisms of rising topics in Twitter which have economic or political relevance. The project will run from August 2012 until July 2015.

Discourse Analysis in Social Media: In this interdisciplinary research project, which started in May 2012, four German universities cooperate to investigate and develop new methods of social media analytics and eHumanities. One major goal is to combine the time-consuming manual content analysis with methods of automatic text analysis (e.g. sentiment analysis, opinion mining, text classification). Therefore, content of Facebook, Twitter, and blogs will be tracked and analyzed on a large scale. The overall project is funded by the Federal Ministry of Education and Research for three years and it is coordinated by Stefan Stieglitz at University of Münster www.social-media-analytics.org

Social Media Monitoring: Analysis of Social Networks for Enterprises' Issue Management (AsNIM): The research group cooperates with the QUT for a joint research project in the field of brand communication in social media. The German Academic Exchange Service (DAAD) and the Australian ATN fund the project for two years from 2011-2012. The interdisciplinary project combines methods and theories from Information Systems and Communication Studies in order to collect and analyze data from online social networks (particularly Twitter) in regard to business relevant topics.

EMUVE – Entrepreneur Multi-User Virtual Environments: The goal of the EU project two-years project was to develop a training center based on a 3D environment to equip students with knowledge of entrepreneurship and to investigate the potentials of virtual worlds for collaboration. The

project involved researchers from Germany, Spain, Portugal, and Italy and finished in September 2012. Results and further information can be found at www.emuve.eu

Museum 2.0 – Virtual Environments for Collaboration: In cooperation with the regional association of Westphalia-Lippe (LWL), the state museum for art and art history is being reconstructed within the virtual 3D-world Unity 3D. Users are able to enter the museum regardless of time and location. Furthermore, the interactive possibilities of virtual worlds are being exploited to enable innovative utilization concepts for exhibitors and visitors. The aim of the two-years project (2011–2013) is to investigate virtual worlds as communication and collaboration environments.

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Youtube: www.youtube.com/wikukunims

PUBLICATIONS

S. Stieglitz, L. Dang-Xuan (2012): Emotions and Information Diffusion in Social Media – An Investigation of Sentiment of Microblogs and Sharing Behavior. Journal of Management Information Systems (JMIS) (forthcoming)

S. Stieglitz, T. Brockmann (2012): Increasing the Organizational Performance by Reorganization into a Mobile Enterprise. MIS Quarterly Executive (MISQE) (forthcoming)



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KEY FACTS

INSTITUTION

- Launched in April 2010
- 4 Researchers
- Joint projects with industry partners – ERCIS Competence Center Smarter Work

RESEARCH TOPICS

- Relevance of Social Media for Business
- Community Engineering
- Social Media Monitoring
- Collaboration in Virtual Worlds





ABOUT THE INSTITUTION

The Chair of Computer Science in the Department of Information Systems at the University of Münster, Germany, is a member of the European Research Center (ERCIS). Gottfried Vossen, Professor of Computer Science, is a Fellow of the German Computer Science Society (GI), Honorary Professor at the University of Waikato Management School in Hamilton, New Zealand, and the European Editor-in-Chief of Information Systems, an international journal. He is also Associate Editor of the International Journal on Semantic Web and Information Systems, university contact person of the German Computer Science Society as well as speaker of the local GI chapter. Furthermore, he is deputy chairman of the steering committee of the German information technology certification agency Cert-IT, Editor-in-Chief of the dissertation series “Databases and Information Systems” (DISDBIS) of aka Verlag, as well as member of several editorial boards and program committees.

RESEARCH TOPICS

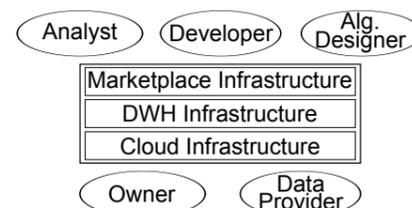
DBIS’ goal is to advance the database field (and its surroundings) so that it becomes an integrated, embedded technology in all aspects of computing, and that it meets the challenges of the IT future with regards to Internet, Web, and mobility. We consider the use of business process technology an important tool in this context.

CURRENT RESEARCH PROJECTS

A current highlight among the research topics our group is working on (cf. the sidebar on the right), is our engagement

with the topic of cloud computing and its related fields. By now, our group can showcase a respectable number of publications related to the sourcing of IT services from “the cloud”.

Earlier this year, Gottfried Vossen – together with ERCIS colleagues Till Haselmann (DBIS Group) and Thomas Hoeren (ITM) – published a book on cloud sourcing that primarily aims at small and medium-sized enterprises (SMEs). This practice-centered guide was complemented by Till Haselmann’s dissertation on the same topic that examines strategies for and economic aspects of cloud sourcing as well as opportunities for cooperations of SMEs in this context. These two cornerstones are accompanied by a variety of conference and journal publications (see below). Having been reinforced by three new research assistants, the DBIS Group will continue to pursue open research questions in this field; this includes expanding interdisciplinary research in the context of the ERCIS Cloud Computing Competence Center.



A new stream of research that we are working on is marketplaces for data in the cloud. Building on scalable cloud compu-

ting infrastructures, data marketplaces are intermediaries between organizations that would like to buy data in order to gain a competitive advantage and organizations that seek a monetization of their data assets. During the past year, we have conducted research on data marketplaces that led to the identification of a general data marketplace architecture and agents that regularly interact with data marketplaces (see the figure below for a simplified view) Our further research interest in this area is to gain advanced insights into data marketplaces, including business processes, pricing of data and data-related services as well as understanding the behaviors of agents on a data marketplace.

PUBLICATIONS

F. Schönthaler, G. Vossen, A. Oberweis, Th. Karle, (2012): Business Processes for Business Communities; Springer-Verlag, Berlin, 2012

G. Vossen, Th. Hoeren, T. Haselmann (2012): Cloud-Computing für Unternehmen – Technische, wirtschaftliche, rechtliche und organisatorische Aspekte; dpunkt.verlag, Heidelberg 2012

G. Vossen, K.-U. Witt (2012): Grundkurs Theoretische Informatik – Eine anwendungsbezogene Einführung für Studierende in allen Informatik-Studiengängen; Friedr. Vieweg & Sohn Verlagsgesellschaft, Wiesbaden, 5. durchgesehene Auflage 2012

A. Abello, J. Darmont, L. Etcheverry, M. Golfarelli, J.-N. Mazon, F. Naumann, T. Bach Pedersen, St. Rizzi, J. Trujillo, P. Vassiliadis, G.

Vossen (2012): Fusion Cubes: Towards Self-Service Business Intelligence, to appear in International Journal of Data Warehousing and Mining (IJDWM)

H. J. Ahn, P. Childerhouse, G. Vossen, H. Lee, (2012): Rethinking XML-Enabled Agile Supply Chains, International Journal of Information Management 32, 2012, 17–23

P. Childerhouse, H. J. Ahn, Ch. Basnet, H. Lee, W. Luo, G. Vossen (2012): Logistical Service Provider Triadic Relational Dynamics, to appear in International Journal of Industrial Engineering: Theory, Applications and Practice, 2012

St. Dillon, F. Stahl, G. Vossen (2012): Towards The Web in Your Pocket: Curated Data as a Service, to appear in Proc. 4th International Conference on Computational Collective Intelligence Technologies and Applications (ICCCI) 2012, Ho Chi Minh City, Vietnam

M. Dugas, G. Vossen (2012): CityPlot – Colored ER Diagrams to Visualize Structure and Contents of Databases, Datenbank-Spektrum 12(3) 2012, 215–218

Ch. Forster, G. Vossen (2012): Exploiting XML Technologies in Medical Information Systems, 25th Bled eConference (eDependability: Reliable and Trustworthy eStructures, eProcesses, eOperations and eServices for the Future) 2012, Bled, Slovenija, 70–83

St. Hagemann, G. Vossen (2012): Web-Wide Application Customization: The Case of Mashups, International Journal of Information System Modeling and Design 3 (1) 2012, 23–47

M. Häsel, Th. Quandt, G. Vossen (eds.): Towards A Multi-Discipline Network Perspective, Dagstuhl Manifestos 1 (1) 2012, 1–13

P. Loos, J. Lechtenbörger, G. Vossen, A. Zeier, J. Krüger, J. Müller, W. Lehner, D. Kossmann, B. Fabian, O. Günther, R. Winter (2012): In-memory Databases in Business Information Systems, Business Information Systems Engineering 6/2011, 389–395 and

In-Memory-Datenmanagement in betrieblichen Anwendungssystemen; Wirtschaftsinformatik 6/2011, 383–390

A. Muschalle, F. Stahl, A. Löser, G. Vossen (2012): Pricing Approaches for Data Markets, 6th International Workshop on Business Intelligence for the Real Time Enterprise (BIRTE) 2012, Istanbul, Turkey

M. Schneider, G. Vossen, E. Zimanyi (eds.): Data Warehousing: from Occasional OLAP to Real-time BI, Dagstuhl Reports 1 (9) 2011, Schloss Dagstuhl – Leibniz-Zentrum für Informatik, Dagstuhl Publishing, Germany, 1–25

F. Stahl, F. Schomm, G. Vossen (2012): Marketplaces for Data: An Initial Survey, Working Paper No. 14, European Research Center for Information Systems, Juli 2012

F. Stahl, G. Vossen (2012): From Unreliable Web Search to Information Provisioning based on Curated Data, EMISA Forum 32 (2) 2012, 6–20

G. Thies, G. Vossen (2012): Identification, Specification, and Development of Web-Oriented Architectures, International Journal of Information Systems in the Service Sector (IJSSS) 4 (1) 2012, 1–22

G. Vossen (2012): The Process Mining Manifesto – An interview with Wil van der Aalst, Information Systems 37, 2012, 288–290

G. Vossen, Haselmann, T. (2012): Die neue Rolle des “Chief Cloud Officer” (CCO), IT-Governance (journal of the ISACA Germany Chapter e. V.) 12, 2012, 12–16

DISSERTATIONS

Till Haselmann: Cloud-Services in kleinen und mittleren Unternehmen: Nutzen, Vorgehen, Kosten; MV-Verlag, Münster, 2012



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KEY FACTS

RESEARCH TOPICS

- Single Source
- MoVIS – Mobile Visitor Information System
- Database-as-a-Service
- Web oriented Architectures
- Web 2.0: New Services and Mashups
- Data Warehouse Schema Design
- Book of the Future
- C4: ERCIS Cloud Computing Competence Center

EVENTS

ERCIS Launch Pad, annually in fall

BEM – BORDEAUX MANAGEMENT SCHOOL – DEPARTMENT OPERATIONS MANAGEMENT AND INFORMATION SYSTEMS



BECOMES



ABOUT THE INSTITUTION

A pioneer in French elite Grandes Ecoles system, BEM-Bordeaux Management School, founded in 1874, provides a high value-added education in business administration and management. 20.000 companies and professional organizations work regularly with BEM, providing active support for its educational programs and research. The “Operations Management and Information Systems” department is known for its competency in purchasing, logistics, supply chain and Information Systems management. The team members are highly recognized as experts in the area of Information and Decision Science, in Knowledge Management and Organizational Learning research fields.



RESEARCH TOPICS

The areas of research pursued by the team members are wide-ranging: developing business models of electronic marketplaces and measurement of electronic service quality, a systemic analysis of organizational design and the performance

of inventory control systems, formal modeling for the different organizational learning mechanisms and causal mapping applications in managerial decision-making.

CURRENT RESEARCH PROJECTS

Several research projects are conducted by the team members in close collaboration with industrial partners.

Innovation process from is in a multi-national company

Relying on the extensive study of a multi-national company (The group Legrand, a world leading firm in electric appliances industrial sector), this work proposes a process view of the way firms balance tensions between exploring new knowledge and exploiting old one. First, ideas are generated throughout the organization. These ideas are funneled towards specific project teams that further develop and refine them. Second, projects are assessed by the top management. Accepted projects are then progressively transformed into exploitable products, following a transformative learning process. We then make propositions regarding the role information systems can play in sustaining this process. Regarding the first phase of the cycle, we will focus on systems that help sustaining idea generation and balancing explorative and exploitive projects in the technologies portfolio of the firm. Regarding the second phase, we will look at information systems that could be useful in supporting knowledge transfer and knowledge interpretation across a multi-national company. This project has been granted (18.000) by the CIGREF foundation, and lasted 18 months.



Summary of the research work of prodige

BEM has been involved in the research project “PRODIGE” since November 2009. The project is funded (2.3 million) by the National Agency of Research (ANR, France) and is conducted in collaboration with the University of Bordeaux 1, the engineering school EIGSI la Rochelle and the companies GT SA, Geoloc Systems and Inovelec. The aim of the project is to develop a technical and an organizational solution for an intelligent routing of products within supply chains. A prototype of the technical solution has been developed based on the RFID technology and geolocation solutions. In the first phase of the experimental part of the project, the performance of the prototype has been tested in the case where the RFID tags are placed on pallets loaded on a static truck. The optimal position of the antennas in the truck and the optimal location of the tags on the pallets have also been determined. The next steps of the research consist of performing other tests of the prototype when the truck moves in a real route to make some pick-up and delivery tasks. These simulations aim at testing some developed routing optimization algorithms, the reading of the tags when pallets are loaded or unloaded during the route and also the information system that controls the pallets during the entire transportation activity.



PUBLICATIONS

O. Allal-Chérif (2012): Improving Sustainable Procurement: the Role of Information Systems, International Journal of E-Services and Mobile Applications, Vol. 4 Issue 1, pp. 42–58

J. Barjis, A. Gupta, R. Sharda, T. Bouzdine-Chameeva, P. D. Lee, A. Verbraeck (2012): Innovative Teaching Using Simulation and Virtual Environments, Interdisciplinary Journal of Information, Knowledge, and Management, Vol 8, pp. 64–89

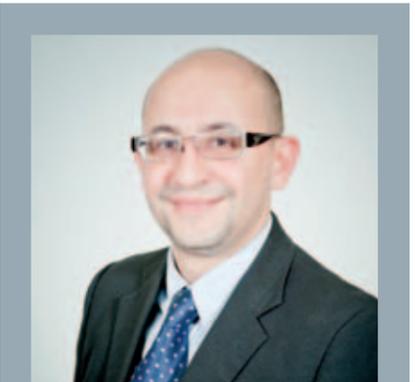
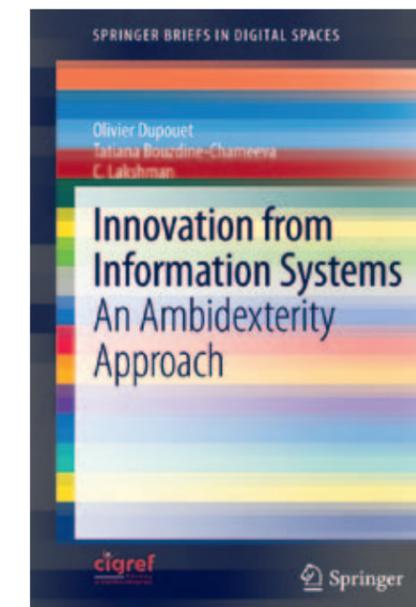
O. Dupouët, T. Bouzdine-Chameeva, C. Lakshman (2012): Innovation from Information Systems: Ambidexterity Approach, Springer Briefs in Digital spaces, Springer Edition, 94

M. Ninomiya, T. Bouzdine-Chameeva (2012): Distribution System in Bordeaux: Separation of Production and Sales in Wine Sector, Fukuoka University Review of Commercial Sciences, Vol. LVI, N° IV (No 206), March 2012, Central Research Institute, Fukuoka University Japan, pp. 377–397

V. Podinovski, T. Bouzdine-Chameeva (2012): Weight Restrictions and Free Production in Data Envelopment Analysis, Operations Research, November–December 2012

EVENTS

In celebration of the 20th anniversary of the “Association Information et Management” (AIM), the 17th AIM Symposium was held on 21, 22 and 23 May 2012 in Bordeaux, France, and dedicated to the following theme: “Towards responsible and ethical business management: What contribution from information systems?”



CONTACT DETAILS

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KEY FACTS

INSTITUTION

- Founded in 1874
- One of the oldest „Grandes Ecoles“ en France
- 12 programs
- 70 permanents professors
- EQUIS, AMBA and AACSB accredited

RESEARCH TOPICS

- IS in Operations Management
- Purchasing and IS
- e-distribution, e-commerce, e-business
- Supply Chain and OM Decision-Making & Decision Analysis
- Organizational Learning/ Knowledge Management/Competences
- Electronic Marketplaces
- Serious games

QUEENSLAND UNIVERSITY OF TECHNOLOGY – SCIENCE AND ENGINEERING FACULTY – INFORMATION SYSTEMS SCHOOL



Queensland University of Technology



ABOUT THE INSTITUTION

Queensland University of Technology's Information Systems School is the premier Australian institution for Information Systems research and the only university to achieve a top ranking for this field in a comparative assessment of research quality across 41 universities nationally. The Information Systems School has a vision to change the world by connecting processes, information, services and people, and set the template for the future of this field through excellent research, teaching and provision of services to the profession. QUT is ranked higher than any other university in Australia or Europe (2008–2010) for research productivity by publications and international citation analysis in the top six Information Systems journals worldwide. QUT has also produced more award-winning doctorate students in the field than any other Australian university, with students awarded best Australian PhD thesis in Information Systems. Our solid reputation has led to the university successfully hosting the most significant

regional IS conferences in this discipline (ACIS 2010, PACIS 2011). At the start of 2012, the Information Systems School became one of six schools in the newly formed Science & Engineering Faculty at QUT. With more than 9,000 students studying over 100 courses and more than 800 researchers working towards new discoveries, the faculty is QUT's realisation of the goal to be a leader in the development of courses and research in the fields of science, technology, engineering and mathematics. A new \$230 million Science and Engineering Centre will further integrate teaching and research in the science and engineering disciplines in a world-leading model and dynamic community hub at our Gardens Point campus. The Information Systems School is perfectly placed in the new building, allowing for collaborations with other disciplines and schools.

RESEARCH TOPICS

Research within the School covers the current and future fundamental aspects of processes, services and information systems. The Business Process Management (BPM) group is one of the most influential in the world, and its research is widely quoted and adopted by organisations. Research members have authored and edited leading BPM textbooks, and developed core artefacts including the open source workflow environment YAWL, a BPM maturity model and the Apromore repository. BPM is concerned with empirical, conceptual, theoretical, formal, and technological research that enables the provision of effective process support to organisations.

Growing expertise in process performance management, governance, modelling, verification, maturity models, automation, mining, and configuration has pushed QUT to the forefront of BPM. The BPM executive program provides professional education with a focus on research-informed, cutting-edge insights covering latest process management approaches. Services Science expertise is diverse and has a dedicated focus on the theoretical foundations, applications, technologies and impacts of services across organisations, industries, ubiquitous computing environments and the Web. Key research focuses on empirical and business-related methodologies, conceptualisation of services, architecture and provisioning of services, service delivery platforms, public/private cloud infrastructure, and mobile and smart device service consumption. QUT aims to develop new models and capabilities for service innovation beyond conventional organisational and application boundaries in complex business ecosystems and Web-based communities. Information Ecology investigates understanding, modelling, enhancing and enabling contextual connections between information, people and their environment. It aims to improve how people and enterprises share, comprehend, and effectively use and interact with structured and unstructured information. Binding these investigations is the contextual connections from which meaning is developed from information, whether mediated through systems or interactions with other people, individually, or in groups.

CURRENT RESEARCH PROJECTS

The Information Systems School is hosting several large funded initiatives. Projects funded by the Australian Research Council include:

- Airports of the Future
- Risk-aware Business Process Management
- Information Systems Impact
- Cost-aware Business Process Management
- Advanced Process Model Repositories
- Process Design for Decision-Making

Two industry-funded Chairs, The Brisbane Airports Corporation Chair for Airport Innovation and the Woolworths Chair of Retail Innovation showcase significant commitment and appreciation by industry partners. As Chair of Airport Innovation, Associate Professor Alexander Dreiling will focus on the use of emerging technologies for improved airport operations. As Chair of Retail Innovation, Professor Jan Recker will lead research in developing new ways of identifying innovation potential in retail, sponsored by an investment of nearly \$1 million for three years. Other research focuses on the use of social media for organizational innovation, and research on Business Service Management as part of a Cooperative Research Centre.

PUBLICATIONS

J. Recker: Scientific Research in Information Systems: A Beginner's Guide. Springer, Heidelberg, Germany

J. Vom Brocke, S. Seidel, J. Recker: Green Business Process Management: Towards the Sustainable Enterprise. Springer, Heidelberg, Germany

M. Dumas, M. La Rosa, J. Mendling, H.A. Reijers: Fundamentals of Business Process Management, Springer, Heidelberg, Germany

A. Schaefer, J. Moormann, M. Rosemann (2012): The Rise of Smartphone Apps: Opportunities for Customer-Centric Retail Banking. Banks & Bank Systems, Vol. 7, No. 1, pp. 64–72

Indulska, M., Hovorka, D., Recker, J. (2012): Quantitative Approaches to Content Analy-

sis: Identifying Conceptual Drift Across Publication Outlets. European Journal of Information Systems, Vol. 21, No. 1, pp. 49–69

Wil M. P. van der Aalst, Niels Lohmann, Marcello La Rosa (2012): Ensuring correctness during process configuration via partner synthesis. Inf. Syst. 37(6): 574–592

S. Seidel, J. Recker, J. vom Brocke (In Press): Sensemaking and Sustainable Practicing: Functional Affordances of Information Systems in Green Transformations. Accepted for publication in: Management Information Systems Quarterly, forthcoming

Alharbi, Awadh & Middleton, Michael R. (2012): The relationship between academic library usage and educational performance in Kuwait. Library Management, 33(1/2), pp. 86–94

J. Recker, N. Safrudin, M. Rosemann (2012): How Novices Design Business Processes. Information Systems, Vol 37, No. 6, pp. 557–573

DISSERTATIONS

Awahdh Al Harbi: The relationship between academic library usage and perceived personal performance in Kuwait

Ahmad Rabaai': Evaluating the Success of Large scale, Integrated Information Systems through the Lens of IS Impact and IS Support

Cheryl Lynn Stenstrom: Factors Influencing Funding Decisions by Elected Politicians at the State/Provincial Level: A Case Study of Public Libraries in Canada

Diana Kiyo Wakimoto: Queer community archives in California since 1950

Wen Juan Wang: Supply chain management systems benefits: the expectation-confirmation theory perspective

Ligang Zhang: Towards spontaneous facial expression recognition in real-world video

Thomas Kohlborn: Decision-Support for Service Bundling in Developing Government One-Stop Portals



CONTACT DETAILS

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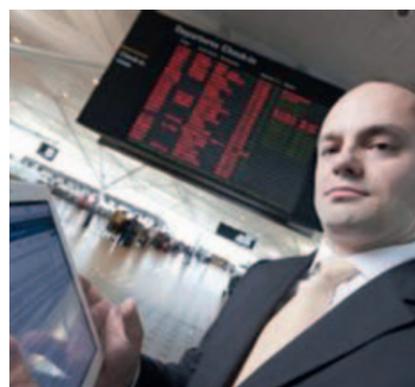
KEY FACTS

INSTITUTION

- Established in 1989
- 40,000 students
- Information Systems School, 29 academics, 90 PhD

RESEARCH TOPICS

- Business Process Management
- Services Sciences
- Information Ecology



Alexander Dreiling –
BAC and QUT Airport Chair of Innovation



Copenhagen Business School
HANDELSSHØJSKOLEN



ABOUT THE INSTITUTION

The Department of Information Technology Management (ITM) is a multi-disciplinary department that embraces theories and methods from the fields of information systems, business administration, computer science, organization studies, political science, economics, sociology, psychology and communication theory. The mission statement of the department is: Co-creating knowledge with enduring consequences through the study of the interrelationships among people, information and technology. The Association of Information Systems (AIS) is the core community of the department. The AIS community is inclusive and open to all the current research areas of the department. With our journal contributions to the Senior Scholars' Basket of Journals we are ranked number two in Europe. Other communities are also relevant, e.g., human-computer interaction, e-government, organization studies, learning sciences, and software design and development. We strive for a high level of collaboration with representatives from industry and society (also called engaged scholarship) while also organizing our research to accommodate for the fast-moving pace and radical innovation that characterizes the IS research field. We achieve this by organizing part of our research around themes that address societal or business challenges. The themes are topical, popular, inter-disciplinary and dynamic in nature. In addition to the research themes, ITM still maintains the more traditional research areas for the disciplinary development of its researchers. The faculty and administrative staff of

the department are primarily teaching within the following degree programs: Bachelor in Business Administration and Information Systems, Bachelor in Information Management, MSc in Business Administration and Information Systems and the MSc in IT (eBusiness).

RESEARCH TOPICS

The Department of IT Management conducts research within the following research areas related to information technology and information systems: Design, Implementation, Use and exploitation and Information management.

The research at ITM is organized around a number of cross disciplinary themes and we cover a number of research areas like mergers & acquisition, social media, cashless society, or open data. Themes are emergent, topical, inter-disciplinary and dynamic in nature. They emerge from bottom up activities where researchers find that they share a common excitement about a new phenomenon and encompass several tenured faculty members who meet regularly about a common research phenomenon over a longer period of time.

CURRENT RESEARCH PROJECTS

Digital Piracy

There are next to no hard, independent data on game piracy, across AAA-levels to indie games, despite numerous reports about massive piracy rates reported for all types of games (as high as several hundred percent). The Digital Game Piracy project is in collaboration with international colleagues collecting extensive data about

bittorrent activities for hundreds of games, correlating these with geographic-, market- and game variables to explore the patterns of game piracy across national boundaries. This research will aid the gaming industry by providing an understanding of the dynamics of the market and enable it to cater to it more effectively.

Cashless Society

The vision behind „Cashless Society“ is to make Denmark the first cashless society in the world. Compared with the rest of the world, the Danish based entirely unique, and the cashless society will only further strengthen Denmark's international competitiveness. The idea of a cashless society leads to a number of issues and challenges that will be explored and investigated. Some of the key research questions are: How does the digitization of money affect the use and experience of money? How does the digitization of transactions influence the performance of and preference for different payment systems? How can we design a digitized payment ecosystem? The complexity in the challenges requires us to apply multi methodological approach ranging from anthropological studies, field studies, experiments, and design science in close collaboration with practice, including, including The Danish Bankers Association, NETS, Dansk Bank, Cell Point Mobile, IBM, and Innovation Lab.

NEXT-TELL

Our vision of the 21st Century classroom is that of a technology- and data-rich environment that supports teachers and stu-

dents to use various sources of information generated in the classroom and during homework in pedagogical decision-making. Such an information infrastructure will improve instruction, diagnosis, workflow, and productivity as well as enhance collaboration and communication among students, teachers, and other stakeholders, especially parents. Teachers in particular will be supported in their function as diagnosticians who have to make constantly and rapidly decisions in a highly dynamic and complex environment. To bring this vision to life, we collaborate in the project NEXT-TELL, an integrating project (ip) in the ICT challenge of the 7th framework programme of the European Commission. NEXT-TELL's main objective is to provide, through research and development, computational and methodological support to teachers and students.

3gERP

The enterprise resource planning (ERP) software market is deeply fragmented. For small and medium sized enterprises (SME) the number of vendors is around 10.000 globally. With so many options market leadership is difficult, standardization next to impossible and the achievement of economy of scale not easy. In this context, the 3gERP project aims to develop a standardized, yet highly configurable and flexible, global ERP system for SME's based on fundamentally new software architecture. This would make implementation and maintenance possible at a fraction of their current cost.

PUBLICATIONS

Suprateek Sarker, Saonee Sarker, Arvin Sahaym, Niels Bjørn-Andersen: Exploring Value Cocreation in Relationships Between an ERP Vendor and its Partners: A Revelatory Case Study, in: MIS Quarterly, Vol. 36, No. 1, 2012, p. 317–338

Torkil Clemmensen: Usability Problem Identification in Culturally Diverse Settings, in: Information Systems Journal, Vol. 22, No. 2, 03.2012, p. 151–175

Hanne Sørum, Kim Normann Andersen, Ravi Vatrapu: Public Websites and Human-Computer Interaction: An Empirical Study of Measurement of Website Quality and User Satisfaction, in: Behaviour and Information Technology, Vol. 31, No. 7, 2012, p. 697–706

Stefan Henningson, Helle Zinner Henriksen: Inscription of Behaviour and Flexible Interpretation in Information Infrastructures: The Case of European e-Customs. In: Journal of Strategic Information Systems, Vol. 20, No. 4, 12.2011, p. 355–372

Morten Hertzum, Torkil Clemmensen: How do Usability Professionals Construe Usability?, in: International Journal of Human-Computer Studies, Vol. 70, No. 1, 2012, p. 26–42

Ioanna Constantiou, Morten Fosselius Le-garth, Kasper Birch Olsen: What are Users' Intentions Towards Real Money Trading in Massively Multiplayer Online Games? In: Electronic Markets, Vol. 22, No. 2, 2012, p. 105–115

Kim Normann Andersen, Rony Medaglia, Zinner Henriksen: Helle/Social Media in Public Health Care: Impact Domain Propositions, in: Government Information Quarterly, Vol. 29, No. 4, 2012, p. 462–469

Frank C. Braun, Michel Avital, Ben Martz: Action-Centered Team Leadership Influences More than Performance, in: Team Performance Management, Vol. 18, No. 3, 2012, p. 176–195

Daniel Rudmark, Elias Arnestrand, Michel Avital: Crowdpushing: The Flip Side of Crowdsourcing, in: ECIS 2012 Proceedings. www: Association for Information Systems. AIS Electronic Library (AISeL), 2012. p. 1–12



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KEY FACTS

INSTITUTION

- 20 tenured faculty
- 16 PhD candidates
- Plus a number of assistants, lecturers, adjuncts, external employees

RESEARCH TOPICS

- Information Management
- Social Media Management
- Social Media Analytics
- IT in Mergers and Acquisitions
- IT Strategy and Organization
- Internet of Things
- Open Data, Big Data
- Electronic Communication
- Human Computer Interaction
- Systems Development
- E-Government

UNIVERSITY OF TWENTE – CENTRE FOR TELEMATICS & INFORMATION TECHNOLOGY – DEPARTMENT OF INDUSTRIAL ENGINEERING & BUSINESS INFORMATION SYSTEMS

UNIVERSITY OF TWENTE.



ABOUT THE INSTITUTION

The University of Twente is a young research university that celebrated its 50th anniversary in 2011. High tech, human touch. That is the UT. Some 3,300 scientists and other professionals working together on cutting-edge research, innovations with real-world relevance and inspiring education for more than 9,000 students. The enterprising university encourages students to develop an entrepreneurial spirit. The UT has ICT and Information Systems Research among its focus areas. The Center for Telematics and ICT (CTIT) is the largest ICT research institute in the Netherlands and among the largest in Europe. CTIT is involved in more than 30 EU funded research projects and generates around 7 spinoff companies per year. CTIT recently co-founded ICT labs, a European EIT dedicated towards accelerating ICT innovations in business.

As of Feb 1st, 2012, The Information Systems and Change Management department (ISCM) merged with the departments of Operational Methods for Production and Logistics and Financial Engineering. The newly established department is named IEBIS, Industrial Engineering and Business Information Systems. Researchers in IEBIS work closely with other departments in CTIT on numerous Information Systems research projects.

RESEARCH TOPICS

The focus of our research is on the logistics, healthcare and services sector. We have a special interest in decision support systems and inter-organizational

systems connecting networks of businesses and government. We study novel ways of organizing networks such as dynamic global sourcing and multi-agent coordination. We apply quantitative models and algorithmic approaches, simulation and gaming, ICT architecture and business modeling and prototyping to create and evaluate innovative concepts.

CURRENT RESEARCH PROJECTS

IEBIS is involved in and has initiated several innovative research projects. Often these are done in collaboration with other departments embedded in the CTIT research institute. This assures the inter-disciplinary approach that is required to successfully transform static supply chains in the dynamic networks of businesses and government. Moreover, national partners include the Dutch Top institute for Logistics Dialog, research institutes TNO and Novay. Furthermore, innovative ICT companies, businesses and government are involved in the projects. See below a short description of some of these ongoing research projects:

- Catalog – Ebusiness architecture and fulfillment
- COSMOS – The design of a method to support benefits identification and distribution in an inter-organisational setting.
- IOP-GENCOM – Business modeling using multiple architectural layers to arrive at a solution architecture that describes both business value and process and service architecture
- BATMAN – Barge Terminal Multi-Agent Network. Design and implementation of

- an inter-organisational system for dynamic coordination between terminals and barge operators in the port of Rotterdam
- 4C4More – Design and implementation of cross chain control centers to collaborate and coordinate multi party supply chains
- Synchro-Modal control tower – design and implementation of a real time synchro modal information infrastructure
- Sense & Response in distribution of high-sensitive products – Exploring the benefits of the use of smart sensors in global supply chains
- iQMSS – Instrument for Quality Measurement of Semantic Standards. Design and Validation of a quality instrument to improve standards for semantic interoperability
- Design Strategies for Social Participation – Discovering successful strategies to increase community network participation and engagement through social systems
- Social Systems for Team Coordination – Designing tools, visualisations and metrics for social network data mining to improve coordination in teams
- Information coordination for disaster relief – Using multi-agent systems to support coordination in disaster relief operations
- EPD adoption – A longitudinal study in adoption of Electronic Patient Records
- Business Gaming Framework – the development and use of business gaming to transform business to business relationships
- MEAPS – Methodology Engineering Approach for Professional Services
- BSc and MSc in Business and IT Programs.
- Elsevier magazine in the annual study survey again ranked these programs as nr1 Business Information Systems pro-

grams in the country. 20 BSc and 30 MSc students Business & IT received their diplomas this year.

PUBLICATIONS

Amrit, Chintan and Hillegersberg van, Jos and Diest van, Bart (2012): Can Anybody Help?: Mitigating IS Development Project Risk with User, in: 45th Hawaii International Conference on System Sciences, HICSS 2012, January 4–7, 2012, Maui, Hawaii, USA

Douma, A.M. and Hillegersberg van, J. and Schuur, P.C. (2012): Design and evaluation of a simulation game to introduce a Multi-Agent system for barge handling in a seaport. *Decision support systems*, 53 (3). 465–472. ISSN 0167-9236

Eckartz, Silja and Katsma, Christiaan and Daneva, Maya (2012): Exploring the Business Case Development Process in Inter-Organizational Enterprise System Implementations. *Information Resources Management Journal*, 25 (2). pp. 85–102. ISSN 1040-1628

Eckartz, Silja and Katsma, Christiaan and Oude Maatman, Ruud (2012): A Design proposal for a Benefits Management Method for Enterprise System Implementations. In: 45th Hawaii International Conference on System Sciences, HICSS 2012, January 4–7, 2012, Maui, Hawaii, USA

Effing, Robin, Jos van Hillegersberg, and Theo W. C. Huibers: Measuring the Effects of Social Media Participation on Political Party Communities. In *Web 2.0 Technologies and Democratic Governance*, edited by Christopher G. Reddick and Stephen K. Aikins, 201–217. *Public Administration and Information Technology* 1. Springer New York, 2012. www.link.springer.com/chapter/10.1007/978-1-4614-1448-3_13

Faran, Doron, and Fons Wijnhoven: Critical Rationalism and the State of Unawareness in Managers' Theories. *Management Learning* (January 3, 2012). www.mlq.sagepub.com/content/early/2012/01/03/1350507611429910

Meertens, Lucas O., Maria-Eugenia Iacob, Lambert (Bart) J. M. Nieuwenhuis: A Method for Business Model Development, in: *Business Modeling and Software Design*, edited by Boris Shishkov, 113–129. *Lecture Notes in Business Information Processing* 109. Springer Berlin Heidelberg, 2012. www.link.springer.com/chapter/10.1007/978-3-642-29788-5_7

Michel-Verkerke, Margreet B.: Information Quality of a Nursing Information System Depends on the Nurses: A Combined Quantitative and Qualitative Evaluation. *International Journal of Medical Informatics* 81, no. 10 (October 2012): 662–673.

Wijnhoven, Fons (2012): The Hegelian inquiring system and a critical triangulation tool for the Internet information slave: a design science study. *Journal of the American Society for Information Science and Technology*, 63 (6). pp. 1168–1182. ISSN 1532-2882

DISSERTATIONS

April 2012, PhD: Ir. E.A.J. Folmer, promotor: prof.dr. J. van Hillegersberg: Quality of semantic standards

June 2012, PhD: Ir. D.C.F. Rothengatter, promotor: prof.dr. J. van Hillegersberg: Engineering situational methods for professional service organizations – an action design research approach

July 2012, PhD: J.E. Ibarra, promotor: prof. dr. K. Kumar: Impact of e-infrastructure stimulus on the biodiversity science discipline: an empirical investigation

August 2012, PhD: drs. M. Harkema, promotoren: prof.dr.ir. L.J.M. Nieuwenhuis en prof.dr. R.D. van der Mei: Performance modeling of object middleware

August 2012: PhD: Mw. S.M. Eckartz, promotoren: prof.dr. R.J. Wieringa en prof.dr. J. van Hillegersberg: Managing the business case development in inter-organizational it projects: a methodology and its application



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KEY FACTS

INSTITUTION

- 440 researchers/238 fte
- more than 30 EU funded research projects
- 7 spinoff companies per year

RESEARCH TOPICS

- Service Design and Value
- Service Coordination and Integration
- Service CHange and Transformation
- co-funded ICT labs, a European EIT



ABOUT THE INSTITUTION

With almost 33,000 students, nine faculties and 1,700 academic staff members, the University of Gdansk is the largest institution of higher education in the Pomeranian region. It offers the opportunity to study in almost thirty different fields with over a hundred specializations. The Department of Business Informatics (BI) of the University of Gdansk is involved in research and teaching in the field of business informatics on the Bachelor, Master and Doctoral levels, according to Bologna process standards. The Department is the main contributor to the e-learning Educational Platform of the University of Gdansk. The Department of BI is also the coordinator of the Pomeranian Regional CISCO Academy, conducting numerous courses in educating computer network administrators with international certificates. The projects of several students were distinguished in the International Business Informatics Challenge organized by Dublin University in 2006 and 2007. The Department has conducted the Observatory of Pomeranian Digital Economy. In 1995 the Department founded the Polish Society for Business Informatics.

The Department of Business Informatics of the University of Gdansk has cooperated with academic centers of the Baltic Sea Region in the following transbaltic initiatives:

- BSVC – Baltic Sea Virtual Campus, consortium developing and implementing e-learning courses;
- BIR – Annual International Conference on Perspectives in Business Informatics;

- Doctoral Consortium MINE – Methodologies For Interactive Networked Enterprises, financed by the Nordforsk Council of Ministers (2005–2009)
- The Department is involved in the following international initiatives:
 - Polish Chapter of Association for Information Systems – PLAIS



- The Annual AIS SIGSAND/PLAIS EuroSymposium on Systems Analysis and Design
- The Annual International Conference on Perspectives in Business Informatics Research – BIR



- Information Systems Academic Heads International – ISAHl



RESEARCH TOPICS

The research and competencies covers the following themes:

- Business Informatics
- Data Bases
- Information Systems Development
- E-Business, Information Society
- Business Systems Modeling
- UML and SysML
- ERP, CRM, SCM, WFM, BI Systems
- E-Learning
- Computer Programming
- Computer Networks

PUBLICATIONS

S. Wrycza, B. Marcinkowski, J. Malankowski, (2011): UML 2.x Advanced Cases, Helion (book in Polish)

J. Ralyté, X. Franch, S. Brinkkemper, S. Wrycza, (eds.) (2012): Advanced Information Systems Engineering, 24th International Conference, CAiSE 2012, Gdansk, Poland, June 25–29, 2012, Proceedings, Series: LNCS 7328, Springer

I. Bider, T. Halpin, J. Krogstie, S. Nurcan, E. Proper, R. Schmidt, P. Soffer, S. Wrycza (eds.) (2012): Enterprise, Business-Process and Information Systems Modeling, 13th International Conference, BPMDS 2012, 17th International Conference, EMMSAD 2012, and 5th EuroSymposium, held at CAiSE 2012, Gdansk, Poland, June 25–26, 2012, Proceedings, Series: LNBIP 113, Springer

E. Proper, K. Gaaloul, F. Harmsen, S. Wrycza, (eds.) (2012): Practice-Driven Research on Enterprise Transformation, 4th Working

Conference, PRET 2012, Gdansk, Poland, June 27, 2012, Proceedings, Series: LNBIP 120, Springer

J. Auksztoł, M. Chomuszko (eds.) (2012): Modeling of Process Organization, PWN, Warsaw (book in Polish)

B. Marcinkowski, M. Kuciapski (2012): A Business Process Modeling Notation Extension for Risk Handling, Series:LNCS 7564, Springer

A. Lenart (2012): Best Practises in SAP ERP Application in Food Industry, PWN, Warsaw (the article in Polish)

M. Kuciapski (2012): Quality Management Modeling of Business Processes in IS Project, Proceedings of the CAiSE'12 Forum at the 24th International Conference on Advanced Information Systems Engineering, CEUR Vol-855

Kuciapski, M. (2012): “Improving Efficiency of Managing Projects by Quality-Oriented Modelling of Processes”, 21st International Conference on Information Systems Development (ISD2012), Springer

DISSERTATIONS

L. Zoledziwski: A Study of e-Learning Applications for Support of Companies Management, University of Gdansk, 2011

J. A.Kluk: The Requirements Identification Model in IT Outsourcing Projects, University of Gdansk, 2012

M. Kuciapski: Management Model of E-learning Projects Development, University of Gdansk, 2012

P. Jatkiewicz: The Determinants of Information Security Management Systems for Local Governments Institutions, University of Gdansk, 2012

Supervisor Prof. S. Wrycza (all in Polish): The Department cooperates effectively, on the base of formal agreements with: CISCO, IBM, Oracle, Microsoft, Lufthansa Systems and Pomeranian ICT Cluster.

EVENTS

- CAISE 2012 – The 24th International Conference on Advanced Information Systems Engineering, June 25–29, 2012
- Joint EMMSAD'2012 – 5th EUROSYMPOSIUM'2012, June 25–26, 2012



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KEY FACTS

ABOUT THE PERSON

- Head of Department of Business Informatics
- Editorial Board of Journal of Database Management
- Senior Editor of Information Management Journal
- Information Systems Journal – Editorial Board
- BIR Steering Committee – The Annual International Conference on Business Informatics Research
- Honourable Ambassador of Polish Congresses
- Information Systems and e-Business Management Editorial Board

INSTITUTION

- Founded in 1967
- Researchers: 13 staff + 15 doctorants





ABOUT THE INSTITUTION

The Department of Information Systems at the Kaunas University of Technology (KTU) was founded in 1993 as a result of more than 20 years of research in the field of Information Systems (IS). Since then, we have grown to become one of the largest departments in the KTU Faculty of Informatics. Being among the leading IS research centers in Lithuania, the department has built good relationships with the local IT companies and accumulated valuable research experience with Lithuanian and international partners.

Our academic work is directed towards providing quality education on fundamental and advanced subjects in the field of Information Systems. The department is responsible for both undergraduate and postgraduate study programs titled “Information Systems” and “Information Systems Engineering” respectively. The number of graduates in 2012 was 20 for our undergraduate program and 23 for the postgraduate program.



RESEARCH TOPICS

The KTU Department of Information Systems specializes in topics related to Business Process Modeling and Information Systems Engineering. The majority of our R&D activities are carried out within the following topics:

- Conceptual modeling, ontologies and databases
- Requirements specification
- Modeling of business processes and business rules
- Enterprise modeling
- Information systems engineering
- Model-driven and service-oriented development
- Project management
- Business analysis and intelligence
- Knowledge-based systems
- Information systems user interface and usability

CURRENT RESEARCH PROJECTS

In 2012, the department continued their work on several long-term projects and got involved in new initiatives. Work has been completed within the Thematic Network of Knowledge about Innovative Language, Semantics and Business Modeling Technologies, a three year long project sponsored by the Lithuanian Ministry of Economy and Lithuanian Business Support Agency. The Department also continued the cooperation with State Forest Survey Center designing the new National forest inventory information system. As usual, several smaller scale R&D projects have been carried out in cooperation with local small and medium-sized enterprises, and with the support of the Lithuanian Agency for Science, Innovation and Technology.

Among the new endeavors, the most notable was the successful start of the work on the project titled “Syntactic and Semantic Analysis and Search System for Lithuanian Internet, Corpus and Public Sector Applications in Lithuanian Language”. This three year long research initiative is sponsored by EU Structural Funds and is carried out along with the Vytautas Magnus University (Kaunas, Lithuania). We also got involved in the large-scale four year long European Social Fund-sponsored project titled “Research and Development of Internet Technologies and their Infrastructure for Smart Environments of Things and Services”.



PUBLICATIONS

The majority of papers published by the Department’s staff in 2012 were project-related. Here is a short selection, representing key directions of our current research:

E. Vysniauskas, L. Nemuraite, B. Paradauskas(2012): Preserving semantics of OWL 2 ontologies in relational databases using hybrid approach, Information technology and control, vol. 41, no. 2, pp. 103–115

T. Skersys, L. Tutkute, R. Butleris (2012): The Enrichment of BPMN Business Process Model with SBVR Business Vocabulary and Rules, Journal of Computing and Information Technology, vol. 20, no. 3: Special Issue: Selected Papers from ITI 2012 Conference, pp. 143–150

T. Danikauskas, R. Butleris, V. Sakys (2012): Application of domain specific language in information system development process: the case of Lithuanian forest cadastre integrated information system, Transformations in Business & Economics, vol. 11, no. 1 (25), pp. 232–247

A. Lopata, M. Ambraziunas, S. Gudas (2012): Knowledge-based MDA requirements specification and validation technique, Transformations in Business & Economics, vol. 11, no. 1 (25), pp. 248–260

DISSERTATIONS

Linus Ablonskis: Method for Automated Configuring of a Program Code Generator. Vysniauskas, Ernestas: Hybrid Method for Transforming OWL 2 Ontologies into Relational Databases.

EVENTS

In 2013, one of the key aims will be the smooth extension of our research and development capabilities into the newly established Information Technology Research Center. There, a number of Informatics faculty laboratories are set to be opened, five of them – directly intended for the activities of the Department of Information Systems. In these new laboratories, the starting focus will be on intensifying the participation in international or national calls for scientific project proposals.

The Department is also expecting to intensify small-to-medium scale R&D work and the collaboration with the local industry. Among larger-scale initiatives, the most notable is the expected start of work on a two year long project titled “Business Semantics Based Integration of Business Processes and Business Rules”. As this report was being published, the proposal was in the final stages of evaluation and chances were good it would receive funding from the European Structural Funds.

Regarding events, the department will again be responsible for the 19th International Conference of Information and Software Technologies and the accompanying Industrial Tutorials. Both events are set for September 2013.



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KEY FACTS

INSTITUTION

- Founded in 1993
- Part of the KTU Faculty of Informatics
- More than 20 researchers

EVENTS

- 3rd Annual ERCIS Workshop. Kaunas, Lithuania, June 18–20
- 18th International Conference on Information and Software Technologies, ICIST 2012. Kaunas, Lithuania, September 13–14



ABOUT THE INSTITUTION

The Department of Information Systems (IS) is one of six departments within the Faculty of Economics and Social Sciences at the University of Agder (UiA) in Kristiansand. With 18 researchers (15 in permanent positions and 3 adjunct professors), this is one of the largest IS departments in Norway. The department offers a three-year bachelor programme in IT and Information Systems, a one year undergraduate study in IT and Information Systems, a two-year masters programme in Information Systems, and a three year PhD programme in Information Systems. The master programme started in 1999 as the first IS master programme in Norway. The University of Agder also has a Department of ICT, responsible for education and research within computer science and ICT engineering. The Department of Information Systems contributes actively to the IS community by publishing in leading IS journals, and hosting and participating in international conferences.

RESEARCH TOPICS

The research in the Department of IS is currently organized in two centres and one research group:

The Centre on electronic government (CeG) focuses on how ICT can be used to improve government processes and communication with citizens, how citizen participation can be furthered through social networks and how ICT can further development in the lesser developed parts of the world. The centre is involved in research, teaching and dissemination, and is a leading e-Government research group in Norway.

Centre for Enterprise Systems (CENS) was established as a response to the increasing demand for graduates with enterprise systems skills, both from the IS and the business programs. The centre has two main goals: to provide hands-on enterprise systems modules in various IS and business courses, and to be a resource centre for organisations on the acquisition, implementation and use of enterprise systems.

The research group on information systems development (ISD) focuses on how information systems and software solutions are developed in and for organizations. Especially, the group views ISD as interaction between the processes of technical construction of software applications and organizational implementation.

Most of the department's research is based on empirical studies of the development and use of IS in organizations in private and public sector. The department also conducts research in areas outside the thematic organization of the research groups.



Examples of this include recent work on IS research methodology (e.g. action design research, grounded theory, and Delphi studies) and e-learning. The department is also part of the Centre for e-Health and Health Care Technology at UiA, and plays a key role in the new multidisciplinary Centre for Integrated Emergency Management (CIEM) at the university.

CURRENT RESEARCH PROJECTS

The Semicolon II project (2011–2013) is funded by The Research Council of Norway and participating government agencies to identify and address issues related to interoperability, and how interoperability generates various forms of value, in the Norwegian public sector. The consortium behind Semicolon II is comprised of several major government agencies, industry partners and four universities.

The SmartEMIS (Smart Emergency Management Information Systems) project (2012–2015) is funded by The Competence Development Fund of Southern Norway. The



project focuses on how mobile devices such as smart phones combined with different forms of social media can be applied for improving information sharing and collaboration in crises. An important goal is to develop solutions and procedures for increased citizen participation in emergency preparedness and management.

PHD THESES

Thapa, Devinder,

Exploring the link between ICT intervention and human development through a social capital lens: The case study of a wireless project in the mountain region of Nepal

Zach, Ondrej,

ERP system implementation in small and medium-sized enterprises

PUBLICATIONS

E. Hustad, A. A. Arntzen (2012): Exploring the Role of Boundary Spanning in Distributed Networks of Knowledge, *Electronic Journal of Knowledge Management*, (10:2), pp. 121–130

E. Å. Larsen, T. Päiväranta, K. Smolander, (2012): A model for analyzing changes in systems development practices, forthcoming in *Journal of Information Technology Theory and Applications (JITTA)*

C. Merschbrock, B. E. Munkvold (2012): A research review on Building Information Modeling in construction – an area ripe for IS research, forthcoming in *Communications of the Association for Information Systems (CAIS)*.

M. K. Sein, B. Furuholt (2012): Intermediaries: Bridges across the Digital Divide, *Information Technology for Development (18:4)*, pp. 332–344

K. Stendal, J. Molka-Danielsen, B. E. Munkvold, S. Balandin, (2012): Virtual worlds and people with lifelong disability: exploring the relationship with virtual self and others, *ECIS 2012 Proceedings*, Paper 156 (Best paper award)

D. Thapa, M. K. Sein, Ø. Sæbø (2012): Building collective capabilities through ICT in a mountain region of Nepal: where social capital leads to collective action, *Information Technology for Development (18:1)*, pp. 5–22

O. Zach, B. E. Munkvold (2012): Identifying reasons for ERP system customization in SMEs: a multiple case study, *Journal of Enterprise Information Management (25:5)*, pp. 462–478

EVENTS

In September 2012, Department of Information Systems co-organized the 11th IFIP Electronic Government Conference (IFIP EGOV 2012) and the 4th IFIP ePart conference, with approximately 100 participants.



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KEY FACTS

INSTITUTION

- Founded in 1994 (full university status from 2007)
- Approximately 10.000 students and 900 staff
- 18 researchers
- Approximately 300 bachelor and master students in IS
- 13 PhD students

RESEARCH TOPICS

- E-Government and benefits realization
- E-Participation and e-Democracy
- ICT for Development
- Enterprise Systems implementation in SMEs
- Business process management and process modelling
- Knowledge management and e-collaboration
- Systems development practice
- Emergency management information systems



ABOUT THE INSTITUTION

The Information Systems research group at Manchester Business School is involved in research projects that cover a wide range of consumer and business applications of digital technologies. It also has teaching responsibilities across all of our undergraduate, postgraduate MBA and PhD degree programmes. The research group is part of Manchester Informatics, an innovative network of researchers from across the University of Manchester involved in all aspects of digital innovation that includes academics from Economics, Computer Science, Engineering, Health and Biology. The IS group's research and consultancy is characterised by close involvement with a range of international public and private organisations covering multiple sectors of the economy including banking, insurance, telecommunications, Government and grocery. Individual members are active in a range of professional groups including the UK Association for Information Systems. In 2012, the group hosted a visit from Professor R.D. Galliers from Bentley University to mark the launch of a new initiative titled "Digital Futures" which has been set up in collaboration with Manchester Informatics to coordinate research into future developments in business and Government that are centred on digital innovation, business models and social networks. The group had the privilege to receive lectures from our visiting fellows Dr. Michael Weichert and Mr. Karl Wills on e-commerce strategy in Germany and on the use of IT for online distribution in UK retailing.

RESEARCH TOPICS

Current research is focused on several inter-related areas: global systems, online consumer behaviour, Internet marketing strategy, innovative use of web 2.0 and social media in a range of business and Government contexts, the interpretation of 'big data', decision making in online environments, decision analytic tools and emergency management systems. Some examples of collaborating research organisations over the past year include Waitrose, the Royal Bank of Scotland (RBS), ComScore, Motorola, Local Government, the National Health Service (NHS) and the World Academy of Sport.

Research Collaboration between Luiss Guido Carli University and MBS

Luca Sabini from LUISS Guido Carli University has been on a 4 months research visit at MBS working with Prof. Daniel Muzio on a project on the professionalization of project management. The project which comprises of a number of qualitative interviews with officials in project management associations both in Italy and the UK, seeks to understand 1) the occupational development of project management, 2) identify the strategies and tactics deployed by this occupation and 3) consider how these relate to more established patterns of professionalization. The project also has a strong comparative dimension as it seeks to understand differences between the Italian and UK case with references to institutional differences between these two political-economies. One core finding emerging from the project is that whilst in

the UK professionalization as a much more market oriented dimension, in Italy professional associations are seeking to a greater extent governmental sponsorship and statutory regulation.



Prof. D. Muzio, Manchester Business School



L. Sabini, LUISS Guido Carli University

Nadia Papamichail is Senior Lecturer in Information and Decision Systems. Her research focuses on improving managerial

decision making through the use of technologies. She has served as principal investigator for an EPSRC-funded project on 'good practice in decision making', in collaboration with British Telecom. Her work cuts across the fields of decision sciences, information systems and artificial intelligence and has been published in leading journals in these areas.

Nadia is Chair of the Decision Analysis special interest group (DASIG) that runs under the auspices of the Operational Research Society. Under this capacity, she actively organises workshops and conference streams to promote the discipline of Decision Analysis in the UK and abroad. Nadi has been very active in promoting her research at major international conferences and this is reflected in her recent publications.

PUBLICATIONS

K. N. Papamichail, S. French: 25 years of MCDA in nuclear emergency management. IMA Journal of Management Mathematics (forthcoming 2013)

K. N. Papamichail, T. J. Stewart (2012): Design and evaluation of MCDA interventions, in 25th European Conference on Operational Research, Vilnius

K.N. Papamichail: Explanation Systems, in: INFORMS Annual Meeting, The Institute For Operations Research and the Management Sciences 14 October 2012, 17 October 2012, Phoenix

S. Karimi, K. N. Papamichail, C. P. Holland (2011): Online Purchase Decision Making Processes: An Individual and Market Analysis. In MCIS – 6th Mediterranean Conference on Information Systems, 3 September 2011, 05 September 2011. Limassol, Cyprus

Christopher P. Holland; Gordon D. Mandry: Online Search and Buying Behaviour in Consumer Markets, in: Hawaii International Conference on System Sciences, 07 January 2013, 10 January 2013, Maui, Hawaii, US: IEEE

Christopher P. Holland: The use of social media and web 2.0 in sports marketing, published by the World Academy of Sport 2012, teaching case study



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KEY FACTS

INSTITUTION

- 4 senior members of staff
- 6 researchers
- 5 PhD and DBA students
- Several visiting faculty and researchers

RESEARCH TOPICS

- Global systems
- Web 2.0 and social media in a variety of organisational contexts
- Consumer behaviour and decision making in online environments
- Enterprise systems
- Digital business models
- Emergency management systems
- Decision analytic tools

EVENTS

- Digital Futures launch at Manchester Informatics November 2012



University of Maribor
Faculty of Organizational Sciences



ABOUT THE INSTITUTION

The Faculty of Organizational Sciences is a member of the University of Maribor. The Faculty of Organizational Sciences has been involved in research and education about the organizational and informational sciences for more than 50 years. Today it provides Bologna programs of Information Systems, Human Resource and Educational Systems, Business and Work Systems. During this period, the Faculty has taught a large number of graduates who have pursued employment in the manufacturing and service industries as well as governmental and educational institutions. Research at the Faculty is organized in many laboratories and in the eCenter. Research projects involve prototyping, consulting, education, and training at the national and international level. Their activities have been organized and are run following the LivingLab methodology, with a strong involvement of business and government organizations, users, IT providers and universities. Lab activities are organized and run following the living lab methodology, with strong involvement from business and government organizations, users, IT providers and universities. The resulting eLivingLab is the Slovenian founding member of ENOLL. The Faculty has established connections with numerous institutes, faculties and universities around the world, enabling cooperation through student exchanges and collaborative research work. The Faculty of Organizational Sciences strives to enhance its internationally renowned reputation. Bilateral cooperation has occurred in several forms, including the exchange of higher educa-

tion professors, participation in various research projects, and student exchange.

RESEARCH TOPICS

The Faculty of Organizational Sciences researches in area including the theory and practice of organizing business and organizational systems, information systems, human resources, and educational systems. The Faculty has established connections with numerous institutes, faculties, and universities around the world in order to enable cooperation between students, researchers, professors, and their counterparts at other institutions in exchange programs, research work, and conferences. See the right for a list of research topics.

CURRENT RESEARCH PROJECTS

- National Research programme Research programme, P5-0018 Decision-making systems in the global electronic commerce
- Research programme, P5-0364-0586 Impact of management, organizational learning and knowledge management in modern organizations
- Targeted research programs (CRP)
- Analysis of the state of local food supply in Slovenia: benchmarking analysis and recommendations
- Economics of organic farming in Slovenia
- Interreg Ivc, Mini Program Locare – Low Carbon Economy Regions
- ZeroTrade: A public Private Governance Model for Zero Carbon Trade Sector
- Central Europe Programme
- CentraLab – Central European Living Lab for Territorial Innovation

- Central Europe Programme
- ESSENCE – Easy eServices to Shape and Empower SME Networks in Central Europe
- Competitiveness and Innovation Framework Programme (CIP)
- APOLLON—Advanced Pilots of Living Labs Operating in Networks
- Nato Gepsus
- Geographical information processing for the environmental pollution-related security within urban scale environments
- Operational Programme Slovenia – Austria. Process of cross-border network of innovative technological cooperation of small and medium sized enterprises and research institutions on specific cross-border innovative technological process development projects CROSSINNO

PUBLICATIONS

- KLJAJI BORTNAR, Mirjana:* Towards understanding collaborative learning in the social media environment. V: RAJKOVI, Vladislav (ur.), BERNIK, Mojca (ur.), RAJKOVI, Uro (ur.): Education in information society: thematic issue, (Organizacija, Letn. 45, 2012, t. 3). Kranj: Moderna organizacija, 2012, maj–june, 2012, letn. 45, t. 3, pp. 100–107
- KLJAJI BORTNAR, Mirjana:* Comparative analysis of collaborative and simulation based learning in the management environment. V: KLJAJI, Miroljub (ur.), WEBER, Gerhard-Wilhelm (ur.): Recent advances in systems, decision making, collaborative work and learning: thematic issue, (Organizacija, Letn. 45, 2012, t. 5). Kranj: Moderna organizacija, 2012, pp. 236–245

KLJAJI, Miroljub, KLJAJI BORTNAR, Mirjana: Contribution to collaborative and simulation-based learning. V: LASKER, George Eric (ur.). Acta systemica, (Acta systemica, Vol. 12, No. 1). Tecumseh (Canada): International Institute for Advanced Studies in Systems Research and Cybernetics, 2012, pp. 19–23

KLJAJI, Miroljub, KLJAJI BORTNAR, Mirjana, KRABA, Andrej, KOFJA, Davorin: System approach to MIS and DSS and its modeling within SD. V: MORA, Manuel (ur.), GELMAN, Ovsei (ur.), STEENKAMP, Annette (ur.), RAISINGHANI, Mahesh S. (ur.): Research methodologies, innovations and philosophies in software systems engineering and information systems. Hershey: Information Science Reference, cop. 2012, pp. 340–359

ROZMAN, rtomir, PAEK, Karmen, PRIENK, Jernej, KRABA, Andrej, KLJAJI, Miroljub: System dynamics model for policy scenarios of organic farming development. Organizacija (Kranj), 2012, letn. 45, t. 5, pp. 212–218

STOJANOVI, Radovan, KRABA, Andrej, BERKOWICZ, Simon M., DE AMICIS, Raffaele, ELHANANI, Doron, CONTI, Giuseppe, KOFJA, Davorin, DRAGOVI, Marko, LEKI, Nedeljko, NIKOLI, Gojko. GEPUS: Simulation-based decision making system for air pollution accidents. V: KLJAJI, Miroljub (ur.), WEBER, Gerhard-Wilhelm (ur.): Recent advances in systems, decision making, collaborative work and learning: thematic issue, (Organizacija, Letn. 45, 2012, t. 5). Kranj: Moderna organizacija, 2012, pp. 200–211



NIDARI, Anja, WEBER, Borut: Usage of information and communication technology in micro enterprises in the last decade. Organizacija (Kranj), mar.– apr. 2012, letn. 45, t. 2, pp. 87–96

EVENTS

26th Bled eConference, elnnovation: Challenges and Impacts on Individuals, Organizations and Society, June 9–12, 2013, Bled Slovenia, www.BledConference.org

International Summer School in conjunction with 26th Bled eConference, June 3–6, 2013, Faculty of Organizational Sciences, University of Maribor, Kranj, Slovenia, www.fov.uni-mb.si/Study/Summer-School

International Conference on Organizational Science Development, March 20–22, 2013, Portoro, Slovenia, www.fov.uni-mb.si/conference

Information Society 2013, 16th International multiconference Education in Information Society, October 2013, October, 2013, Ljubljana, Slovenia, www.vivid.fov.uni-mb.si

Award, The International Institute for Advanced Studies in Systems Research and Cybernetics Outstanding scholarly contribution award Mirjana Kljajic Bortnar, August 2, 2012, Baden-Baden



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KEY FACTS

RESEARCH TOPICS

- eBusiness
- eGovernment
- Mobile commerce
- eHealth
- Management of Information systems
- Social media, Web 2.0, eCollaboration
- Open innovation
- Living labs
- Business processes management
- Decision support systems
- Simulation systems and models
- Knowledge management
- Organizational learning
- Business intelligence



HSE Moscow colleagues research visit to ERCIS HQ

ABOUT THE INSTITUTION

The HSE Moscow, Faculty of Business Informatics is the leading faculty in Russia in research and implementation of information systems in business, software engineering, corporate information systems, and other strategic IT topics. Graduates of the Faculty of Business Informatics are working as business analytics, software architects, are leading IT Departments, and are managing small and medium size companies in the IT area.

RESEARCH TOPICS

- Social networks research
- Enterprise Architecture and business process management for very large companies
- Business Transformation and organizational change
- Business Process Management
- ERP systems
- Semantic Networks
- Knowledge Management
- E-Business and Internet Technologies
- Data Mining and Decision Support

INDUSTRY COOPERATION

Traditionally, the faculty of Business Informatics has a very strong link with the IT industry. International and Russian companies are taking an important role as members of the Faculty Advisory Committee and Industry placements. Among them are IBM, SAP, Microsoft, Lanit, IBS, 1, Cognitive Technologies, and others. E.g., SAP Academic Department is working very closely with HSE students as part of Russian and EU projects and is currently implementing different activities for students. Subject of the multilateral relations between HSE Moscow/SAP Academic Department and the industry is the interaction between the commercial organization and the university and its students. This year, the department started to work with students by conducting different business team games and a Design Thinking competition.

EVENTS

In 2012 some significant events with the participation of ERCIS members were held with the HSE Moscow. Among them:

- Workshop: “Bridging the Gap: From Innovation to Standards” at 10–12 September 2012, Data Science Summit Russia 2012 in partnership with EMC Russia and SKOLKOVO, ERCIS Propeller Workshop, academic and exchange visits, and more.
- Propeller Workshop: The biggest event in this year was in April (24th–26th of April) at the Higher School of Economics together with the ERCIS, the Innovation Forum “Propeller” for business process management (BPM), was conducted in Moscow, HSE Rectorate building. All key speakers stressed that this forum became a significant event for BPM in the academic and business environment and also emphasized that the forum contributed to the close cooperation between these structures and two participating countries (for more details see the page xx of the ERCIS report).

RESEARCH VISITS

In 2012 Yuri Kupriyanov (PhD candidate/writing-up) and Vadim Agievich (PhD candidate) from the Higher School of Economics Moscow visited the ERCIS headquarters. They presented their current research in an open presentation. Yuri Kupriyanov works on the topic of IS-enabled organizational transformation management within his research, teaching, and past professional activities. Vadim Agievich is a first year Doctorate candidate of the HSE in Russia. He also works in the Oil&Gas company Surgutneftegas, OJSC as the Department Head of the Enterprise Architecture Department. His research topic is related to the Enterprise Architecture discipline.

One of the important openings in this year took place in November. HSE Nizhny Novgorod in cooperation with the SAP Academic Department at HSE Moscow inaugurates of the innovative SAP Regional Centre for promotion of SAP Business One solution in partnership with SAP partner. The Center will focus on the needs of midsize and small businesses and it specialized in IT sphere and HSE Moscow and HSE Nizhny Novgorod will work together on SAP software related research topics.

“I’m impressed by the Propeller event organized by ERCIS/HSE Moscow and enjoyed to speak with university faculty from Germany and Russia” – Dmitry Armyakov, Managing Director, SAP Lab CIS



Finally, a very effective cooperation was achieved between Russia and Germany during 13th–19th of November in HSE Moscow when ERCIS lectures were held by Matthias Voigt and Mathias Eggert. They presented materials about BPM, creativity in business-processes, business and meta modeling, and scientific publishing.

“We at HSE are very proud to be part of the ERCIS network – a truly leading information systems research network in the World” – Prof. Dr. Svetlana Maltseva, Acting Dean, Faculty of Business Informatics, Higher School of Economics Moscow



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KEY FACTS

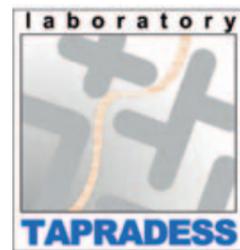
RESEARCH TOPICS

- Social networks research
- Enterprise Architecture and business process management for very large companies
- Business Transformation and organizational change
- Business Process Management
- ERP systems
- Semantic Networks
- Knowledge Management
- E-Business and Internet Technologies
- Data Mining and Decision Support

NATIONAL RESEARCH UNIVERSITY HIGHER SCHOOL OF ECONOMICS, NIZHNY NOVGOROD – FACULTY OF BUSINESS INFORMATICS AND APPLIED MATHEMATICS



НАЦИОНАЛЬНЫЙ ИССЛЕДОВАТЕЛЬСКИЙ
УНИВЕРСИТЕТ
НИЖНИЙ НОВГОРОД



ABOUT THE INSTITUTION

The Higher School of Economics in Nizhny Novgorod (HSE NN) is a young and active part of the innovative Russian distributed university – National Research University Higher School of Economics (HSE). HSE NN was founded in 1996 and nowadays it is a regional leader in business and economic education in the Volga Federal Region. The main educational activities of the Faculty of Business Informatics and Applied Mathematics (BIAM) of the HSE NN are related to modern enterprise organization, enterprise architecture, business mathematical and computer modeling. The laboratory TAPRADESS (Theory and Practice of Decision Support Systems) is the research unit of the Faculty BIAM. It was founded in 2009 to promote a high level research activity at HSE NN.

RESEARCH TOPICS

The research of the Faculty BIAM and TAPRADESS Laboratory focuses on following directions:

- Cognitive science – the development of methods and techniques of receiving, processing, storage, use and management of professional knowledge
- Situational Modeling – multidimensional modeling of the behavior and decision making processes of individual and collective agents in complex distributed systems.
- Decision Making Analysis: basic approaches for solving important problems like the reengineering of companies using advanced technologies of e-business and a consistent set of formal process-oriented models. This result allows us to effectively conduct a systematic analysis of economic and technological factors affecting the sustainable development of business and e-commerce
- original ways of formalizing the knowledge, which are based on ontological engineering, and are supplemented by practical methods of integration and verification of complex corporate service-oriented systems
- new mathematical models and multi-agent optimization algorithms in distributed service-oriented systems applicable to different domains (transport, planning, training activities); the result defines new approaches to the creation and use of intelligent decision support systems in the modern service-oriented economy.
- axiomatic approach to non-compensatory aggregation (decision making rules) and axiomatic approach to general measure of power (power indices) in a voting body.

CURRENT RESEARCH PROJECTS

Knowledge technologies for improving multi-modal logistics operations in seaports
The project team performs an analysis of business-processes and information technologies in the framework of modern port logistics operations. The goal of the project is to develop high-level models of adaptive business processes and distributed software implementations using multi-agent technologies. The ontology-based specifications and principles of holonic self-organization are explored at the theoretical level, and JESS multi-agent platform is used for software prototyping. The project is conducted in cooperation with INSA-Rouen (France).

Development of the methodology for Value Assessment of SOA-based IS Projects

This research is aimed at adopting existing IT project assessment methods for measuring the value of SOA-based IS projects. The research considers the fact that SOA-based IS deployment and evolution could be split in separate flows, one per service. It should make project value assessment more accurate compared to existing methods which use the single flow for the entire project. This research also proposes Real Options for calculating the flexibility fraction of the value.

Development of the adaptive methodology of business process-management for small and medium enterprises in emerging economies

The research focuses on the investigation of key influencing factors which facilitate innovative development of small and medium-sized enterprises. The project is supported by SAP AG.

PUBLICATIONS

A. Likhvarev, E. Babkin: Developing the method for value assessment of SOA-based IS projects, Lecture Notes in Business Information Processing, Springer, Verlag, 2012. No. 128. pp. 172–186

G. A. Bautin, V. A. Kalyagin: Markov Chains in Modelling of the Russian Financial Market, Springer Optimization and Its Applications, 2012, v.70

M. V. Batsyn, V. A. Kalyagin: An Analytical Expression for the Distribution of the Sum of Random Variables with a Mixed Uniform Density and Mass Function, Models, Springer Proceedings in Mathematics & Statistics, Springer, New York, 2012, v.32, pp. 51–64

EVENTS 2012

- International summer school on mathematical methods and algorithms of operations research, May 2012
- International conference on Perspectives of Business Informatics Research (BIR 2012), September 2012
- Preparation of the Joint PhD program in Business Informatics with the University of Vienna
- Start of educational programs within the framework of SAP Business One Center of Competence.



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RIGHT: PROF. DR. VALERY KALYAGIN

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KEY FACTS

INSTITUTION

- Founded in 2003
- 12 researchers
- Research Topics
- Cognitive Science
- Situational Modeling
- Decision Making Analysis

EVENTS

International conference on Perspectives of Business Informatics Research (BIR 2012), September 2012

PROF. DR. VALERY KALYAGIN

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STEVENS INSTITUTE OF TECHNOLOGY — HOWE SCHOOL OF TECHNOLOGY MANAGEMENT

› Stevens Institute Of Technology – Howe School Of Technology Management howe.stevens.edu

STEVENS
Institute of Technology



ABOUT THE INSTITUTION

Founded in 1870, Stevens Institute of Technology is a premier private university focused on research and entrepreneurship in technology-related fields. Located across the Hudson River from Manhattan in Hoboken, New Jersey, Stevens has a population of 3700 graduate (Masters and PhD) and 2300 undergraduate students. Stevens is committed to exploring the frontiers of engineering, science, and management through integrative research and education programs. Stevens Three schools and one college support the mission of the Institute: The Charles V. Schaefer, Jr. School of Engineering and Science, the Wesley J. Howe School of Technology Management, the School of Systems and Enterprises as well as the College of Arts and Letters. Businessweek ranked Stevens in the top 3% of US universities based on student Return on Investment. Notable graduates include Frederick Winslow Taylor, the father of scientific management, Henri Gantt, whose GANTT chart is a staple in most project managers' toolkit, and Alfred Fielding, the inventor of Bubble Wrap.

The School of Technology Management has 40 full-time faculty and 250 undergraduates, 1,000 MS students, 120 MBA students, 80 executive master's students, 25 PhD students and numerous non-degree graduate and executive programs. Within the school, the Information Systems group is among the largest graduate programs in the US, with a mix of evening and weekend classes as well as online course offerings to students around the globe.

RESEARCH TOPICS AND PROJECTS

Within the School of Technology Management, two IS-related research groups operate in the areas of Business Process Innovation and Decision Technologies.

The Center for Decision Technologies (CDT) researches the networks that are around us and in us, because understanding these networks can assist in building technologies that augment decision making in a variety of domains. The Center helps decision makers integrate information through training and visualization. This work combines perspectives from information systems, cognitive psychology, social network analysis, and various computational sciences. The center focuses on two main areas:

Understanding the dynamics of social networks. The ubiquity of networked technologies and the increase in location-aware mobile devices enable new forms of research that reveal the emergence of ideas. These ideas are generated and shared within communities, and leave electronic traces as they spread between people situated across time and space. Within this area of research, CDT members are looking at data from websites such as Digg and Twitter. CDT members are also looking at the ways communication within and between social networks can be used to predict political, cultural, and economic phenomena. In order to help decision makers identify trends in social network information streams, CDT members are exploring new ways of visualizing data.

Improving the design of information systems. Systems are difficult to design, and little is understood about how to encourage the creative leaps that lead to simple but powerful designs. Specifically, CDT members are looking at how diagrams, gesture, and language interact in the design process.

The Center for Business Process Innovation (CEBPI) researches how process innovation improves organizational performance, and how business process technologies can be better managed in organizations. CEBPI hosts a state-of-the-art BPM technology lab with different commercial and open source BPM tools, and provides executive education on process innovation, a graduate certificate on BPM and Service Innovation, as well as courses to build Business Process Management skills for the undergraduate Business & Technology program at Stevens. CEBPI hosted the 2010 International Conference on Business Process Management and conducts research in two areas:

Semantic Enterprise Architecture. Enterprise Architecture (EA) helps stakeholders understand, manage, and/or change organizations and their technical infrastructure. EA facets are typically organized according to the views they describe, such as process, data, rules and organization models. For organizations that engage in large architecture projects, a systematic organization of the architecture content is essential. To date, this meant choosing either a single modeling framework and language, or sticking to a particular architecture tool. Semantic Enterprise Architecture uses



techniques born out of the Semantic Web efforts to better understand and analyze the information generated in Enterprise Architecture projects, irrespective of the tool or method used.

Emergent Processes in Standardization Organizations. Standards organizations produce specifications that regulate many aspects of commerce and private life – from the way we connect peripherals to our laptop to the way health insurers and hospitals share information. While the adoption of standards has been subject to some scrutiny, the development of standards has received much less attention. CEBPI members are studying the collaboration patterns of standard makers in the development of new Web Standards. We seek to explain how standards makers make decisions, and factors affect the effectiveness of the standardization process.

PUBLICATIONS

W. Mason, A. Clauset (2013): Friends FTW! Friendship and Competition in Halo:Reach. The 16th ACM Conference on Computer Supported Cooperative Work and Social Computing

F. Kooti, W. Mason, K. P. Gummadi, M. Cha (2012): Predicting Adoption of Social Conventions in Online Social Networks. Conference on Information and Knowledge Management, 2012, Maui, Hawai'i

W. Mason, S. Suri (2012): A Guide to Behavioral Experiments on Mechanical Turk. Behavior Research Methods, 44(1), 1–23.

W. Mason, D. J. Watts, (2012): Collaborative problem solving in networks. Proceedings of the National Academy of Sciences, 109(3), 764–769.

L. Yu, J. V. Nickerson, Y. Sakamoto, Collective Creativity: Where we are and where we might go, Proceedings of Collective Intelligence, 2012, Cambridge, MA.



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INSTITUTION

- 40 Faculty
- 250 Undergraduate Students
- 1,000 Master's and MBA Students
- 25 PhD Students

RESEARCH TOPICS

- Social Computing
- Business Intelligence & Analytics
- Process Innovation
- Decision Technologies
- Semantic Enterprise Architecture

AWARDS

- Stevens is ranked in the Top 75 US Universities (US News & World Report)
- Stevens is ranked in the top 3% of student ROI for US Universities
- Hoboken ranked #12 best College Town in the US (Princeton Review)
- Stevens WebCampus won the US-DLA online learning award 2006, 2008, 2010 and 2011

CHARLES UNIVERSITY IN PRAGUE, FACULTY OF MATHEMATICS AND PHYSICS – DEPARTMENT OF SOFTWARE ENGINEERING



ABOUT THE INSTITUTION

The natural sciences have been a part of the research teaching at the Charles University since its founding in 1348.

The Faculty of Mathematics and Physics has been created by separating a part of the Faculty of Natural Sciences on 1st September, 1952. Now, it is composed of three schools: the School of Physics, the School of Mathematics, and the School of Computer Science.

The School of Computer Science at the Faculty of Mathematics and Physics includes seven prestigious teaching and scientific workplaces. The quality of their graduates is widely recognized. One of them, the Department of Software Engineering, is focused on research and teaching in the areas of database systems, software engineering, web technologies.

RESEARCH TOPICS

There are three research groups in the department:

- Web Semantization Research Group (SeMWeX) www.ksi.mff.cuni.cz/semwex

SEMWEX focuses on data repositories, domain-specific languages (XML and RDF processing, electronic-design automation), extensions to existing languages, compilers and tools, new parallel environments and programming paradigms, effective execution on NUMA and heterogeneous-core systems, user preference learning, top-k querying, web information extraction and annotation, autonomous robot systems, localization and navigation and virtual cognition.

- Similarity RETrieval Research Group (SiRet) www.siret.ms.mff.cuni.cz

SiRet focuses on similarity search in multimedia databases, structural bioinformatics similarity retrieval, similarity modeling and database indexing – metric access methods.

- XML and Web Technologies Research Group (XRG) www.ksi.mff.cuni.cz/xrg

XRG focuses on XML and Web technologies and their exploitation, service-oriented architectures (design, implementation, management), evolution, change management and adaptability of applications, efficient processing of graph data (XML, RDF, linked data), ontologies, Web 2.0, and semantic web services.

CURRENT RESEARCH PROJECTS

The department members are involved in a number of research projects funded by the Czech Science Foundation and the Grant Agency of Charles University, i.e. Intelligent library – INTLIB, Non-Metric Similarity Searching in Very Large Complex Databases. Conceptual Modelling of XML, Efficient Processing of Linked Data, Parallel processing of finite data stream, Architecture for Trusted Linked Data, etc.

PUBLICATIONS

J. Novak, T. Skopal, D. Hoksza, J. Lokoc: Non-metric Similarity Search of Tandem Mass Spectra Including Posttranslational Modifications, in: *Journal of Discrete Algorithms*, Vol. 2012, Num. 13, pp. 19–31, 2012

M. Necasky, I. Mlynková, J. Klimek, J. Maly: When conceptual model meets grammar: A dual approach to XML data modeling, in: *Data and Knowledge Engineering*, Vol. 72, Num. February, pp. 1–30, 2012

M. Necasky, J. Klimek, J. Maly, I. Mlynkova: Evolution and change management of XML-based systems, in: *Journal of Systems and Software*, Vol. 85, Num. 3, pp. 683–707, 2012

J. Lokoc, C. Premysl, J. Novak, T. Skopal: Cut-region: A Compact Building Block For Hierarchical Metric Indexing, in: *Lecture Notes in Computer Science*, Vol. 2012, Num. 7404, pp. 85–100, 2012

D. Hoksza, D. Svozil: Efficient Pairwise RNA Structure Comparison using SETTER, in: *BIOINFORMATICS*, Vol. 28, Num. 14, ISSN: 1367–4803, pp. 1858–1864, 2012

G. Feuerlicht, J. Pokorny: Can Relational DBMS Scale-up to the Cloud? Information Systems Development – Reflections, Challenges and New Directions.

R. J. Pooley, J. Coady, H. Linger, C. Barry, M. Lang (Eds.): Springer Science and Business Media, 2012

M. Cech, J. Pokorny: NRank: A Unified Platform Independent Approach for Top-k Algorithms. *Proc. of the Int. Conf. on Data Technologies and Applications (DATA 2012)*, Rome, Italy, 25–27 July, 2012, SciTePress, 2012, pp. 111–116



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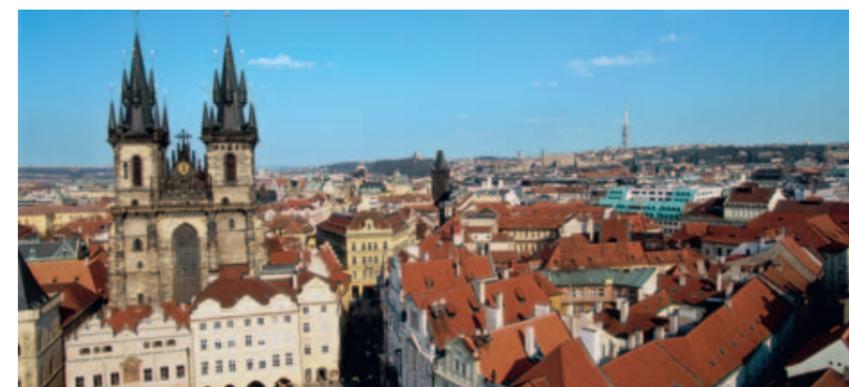
KEY FACTS

INSTITUTION

- University founded in 1348
- Faculty founded in 1952
- Department founded in 1993
- 5 professors
- 12 researchers
- 25 PhD students

RESEARCH TOPICS

- database systems
- semantic web
- similarity search
- XML
- service-oriented systems





ABOUT THE INSTITUTION

The Research Center on Information Systems (CeRSI) is the unit of the LUISS Guido Carli University in charge of both base and applied research in the areas of information systems (IS), enterprise software and knowledge platforms, organization studies, and information and communication technologies. CeRSI regularly runs scientific research and consultancy activities, and participate to national, European, and international R&D programs. CeRSI also promotes the development of research in cooperation with most prominent Italian and foreign scientific communities, and performs, upon request by public or private, national or international, organizations, scientific counselling and researches in the aforementioned thematic areas.

CeRSI is one amongst the most relevant research centers in the area of IS in Italy, not only for the quality of the research activities performed, but also for having contributed to the birth and to the growth of the itAIS www.itais.org, the Italian Chapter of the AIS www.aisnet.org, and for having promoted and coordinated the role of the Italian academic and scientific community, especially at an international level. In the international landscape, even though it cannot compete with institutions with a more large and solid experience, CeRSI is credited of a relevant position achieved mainly thanks to the participation to a high number of international research projects, the agreements on scientific cooperation, and the contributions to the organization of several international events.

In 2012 the CeRSI research center has hosted, for visiting or seminars: Daniel Muzio (University of Manchester), Eusebio Scornavacca (Victoria University of Wellington), Claudia Loebbecke (University of Cologne), Øystein Sæbø (University of Agder).

RESEARCH TOPICS

Research at CeRSI is done in conjunction with project activities in which CeRSI members participate in the iterative phases of designing and evaluating IT artefacts. A multidisciplinary team of IS scholars with backgrounds in computer science, engineering, economics, management, cognitive and political sciences collaborate in both project and research activities by bringing together a multiplicity of methods for planning interventions and analyzing phenomena from different perspectives. This approach allows addressing relevant problems and engaging in national and international cooperation with other universities and research institutions.

Research at CeRSI focuses on three subject areas. The first is related to innovative forms of collaborative environments in which IT has the potential to influence the dynamics of complex adaptive systems. The second is related to organizational learning processes and capability development. The third refers to IT governance models, methods and tools in relationship with the evolution of new IT solutions. Information systems in these areas are viewed as networks of interacting agents surrounded by some existing information infrastructure. New models, methods and tools are needed for guiding the emergence of desired behaviours of individuals, communities, and organizations in each specific context. Among the more recent application domains for these concepts are social assistance, tourism, and industrial districts.

CURRENT RESEARCH PROJECTS

In 2012 the following research projects contributed by CeRSI came to a successful conclusion:

- DTC-L – Distretto Tecnologico della Cultura della Regione Lazio, financed by the Lazio Region (Filas). Partnership: BNC S.p.a., TXT Polymedia S.p.A.
- Smart-cities Laboratory on eHealth/eCare. Study on the state of the art of current good practices in eHealth/eCare in Europe. CeRSI is currently working on the following research projects:
- HOPES – Help and social interaction for elderly On a multimedia Platform with E-Social best practices; financed by the European Joint Programme Ambient Assistant Living, Call 2. Partnership: RAND SAS (Coordinator), Microsoft UK, University of Stuttgart, AHPH, CUP 2000, Campus Biomedico
- MID-BLUE – MULTIMEDIA INFORMATION DISTRIBUTION USING BLUETOOTH, financed by the Regional Law (Lazio) 4, of April 28th 2006, Art. 182, sub 4, let. C. Entrepreneurial Projects, Vertical Actions for the Development of Innovation and Technological transfers. Partnership: ITHUM Srl
- LiVES – LEARNING IN VIRTUAL EXTENDED SPACES, financed by the Regional Law (Lazio) 4, of April 28th 2006, Art. 182, sub 4, let. C. Entrepreneurial Projects, Vertical

Actions for the Development of Innovation and Technological transfers. Partnership: Arakne Srl

- A comparative study on the professionalization processes of IT project management in Italy and UK. In partnership with University of Manchester and Forum delle Competenze Digitali.

CeRSI has also organized the annual conference of the Italian Chapter of AIS in 2012. The conference took place at the Rome campus of Catholic University of Sacred Heart, on September 28th-29th. In the plenary session the relationship between Information Systems and Organization Studies in Italy and Europe has been debated in a panel with Claudia Loebbecke and leading Italian scholars in the Organization Science area.

CeRSI has contributed to the launch of the new Springer series Lecture Notes in Information Systems and Organisation whose first volume has been dedicated to the memory of Professor Alessandro D'Atri, founder and past director of CeRSI.

PUBLICATIONS

R. Baskerville, M. De Marco, P. Spagnoletti (2013): Designing organizational systems: an interdisciplinary discourse, in: Lecture Notes in Information Systems and Organisation (LNISO) vol. 1, Springer, Heidelberg.

P. D'Urso, L. De Giovanni, P. Spagnoletti, (2012): A fuzzy taxonomy for e-Health projects, International Journal of Machine Learning and Cybernetics, forthcoming.

M. De Marco, D. Te'eni, V. Albano, S. Za (2012): Information Systems: a Crossroad for Organization, Management, Accounting and Engineering, Physica-Verlag, Heidelberg

A. Motro, A. D'Atri, A. Brodsky, N. E. Egge (2012): Optimizing Procurement Decisions in Virtual Enterprises, International Journal of Decision Support System Technology (4:3), July, pp. 43-67

A. North-Samardzic, A. M. Braccini, P. Spagnoletti, S. Za (2014): Applying Media Synchronicity Theory to Distance Learning in Virtual Worlds: a Design Science Approach, International Journal of Innovation and Learning, forthcoming

A. Resca, A. D'Atri (2012): Strategic information systems and the reconfiguration of value space: A case study of Yoox, Journal of Information, Communication and Ethics in Society (10:3), pp. 131-143

P. Spagnoletti, A. Resca (2012): A Design Theory for IT supporting Online Communities, in Proceedings of the 45th Hawaii International Conference on System Sciences (HICSS-45), Grand Wailea, Maui, Hawaii



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KEY FACTS

INSTITUTION

- Amongst the most relevant research institutions in the IS research area in Italy
- 4 senior advisors
- 4 researchers
- 1 PhD student
- Several external national and international co-workers

RESEARCH TOPICS

- Cooperative environments
- Organizational learning processes
- IT governance models, methods and tools

EVENTS

X Conference of the Italian Chapter of AIS, Milan, December 2013





ABOUT THE INSTITUTION

The Institute of Information Management at the University of St. Gallen (IWI-HSG), founded in 1989, is an autonomous research institution affiliated to the University of St. Gallen (HSG). The institute pursues a mixed funding approach which means the budget comes from the following areas (in descending contribution).

- private research mandates (mainly consortial projects),
- teaching commitments at HSG's M.A. in Information, Media and Communication Management, Ph.D. in Management (Business Innovation), etc.,
- public research funding (Swiss national research fund SNF, KTI, EU),
- executive education in degree programmes (such as Executive Master of Business Engineering and Diploma in IT Business Management) and non-degree programmes.

Both public and the privately funded research projects at IWI-HSG are organized in the research programme "Business Engineering" which focuses on supporting business transformation ("Change the Business") by providing generic engineered artefacts such as methods or reference models. Pursuing the competence center (CC) approach for its main research topics, IWI-HSG coordinates and moderates several groups of (mainly large) companies in developing innovative solution approaches to important and relevant design problems in information management.

The Institute of Information Management is actually comprised of six departments, each headed by a full professor (Andrea Back, Walter Brenner, Reinhard Jung, Hubert Österle, Robert Winter and since August 1st, 2012 Jan Marco Leimeister). Some 10 Post-Docs and appr. 25 PhD student researchers are employed.

RESEARCH TOPICS AND CURRENT RESEARCH PROJECTS

In addition to consortium workshops with industry partners, an important activity stream of the "Competence Center Corporate Intelligence" CC CI – <http://ci.iwi.unisg.ch/> is the SNF funded project "A Design Theory for Architectural Coordination of Enterprise Transformations (ACET)" that is carried out together with the public research center Henri Tudor, Luxembourg. ACET aims at constructing a well-founded, situationally adaptable method for coordination support of large enterprise transformations. For this purpose, various architectural elements such as frameworks, modelling languages or model analysis will be combined. Based on latest scientific findings, the "Competence Center Corporate Data Quality" CC CDQ – www.cdq.iwi.unisg.ch is developing methods, architectures, reference models, and prototypes needed for efficient implementation of CDQ management in organizations. In consortium workshops and bilateral projects, participating enterprises are gaining critical know-how as to possibilities for successful establishing and maintaining of highly effective CDQ management. The CC "Health Network Engineering" CC HNE – <http://ehealth.iwi.unisg.ch/> focuses on the optimization of business processes in healthcare organizations as well as on the systematic development of networkability within the public health sector. Current research topics are transformational health care and e-health, process and quality management in health care, cooperation and service engineering

as well as emerging business models in the public sector. After the completion of an EU Interreg project to develop tools for measuring hospital process efficiency, a follow up EU project for building a transnational cooperation platform for hospitals could be acquired and started in June 2012. In the CC "Corporate Management Systems" CC USS – www.uss.iwi.unisg.ch/home innovative concepts that enable large, international corporations to manage performance are developed. In 2011 a new research stream "design for use" was initiated that addresses how executive's working style, use situation and connectivity can be considered in the customization of flexible, mobile corporate management systems for "digital natives". The CC "Industrialization of Information Management" CC IIM – www.cciim.ch focuses on knowledge transfer of the more mature industrial engineering industry to the IT industry (and IT service providers) in order to improve the management of IT in these companies. Current research streams are IT sourcing and cloud sourcing. In conjunction with the University of Leipzig, the CC "Sourcing 3" www.sourcing.iwi.unisg.ch develops concepts and instruments for information management in financial networks. Research activities are aligned with the "Bank 2015" model that represents a vision of customer-oriented as well as service-oriented business networking in financial services. The CC "Independent Living" CC IL – www.il.iwi.unisg.ch/index.php?id=2&L=2 strives to enable elderly people to live a self-determined and independent life in their own homes. Research

focuses on business models and prototyping of selected services in the areas of independent living and ambient assisted living. The competence network "Business 2.0" www.business20.unisg.ch investigates the use of web 2.0 concepts in companies. It focuses on the communication and information exchange through innovative internet applications. In 2012, the Institute has been extended by a sixth chair, which is led by Prof. Jan Marco Leimeister www.iwi.unisg.ch/de/About-us/Chairs/IWI-6.aspx. The goal of Prof. Leimeister's research is to develop theories, methods, models and tools for the systematic design, and management of innovative service systems. Additional research activities are focused on crowdsourcing & IT innovation.

PUBLICATIONS

The following list represents a very limited extract of our publications in 2012. The complete list and many full text downloads are available at www.iwi.unisg.ch/publikationen.

Stephan Aier: The Role of Organizational Culture for Grounding, Management, Guidance and Effectiveness of Enterprise Architecture Principles, in: Information Systems and E-Business Management, forthcoming.

Andrea Back, Peter Imler: Implementing a Classification Scheme for Enterprise 2.0, in: Information Technology 54 (2012), Nr. 5, S. 220–227

M. Berkovich, J. M. Leimeister, A. Hoffmann, H. Krcmar, (2012): A requirements data model for product service systems, in Requirements Engineering, 2012, pp. 1–26

Clarissa Falge, Boris Otto, Hubert Österle: Data Quality Requirements of Collaborative Business Processes, in: Proceedings of the 45th Hawaii International Conference on System Sciences. Los Alamitos: IEEE Computer Society, 2012

Dominik Friedel, Andrea Back: Determination of Enterprise 2.0 Development Levels with a Maturity Model, in Nunes, Miguel Baptista et al. (Eds.): Proceedings of the IADIS International Conferences: MCCSIS 2012, Lisbon, pp. 3–9

J. M. Leimeister, M. Böhm, P. Yetton (2012): Managing IT in a Business Unit Divestiture, in MIS Quarterly Executive, 11 (2012), 1, pp. 37–48

J. Mayer: Managers' Mobile Workplace of the Future: Identifying Attractive User Interface Software Components with the Kano Model, accepted for publication in ICIS 2012 Proceedings

Jörg H. Mayer, Stefan Bischoff, Robert Winter, Timm Weitzel: Extending Traditional EIS Use to Support Mobile Executives Online and Offline, in: MIS Quarterly Executive 11 (2012), 2, pp. 87–96

T. Mettler: Post-Acceptance of Electronic Medical Records: Evidence from a longitudinal Field Study. Accepted for publication in ICIS 2012 Proceedings

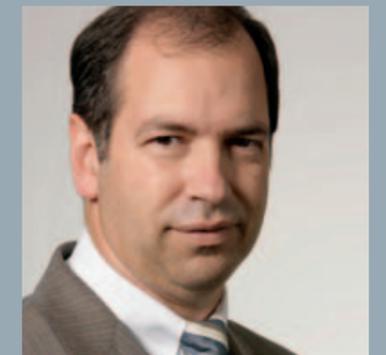
Tobias Mettler, Dimitri A. Raptis: What constitutes the field of Health Information Systems? Fostering a systematic framework and research agenda, in: Health Informatics Journal, 18 (2012), 2, pp. 147–156

Boris Otto: Managing the business benefits of product data management: the case of Festo, in: Journal of Enterprise Information Management 25 (2012), 3, pp. 272–297.

Jochen Wulf, Till J. Winkler, Walter Brenner: Organisationsgestaltung der Demand-IT. In: INFORMATIK 2012, 4. Workshop IT-Governance in Verteilten Systemen (GVS), 2012, Lecture Notes in Informatics (LNI).

EVENTS

The event series "Anwenderforum St. Gallen" (three per year) was continued in 2012 with the 35th, 36th and 37th edition. Anwenderforum topic focus alternates between enterprise transformation and corporate intelligence. Moreover the Meter2cash www.meter-2-cash.ch day, a forum to discuss new innovative energy solutions, was successfully organized for the first time. IWI-HSG also continued to organize events like the Business Engineering Forum or the IT Operations Days. These events serve as networking platforms that bring together a critical mass of practitioners and academics.



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KEY FACTS

INSTITUTION

- Founded in 1989
- 6 Chairs
- 50 Researchers
- Executive Education
- Programs: Executive Master in Business Engineering, Diploma in IT Business Management

RESEARCH TOPICS

- Information Logistics Mgmt
- Enterprise Architecture Mgmt
- Integration Project Mgmt
- Health Networking
- Corporate Controlling Systems
- Business Engineering
- Sourcing in Financial Services
- Independent Living
- IT Management
- Business Innovation



ABOUT THE INSTITUTION

The University of Turku is a multidisciplinary scientific university located on the Southwest coast of Finland, in the vivid student city of Turku. With over 23,000 students and 3,500 employees, the University of Turku is one of the largest universities in Finland. The Institute for Information Systems Science was established in the late 1970s, with the first position opening already in 1971. The institute has grown to have three full professors and a total staff of about 25. In addition, the institute has approximately 20 active doctoral level students. The yearly intake for students to the bachelor level having Information Systems Science as their major subject is around 25 of the annual intake of 250 of the whole Business School. In addition there are yearly approximately 60 master level students in the two international master programs of the Institute: Global Information Systems Management and International Master in Management of Information Technology. Information Systems is a popular minor for students of many areas of Economics, Business Administration as well as Computer Science.

The Institute carries a main responsibility within Turku Center for Computer Science (TUCS) for studies within information systems. TUCS is a joint unit between the University of Turku, the Turku-based Swedish-speaking Åbo Akademi University and Turku Polytechnics. All master level courses within TUCS are taught in English. The Institute for Advanced Management Systems Research (IAMSAR) in Åbo Akademi Univer-

sity and Information Systems Science in Turku School of Economics has formed Turku Information Systems Research Alliance (TISRA). The objective is to increase the effectiveness and credibility of teaching and research of Information Systems Science on the national level and develop further cooperation and trust between the research units. CIO Academy Learning Society is the network of CIO PhD students and professionals in the pursuit of academic degrees in Finland. Currently, the University of Jyväskylä, the Turku School of Economics and the Tampere University of Technology take part in this cooperation. It was established to speed up and build a community of professionals interested in developing themselves by learning scientific inquiry in IT management-related issues and to help to raise a new generation of MBAs and MScs for the field.

RESEARCH TOPICS

The focus of the research activities within the institute lies within understanding the utilization of information and communication technology in enterprises and other organizations. The research conducted within the institute covers most of the key areas of Information Systems. The research activities can be classified into four themes:

- Management of Information Systems and Business Information Systems
- Networks and Business Models
- Work Informatics
- Healthcare Information Systems

In terms of research methods used, the institute has a track-record and long traditions of conducting action research dating

back to the 1980s. Today, the competence of the faculty members covers the whole methodological spectrum from qualitative to quantitative research.

Despite being in a business school, the institute runs a rich research tradition on public sector and third sector organizations, too. E-health is a good example of this, where the role of public service cannot be forgotten. Research is done from the viewpoint of different organizational stakeholders: organization's top management, information systems management, as well as individuals such as customers or workers. Recent developments put emphasis on the management and organizational aspects of data security and privacy, as well as IT governance issues.

CURRENT RESEARCH PROJECTS

During the year 2012, the research portfolio of the institute has grown considerably. Important new openings are the research projects ICT-Portti and e-Live, which offer development services for small and medium-sized enterprises in the field of ICT. The research for the Finnish ICT-barometer happened in the year 2012, too. This research by Tomi Dahlberg was done in association with the Finnish Information Processing Association. During the year 2011, the research project on public-private partnership success, principles and organization in the health and social services of the City of Turku was initiated also in the institute. With the development of a master program

in Information Security, research on the topic has also been intensified. A research report on continuity management in Finnish companies was published in 2011.

Research topics by the doctoral students in the institute cover a wide spectrum of areas. Current active topics include:

- application of open source in health and telecommunication industries
- data mining in aviation safety
- use of teaching platforms
- management of information systems
- capabilities in business process management
- agility in information systems management
- information overflow and interfaces in the work of medical doctors.

Research on different applications of Social Media seems to be a next core topic for the institute. A lot of initiatives following the road shown by Matti Mäntymäki's much appreciated thesis "Continuous Use and Purchasing Behaviour in Social Virtual Worlds" are under way.

PUBLICATIONS

E. Heiro, M. Mäntymäki (2012): Managing medication information with electronic patient records – A Finnish Clinicians Perspective. *Health & Technology* (2:1), pp. 113–122

N. Islam (2012): The Role of Perceived System Quality as Educators' Motivation to Continue E-learning System Use. *AIS Transaction of Human-Computer Interaction* (4:1), pp. 25–43

J. Järveläinen (in press): Information Security and Business Continuity Management in Interorganizational IT Relationships. *Information Management & Computer Security*

R. Serene, E. Koskivaara 2012: Turku Taking Steps Towards Future: Technology Supports Physical Activity. *Lampert Academic Publishing*

R. Suomi (2012): Telework in Finland. *Journal of Japan Telework Society* (1:1), pp. 44–47

T. Verhagen, F. Feldberg, B. van den Hooff, S. Meents, J. Merikivi (2012): Understanding Users' Motivations to Engage in Virtual Worlds: A Multipurpose Model and Empirical Testing. *Computers in Human Behavior* (28:2), pp. 484–495

DISSERTATIONS

Islam, A. K. M. N: Understanding e-learning system users' post-adoption usage behavior and its outcomes: A study of a learning management system. *Turku School of Economics, Series A-5:2012.*

Tommi Tapanainen: Information Technology (IT) manager's contribution to IT agility in organizations – views from the field.

EVENTS

- Conference Well-being in the Information Society (WIS)
- ICEC 2013 The 15th International Conference on Electronic Commerce, 13–15 of August 2013



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KEY FACTS

INSTITUTION

- International environment
- Approximately 23 000 students
- Circa 3 500 staff members
- Yearly master level intake ca. 30
- 3 professors
- Circa 25 staff members

IS MASTER PROGRAMS

- Some 20 active doctoral students
- Global Information Technology Management
- International Master in Management of Information Technology
- Work Informatics

RESEARCH TOPICS

- Management of IS and Business Information Systems
- Networks and Business Models
- Work Informatics
- Wellbeing and Healthcare IS



UNIVERSITY OF LIECHTENSTEIN – INSTITUTE OF INFORMATION SYSTEMS – HILTI CHAIR OF BUSINESS PROCESS MANAGEMENT



ABOUT THE INSTITUTION

The Institute of Information Systems at the University of Liechtenstein was founded in the early 1990s and has been continuously growing since then. The institute offers a Master's program in IT & Business Process Management and a major in Information Management & IT within the Bachelor's program in Business Administration. In 2012, the Master's program started with more than 30 students from 16 different nations. The institute is a co-founder of the Hilti Fellowship Program that provides highly motivated and committed Master's students with the opportunity to do an internship at the Hilti Corporation in Liechtenstein while, at the same time, taking courses at the University of Liechtenstein. Currently welcoming applications for the 12th Call of the Hilti Fellowship, the program has proven a vital element of student exchange within the ERCIS network. In 2012, students from Estonia, Finland, Germany, and Russia participated in the program (more information available at www.uni.li/hilti-fellowship). Situated in the heart of Europe, the Institute of Information Systems strives to be a networking hub that facilitates the exchange of both IS researchers and students. In this past year, we have had the pleasure of being host to a number of distinguished individuals, including Ulrike Baumöl (FernUniversität in Hagen, Germany), Nicholas Berente (University of Georgia, Athens, GA, USA), Elena Gorbacheva (University of Münster, Germany), Reinhard Jung (University of St.Gallen, Switzerland), Roland Holten (Goethe University, Frankfurt am Main, Germany), Jan Mendling (Vien-

na University of Economics and Business, Austria), and Niz Safrudin (Queensland University of Technology, Brisbane, Australia). The institute represents the Association for Information Systems (AIS) in Liechtenstein through the Liechtenstein Chapter of the AIS (LCAIS). Iris Junglas (Accenture Institute for High Performance), Marcello La Rosa and Jan Recker (both from the Queensland University of Technology, Brisbane, Australia) are research fellows at the Institute.

RESEARCH TOPICS

Research at the institute specializes in Business Process Management (BPM) in particular, as well as a number of specific fields in Information Systems (IS). The field of BPM is multidisciplinary and has interfaces to several other disciplines, most notably information systems, management, organization studies, and computer science. Our main research areas are creativity and innovation in IS, culture and people in BPM, Green IS and Green BPM, information and content management, IT and BPM value, and emergent research methods in IS and BPM.

PUBLICATIONS

J. Vom Brocke, S. Seidel, J. Recker (Eds.). (2012): Green Business Process Management: Towards the Sustainable Enterprise. Heidelberg: Springer

J. Becker, W. Schwaderlapp, S. Seidel (Eds.) (2012): Management kreativitätsintensiver Prozesse – Theorien, Methoden, Software und deren Anwendung in der Fernsehindustrie. Heidelberg: Springer

P. Spagnoletti, M. De Marco., N. Pouloudi, D. Te'eni, J. vom Brocke, R. Winter, R. Baskerville (Series Eds.): (forthcoming). Lecture Notes in Information Systems and Organization. Springer: Germany

S. Seidel, J. Recker, J. vom Brocke (accepted for publication): Sensemaking and Sustainable Practicing: Functional Affordances of Information Systems in Green Transformations. MIS Quarterly

A. Dimoka, R. D. Banker, I. Benbasat, F. D. Davis, A. R. Dennis, D. Gefen, A. Gupta, A. Ischebeck, P. Kenning, P. A. Pavlou, G. Müller-Putz, R. Riedl, J. vom Brocke, B. Weber (2012): On the Use of Neurophysiological Tools in Information Systems Research: Developing a Research Agenda for NeuroIS. MIS Quarterly, 36(2), 679–702

J. Vom Brocke, R. Riedl, P.-M. Léger, (2012): Application Strategies for Neuroscience in Information Systems Design Science Research. Journal of Computer Information Systems, 52(4)

C. Janiesch, M. Matzner, O. Müller (2012): Beyond Process Monitoring: A Proof-of-Concept of Event-driven Business Activity Management. Business Process Management Journal, 18(4), 625–643

J. Becker, D. Beverungen, R. Knackstedt, M. Matzner, O. Müller, J. Pöppelbuss (accepted for publication): Bridging the Gap Between Manufacturing and Service Through IT-Based Boundary Objects. IEEE Transactions on Engineering Management



M. Sulayman, C. Urquhart, E. Mendes, S. Seidel, S. (2012): Software process improvement success factors for small and medium Web companies: A qualitative study. Information and Software Technology, 54(5), 479–500

J. vom Brocke, B. Pernici, M. Aiello, B. Donnellan, E. Gelenbe (2012): What IS Can Do for Environmental Sustainability: A Report from CAiSE'11 Panel on Green and Sustainable IS. Communications of the Association for Information Systems, 30(18)

DISSERTATIONS

In October 2012, Theresa Schmiedel, research assistant at the Institute of Information Systems at the University of Liechtenstein, received her PhD in Business Economics. Her dissertation on "Understanding Culture as a Concept in Business Process Management Research" was co-supervised by Jan vom Brocke (University of Liechtenstein), Jörg Becker (University of Münster, Germany), and Jan Recker (Queensland University of Technology, Brisbane, Australia)



EVENTS

BPM Career Program: The BPM Career Program at the University of Liechtenstein is aimed at highly qualified and motivated talents with a firm interest in management and technology. It provides students with the opportunity to work in a professional environment while, at the same time, being enrolled in the IT and Business Process Management Master Program at the University of Liechtenstein. **BPM Winter School:** In this winter school, students gain a comprehensive understanding of the contemporary state-of-the-art in BPM. Classes are taught by BPM thought leaders from both academia and practice. In case studies and exercises, students practically apply concepts and methods. **BPM Round Table:** Each round table meeting focuses on a specific sub-topic of Business Process Management. The meetings are interactive and open to all interested participants. Our aim is to foster BPM-related knowledge exchange and networking in the Rhine Valley and Lake Constance area. Please visit www.bpm-education.org for further information about our activities in teaching and education.



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KEY FACTS

INSTITUTION

- Founded in 1991
- Researchers: 15

RESEARCH TOPICS

- Creativity and innovation in IS
- Culture and people in BPM
- Green IS and Green BPM
- Information and content management
- IT and BPM value
- Emergent research methods in IS and BPM

EVENTS

- 8th International Conference on Design Science Research in Information Systems and Technologies 2013, Helsinki, Finland, Program Chair
- 11th International Conference on Wirtschaftsinformatik (WI 2013), Leipzig, Germany, Student Track Chair

VIENNA UNIVERSITY OF ECONOMICS AND BUSINESS – THE DEPARTMENT OF INFORMATION SYSTEMS AND OPERATIONS



ABOUT THE INSTITUTION

The Department of Information Systems and Operations, Vienna University of Economics and Business (WU Vienna), was founded in the course of WU's organizational restructuring in 2005. Since then, it has consolidated the know-how and reputation of five highly renowned institutes and 16 professors with distinguished focuses in research and teaching, providing a broad representation of IS research topics. Our Bachelor's Program in Information Systems, as well as the subsequent Master's program, are recognized as Austria's leading degree programs in this field (according to Format Uni-Ranking, 2009). The trans-disciplinary Master's Program in Supply Chain Management (launched in the winter semester 2010/11) ambitiously follows this successful tradition ...

CURRENT RESEARCH PROJECTS

In November 2012, the Research Institute for Computational Methods in cooperation with the Institute of Information Business started the uComp project, funded by EU FP7/CHIST-ERA, with project partners such as the University of Sheffield and LIMSI Paris. uComp will merge collective human intelligence and automated methods in a symbiotic fashion in a scalable and generic framework for knowledge extraction and evaluation. Going beyond mere data collection, the framework will continuously learn from human feedback to optimise the automated methods, and embed the human computation paradigm into adaptive knowledge extraction workflows. Since October 2012 the Institute of Information Business and the Institute of Production Management jointly participate in an EU FP7 Project on a Service Platform for Green European Transportation (GET Service), with project partners such as TU Eindhoven, HPI Potsdam, IBM Research Zurich, and Portbase (Rotterdam Harbour). The goal is to develop a software platform for the collection and provision of real-time transport route data suitable for planning and control. The institutes of WU Vienna will be responsible for the identification of case studies and the implementation of the event processing component.

ACTIVITIES

2012 International Conference on Information Resources Management (Conf-IRM) From 21st to 23rd May, the WU under the leadership of the Institute of Information Management and Control hosted the Inter-

national Conference on Information Resources Management (Conf-IRM). Conf-IRM is an affiliated conference of the Association for Information Systems (AIS). It provides a peer-reviewed forum for researchers from across the globe to share contemporary research on developments in the fields of information systems and information management. The event was a great success and generated overwhelming international interest. We were proud to welcome about 150 researchers, practitioners and students from 28 different countries. Conf-IRM 2012 provided a current account on many ideas and initiatives in globalised and digital world promoting Accountability within the discipline of Information Systems. The main programme was organized as a set of 15 different tracks divided into parallel sessions, two keynote addresses and one panel discussion. The AIS-Leo Award holder Niels Bjørn-Andersen from the Copenhagen Business School delivered the academic keynote and Ryszard Dyszkiewicz from the Vienna Insurance Group the practice keynote.

Joint conferences emisa-bpmn-awpn 2012 in Vienna: From 12 to 14 September, WU Vienna and University of Vienna jointly hosted the International Workshop on BPMN, the BPMN Practitioners Days, the EMISA Workshop, and the AWPN Workshop. The event was explicitly tailored to serve as a bridge between academia and practice. Altogether, 100 participants took part in this event. The key note speakers were delivered by highly reputable experts in business process management. For the first time, Dr. Stephen A. White, the found-

ing father of BPMN, presented his perspective on the standardization in a German-speaking country. Prof. Dr. Jan Recker from Queensland University of Technology provided summarized current research on BPMN and looked into the question of what we do not know about it at this stage. Finally, Jakob Freund of camunda presented his take on practice-proven guidelines for working with BPMN.

PUBLICATIONS

The following list represents a short extract of some of our publications:

Wolfgang Burgholzer, Gerhard Bauer, Martin Posset, Werner Jammerneegg (2012): Analysing the impact of disruptions in intermodal transport networks: A micro simulation-based model. *Decision Support Systems*

Jose-Rodrigo Cordoba, Alan Pilkington, Edward Bernroider (2012): Information systems as a discipline in the making: comparing EJIS and MISQ between 1995 and 2008. *European Journal of Information Systems* (21): 479–495

Jan Mendling, Mark Strembeck, Jan Recker (2012): Factors of process model comprehension – Findings from a series of experiments. *Decision Support Systems* 53(1): 195–206

For the first time Dr. Stephen A. White (IBM USA) presented his perspective on the standardization of BPMN in a German-speaking country.



Avner Ottensooser, Alan Fekete, Hajo A. Reijers, Jan Mendling (Jan. 2012): Con Mectas: Making sense of business process descriptions: An experimental comparison of graphical and textual notations. *Journal of Systems and Software* 85(3): 596–606

Taudes, Alfred, Rudloff, Christian (2012): Integrating Inventory Control and a Price Change in the Presence of Reference Price Effects – A Two-Period Model. *Mathematical Methods of Operations Research* (formerly: *Zeitschrift für Operations Research (ZOR)* 75 (1): 29–65

Weidlich, Matthias, Mendling, (Jan. 2012): Perceived consistency between process models. *Information Systems* 37 (2): 80–98.

Hoisl, Bernhard (2012): Inter-Widget Communication for Personal Learning Environments: Methods and Software Artifacts. Saarbrücken: AV Akademikerverlag

Bauer, Christine (2012): Bands as Virtual Organisations: Improving the Processes of Band and Event Management with Information and Communication Technologies. Frankfurt (Germany): Peter Lang Internationaler Verlag der Wissenschaften



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KEY FACTS

INSTITUTION

- Founded in 2005
- More than 60 Researchers

RESEARCH TOPICS

- Supply Chain Operations Planning
- Social Aspects of IS
- Business Programming
- Computer Integrated Manufacturing
- Online-Algorithms and Decision Theory
- Knowledge-based Management
- New Product Development
- Data Modeling and eLearning
- Relation Theory
- eGovernment and eVoting
- eMarketing and Software Agents
- Decision Support Systems
- Secure Business Systems



ABOUT THE INSTITUTION

Waikato Management School is accredited by AACSB International, EQUIS – the European Quality Improvement System, and AMBA – the UK-based Association of MBAs. AACSB is the US-based Association to Advance Collegiate Schools of Business and is the world's oldest-established quality assurance body in management education. These accreditations are reviewed every few years by a team of academics from business schools around the world to ensure Waikato Management School staff continue to offer high quality and relevant teaching and that our top research rankings, programming and planning are maintained to international standard. The Waikato Management School is the top-ranked business school in New Zealand based on PBRF research productivity assessments. As one of eight departments in the school, the Department of Management Systems is home to the disciplines of e-business, e-commerce, information systems management, knowledge management, supply chain management, decision making and systems intelligence.

RESEARCH TOPICS

Our research reflects the multidisciplinary nature of the department. Recent topics of interest include:

- IT and process/strategic alignment in SMEs
- Tacit knowledge management
- How tacit knowledge is built
- Measurement of learning organisations
- A typology of systems intelligence
- Electronic government
- IS strategic alignment

- The IS research discipline
- Supply chain management

CURRENT RESEARCH

Recent work in the knowledge management area investigates knowledge transfer and knowledge building processes observed at technical support centres in China, how script-based tacit knowledge is built, not transferred, and how supervisors manage tacit knowledge in workers in industrial environments. A resource website on Knowledge Management has been set up at <http://kmrg.ac.nz>. Our work in e-government focuses on how social networks are utilised in government, and at policy maker's perspectives on how technology has been used at local levels. In the area of supply chain, work currently centres on external relationship building and the use of the Quick Scan Methodology to assess company supply chains. Other staff are working with the fellow ERCIS member from Bordeaux on lessons learned for prescriptive decision modelling from descriptive managerial behaviours. We also are busy with colleagues in Helsinki and Austria developing theory and measurement metrics for the new area of research called Systems Intelligence.

PUBLICATIONS

Here are some of the more significant articles published recently:

Ab Wahid, Roslina; Corner, James (2011): Critical success factors and improvements in ISO 9000 maintenance, *Business and Management Quarterly Review*, 2, 2, 1–13

Ahn, Hyung Jun; Childerhouse, Paul; Vossen, Gottfried; Lee, Habin (2012): Rethinking XML-enabled agile supply chains, *International Journal of International Management*, 32, 1, 17–23

Basnet, Chuda; Wisner, Joel (2012): Nurturing internal supply chain integration, *Operations and Supply Chain Management*, 5, 1, 27–41

Bohme, Tillmann; Childerhouse, Paul; Deakins, Eric; Towill, Denis (2012): A method of reconciling subjectivist and objectivist assumptions in management research, *Journal of Leadership and Organizational Studies*, -online, 1–9

Cataldo, Alejandro; McQueen, Robert; Sepulveda, Marcos (2012): Big IT for small companies, *Industrial Engineer*, 43, 5, 48–53.

Cataldo, Alejandro; Sepulveda, Marcos; McQueen, Robert (2012): Exploring the IT usage in SMEs from New Zealand, Columbia and Chile using action-research methodology, *Journal of Innovation Management in Small and Medium Enterprises*, 2012, 1–8

Chen, Jihong; McQueen, Robert (2010): Knowledge transfer processes for different experience levels of knowledge recipients at an offshore technical support center, *Information Technology & People*, 23 (1): 54–79

Chen, Jihong; Sun, Peter; McQueen, Robert (2010): The impact of national cultures of structured knowledge transfer, *Journal of Knowledge Management*, 14 (2): 228–242

Childerhouse, Paul; Deakins, Eric; Bohme, Tillman; Towill, Denis; Disney, Stephen; Banomyong, Ruth (2011): Supply chain integration: An international comparison of maturity, *Asia Pacific Journal of Marketing and Logistics*, 23, 4, 531–552

Childerhouse, Paul; Towill, D (2011): Effective supply chain research via the quick scan audit methodology, *Supply Chain Management: An International Journal*, 16 (1): 5–10.

Deakins, Eric; Dillon, Stuart; Al Namani, Hamed; Zhang, Chao (2010): Local E-government impact in China, New Zealand, Oman and the United Kingdom, *International Journal of Public Sector Management*, 23 (6): 1–12

Deakins, Eric; Vossen, Gottfried (2010): Women leading and learning through present-day web linking technology, *International Journal of Knowledge and Learning*, 6(1): 1–27

Hung, Wei-Hsi; McQueen, Robert; Ku, Cheng-Yuan; Chang, Li-Min (2012): Aligning websites with enterprise success: An evaluative approach, *Journal of Computer Information Systems*, 52, 4, 49–58

Hung, Wei-Hsi; Tsai, Chia-An; Hung, Shin-Yuan; McQueen, Robert; Jou, Jau-Jeng (2011): Evaluating web site support capabilities in sell-side B2B transaction processes: A longitudinal study of two industries in New Zealand and Taiwan, *Journal of Global Information Management*, 19, 1, 51–79

Jones, Rachel; Corner, James (2012): Seeing the forest and the trees: A complex adap-



tive systems lens for mentoring, *Human Relations*, 65, 3, 391–411

McQueen, Robert J. and Chen, Jihong (2010): Building script-based tacit knowledge in call center trainees, *Knowledge Management Research and Practice*, V.8, No 3, pp. 240–255 [Publisher: Palgrave Macmillan ISSN: 1477-8238, EISSN: 1477-8246]

Rastrick, Karyn; Corner, James (2010): Understanding ICT based advantages: A techno savvy case study, *Interdisciplinary Journal of Information, Knowledge and Management*, 5, 305–326

Taylor, Hazel; Dillon, Stuart; Van Wingen, Melinda (2010): Focus and diversity in information systems research: Meeting the dual demands of a healthy applied discipline, *MIS Quarterly*, 34 (4): 647–667

DISSERTATIONS

Ab Wahid, Roslina: The maintenance of ISO 9000 in Malaysian service organisations, 2011

Bircham-Connolly, Heather: Structured Articulation of Knowledge: The impact of the framing of questions, 2007

Boehme, Tillmann: Supply Chain Integration

Chen, Jihong: Exploring knowledge transfer and knowledge building at offshore technical support centers, 2010

Hung, Wei-Hsi: Supporting critical activities from web sites: an evaluation methodology

Janson, Annick: Narratives of online collaborative experiences: Leaders and lurkers, 2006

Rastrick, Karyn: Competitive Capabilities: A Resource Based Model of ICT Advantage

Siritanachot, Chansit: The impact of interventional change techniques on an Internet banking cross-functional team, 2008

Williams, David: An investigation into tacit knowledge management at the supervisory level, 2011



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KEY FACTS

INSTITUTION

- founded in 1964
- Department of Management Systems
- is one of eight departments in the Faculty of Management
- 8 full time researchers

RESEARCH TOPICS

- Electronic government
- IS strategic alignment
- Groupware
- Knowledge management
- Organisational learning
- Supply Chain management
- Descriptive/prescriptive decision processes
- Systems Intelligence



› BPM IN FINANCIAL INDUSTRIES

The competence center “BPM in Financial Industries” addresses current business process management (BPM) topics that are of major interest to financial sector institutions – primarily focusing on banks and insurance companies. While our work in the last year has addressed primarily the modeling and compliance of supervisory report obligations, our work in 2012 focuses on the modeling and analysis of banking business processes.

One of the largest industry projects since the foundation of the competence center in 2010 was acquired this year. Together with one of Germany’s largest IT service providers for banks, ERCIS members and project seminar students develop a business process and compliance management platform based on the modeling tool Icebricks.

The project’s goal is to develop a foundation for legal influence analyses. In the end, we will be able to analyze influenced process and process activities, its belonging

system resources and organization units. Beside this industry project, the competence center has successfully published several conference and journal articles about the conceptual design and analysis of regulatory compliant business processes and data warehouses.

Beginning from identifying the need for such solutions to the implementation of analysis algorithms and modeling techniques, the CC team researches the main compliance areas of financial industries.

The agenda for the upcoming year 2013 will focus on the cost perspective of financial business processes.

Therefore we plan to investigate cost mechanisms and functions for estimating the costs for regulatory-related changes on business processes and data warehouses.

Interested researchers as well as practitioners are welcome to participate in our research results and to become a part of the competence center.



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› CLOUD COMPUTING

Founded in spring 2011, the ERCIS Cloud Computing Competence Center (C4) fosters a growing “tradition” of panel discussions and events centered on cloud sourcing risks and opportunities for small and medium-sized enterprises (SMEs). A highlight of 2012 was the expert session on legal aspects of cloud sourcing where renowned experts on matters of cloud legislation presented the most prominent pitfalls for German SMEs. Afterwards, a lively discussion among the audience – mostly delegates of regional SMEs – and the panel brought practical insights and delineated problematic aspects. In addition, the C4 continued its series of C4 Management Briefs by a new publication on cloud governance issues. To find out more, simply visit www.ercis.de/research/competence-center/cloud-computing or contact c4@ercis.uni-muenster.de.



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› CONCEPTUAL MODELING

Recently, conceptual models have become increasingly common in almost every kind of information systems design. Common repositories of companies' conceptual models have reached a considerable size, containing thousands to tens of thousands of model elements, which makes the task of manually applying these models for different purposes nearly impossible (e.g., for Business Process Reengineering, Business Process Compliance Management, Mergers and Acquisitions, ERP Alignment, Model Driven Software Engineering, Benchmarking, etc.). Against the background of this development, the Competence Center for Conceptual Modelling focuses on automatic support for model analysis. In particular, we have developed approaches and tools for

- Structural Model Analysis: To meet the model analysis requirements of Business Process Reengineering, Business Process Compliance Management, Mergers and Acquisitions, ERP Alignment, Model Driven Software Engineering, and Benchmarking, we developed and improved an approach for structural model queries. In particular, we support the identification of model sections that comply with a template structure. Such a template defines how a model structure typically looks and, for instance, reveals a process weakness. The query approach uses these templates, analyses arbitrary models and returns those model sections that match.
- Efficient Analysis of Large Models and Model Collections: The problem of analysing large model repositories is that model analysis is computationally expensive. We have identified typical conceptual model characteristics based on findings from graph theory that allow us to significantly decrease the computational expenses of model analysis. These characteristics are mainly based on bounded treewidth and planarity of model graphs. This means that we can turn the general problem of exponential complexity into a problem of polynomial complexity, making automatic model analysis feasible even for large model repositories typically

used by large companies and corporate groups. To prove the increased efficiency of algorithms exploiting structural model characteristics, we have implemented several of them and performed query tests on large model repositories. First results support our assumptions.

- Business Process Compliance Management: We acquired a research project on Business Process Compliance Management, funded with 330.000 by the German Research Foundation (DFG). In this project, we apply our knowledge on model querying to business process models to be checked for compliance. To be able to prove the utility of model-driven Business Process Compliance Checking, we collaborate with companies from the financial sector.

In the near future, we plan to extend our research to combining terminological standardisation of conceptual models with ontologies, model-based ERP Alignment and model customization. To co-ordinate our research with national and international colleagues and to discuss future challenges of research on conceptual modelling, we held a seminar on "Open Models as a Foundation of Future Enterprise Systems" in Dagstuhl, Germany in March.

Selected publications

J. Becker, P. Bergener, D. Breuker, M. Räckers: An Empirical Assessment of the Usefulness of Weakness Patterns in Business Process Redesign, in: Proceedings of the 20th European Conference on Information Systems (ECIS 2012). Barcelona, Spain 2012

J. Becker, P. Delfmann, M. Eggert, Schwittay: Generalizability and Applicability of Model-based Business Process Compliance Checking Approaches – A State-of-the-Art Analysis and Research Roadmap. Business Research (BuR). Accepted for publication

J. Becker, D. Breuker, P. Delfmann, H. Dietrich, M. Steinhorst: A runtime analysis of graph-theoretical algorithms to detect patterns in process model collections, in: Proceedings of the 2nd International Workshop

on Process Model Collections in conjunction with the 10th International Conference on Business Process Management, LNBP. Tallinn, Estonia 2012

J. Becker, D. Breuker, P. Delfmann, H. Dietrich, M. Steinhorst: Identifying Business Process Activity Mappings by Optimizing Behavioral Similarity, in: Proceedings of the 18th Americas Conference on Information Systems (AMCIS 2012). Seattle, USA 2012

M. Steinhorst, D. Breuker, P. Delfmann, H. Dietrich: Supporting Enterprise Transformation Using a Universal Model Analysis Approach, in: Proceedings of the 20th European Conference on Information Systems (ECIS 2012). Barcelona, Spain 2012

D. Breuker, H. Dietrich, J. Püster, M. Steinhorst, J. Becker, P. Delfmann: Eine empirische Studie zur strukturellen Komplexität konzeptioneller Modelle Grundlegung eines effizienten Ansatzes zur strukturellen Modellanalyse, in: Proceedings der Konferenz Modellierung betrieblicher Informationssysteme (MoBIS) auf der Multikonferenz Wirtschaftsinformatik (MKWI 2012). Braunschweig, Germany 2012, pp. 1688–1701

D. Breuker, H. Dietrich, M. Steinhorst, J. Becker, P. Delfmann: Effiziente Prozessmodellanalyse mit Algorithmen der Subgraphisomorphie, in: Proceedings der Konferenz Modellierung betrieblicher Informationssysteme (MoBIS) auf der Multikonferenz Wirtschaftsinformatik (MKWI 2012). Braunschweig, Germany 2012, pp. 1613–1624



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E-GOVERNMENT

The E-Government Competence Center, which was founded in 2004, has a long tradition in process management both within governments as well as between governments and further organizations. During this year, we have started to broaden our research focus and conducted studies that especially consider the relationship between governments and the citizens.

Study on the potential of eID use in universities

Like many European countries, Germany has introduced an electronic ID card. However, the usage rates are rather poor, which can be ascribed to the lack of potential applications. We conducted a survey with 3000 students as well as staff from the University of Münster asking them whether they could imagine using the eID for transactions at the university. The results have revealed that both staff and students are interested in carrying out certain processes online with the help of the eID. However, most of the respondents wished for a detailed information strategy that includes explaining the use cases of an eID employment, involved risks as well as advantages. Striking enough, the analysis suggests that the social influence seems to have a significant effect on the use of eIDs in the university context.

Qualitative Study of government use of social media

Social media have become an integral part of the communication strategy in many businesses. Although they offer potentials for governments, too, the public sector has not yet started to use social media in a strategic way. In order to get an overview of how governments exploit social media, we derived a coding scheme for governments' usage of Facebook. Afterwards, we applied the coding scheme to different Facebook pages of German local governments using qualitative and quantitative content analysis techniques. The results suggest that governments have not yet started to use the potentials offered by social media. They rather apply traditional

"offline" communication patterns to the Web 2.0 world. This analysis, which has looked at government Facebook pages from the outside, will be followed by an inquiry of governments concerning their underlying social media strategy.

Survey of e-Government Readiness in new Zealand, Australia, and Germany

Together with the ERCIS partner universities in Waikato, New Zealand, and Brisbane, Australia, we sent a questionnaire to municipal governments asking them about their e-government status, their communication strategy as well as further mobile developments. We expect first results by the end of this year.

Publications

L. Heierhoff, S. Hofmann (2012): Adoption of Municipal e-Government Services – A Communication Problem?, AMCIS

S. Hofmann, M. Räckers, J. Becker (2012): Identifying Factors of E-Government Acceptance – A Literature Review, ICIS, accepted for publication

S. Hofmann, M. Räckers, D. Beverungen, J. Becker (2013): Old Blunders in New Media? How Local Governments Communicate with Citizens in Online Social Networks, HICSS, accepted for publication



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ERCIS LAB MOSCOW

The ERCIS Lab Moscow at National Research University Higher School of Economics has been formed in 2011 to help Russian academia and industry clients to extend ideas and research direction in information systems topic with ERCIS members, to create a direct link between academic research and product development/industry cooperation.

The overall mission of ERCIS Lab Moscow is:

- To define how Academia and Industry can work together in new economic environments specifically in the area of ICT and business software technologies.
- To share with Russian companies and public sector the best research and educational methods and approaches in Business Informatics/MIS area.
- To create a framework for research and academic skills of 21 century in Business Informatics/MIS area, to support talented future academic leaders, especially in emerging markets in relevant research areas.

At the moment ERCIS Lab Moscow staff includes seven visiting fellows, PhD and MSc students. ERCIS Lab Moscow is working very closely with ERCIS HQ in Münster.

Main research directions are:

- Business Transformation, organizational changes
- Enterprise Architecture and business process management for very large companies
- Business Process management in design and manufacturing, Life-long product maintenance
- ERP systems implementation, ERP for SMEs, Enterprise software and software-related services research
- Industry oriented MSc and PhD education

ERCIS Lab Network in Russia is research partner network of ERCIS Lab Moscow and at the moment includes:

Moscow State Institute of International Relations (MGIMO-University), Moscow State University of Railway Engineering (MIIT), The Gubkin Russian State University of Oil and Gas, Bauman Moscow State Technical University, Moscow Power Engineering Institute (Technical University) and Saint-Petersburg Institute for

Informatics and Automation of the Russian Academy of Sciences (SPII RAS). ERCIS Lab Network in Russia major industry cooperation partners include companies such as SAP, T-systems, Surgutneftegas, United Metallurgical Company, Joint Stock Company Commercial Bank "Center-invest", Russian Railways, Gazprom and Lukoil. In 2012 ERCIS Lab Moscow participated in a number of leading international conferences such as IEEE IFOST Conference (Tomsk), International Congress on Intelligent Systems and Information Technology (Gelendzhik), also members of ERCIS Lab network participated in Business Informatics Research (BIR) conference in Nizhny Novgorod. More than 10 research publications were published in English and Russian, including leading Russian journals such as Journal of Business Informatics. ERCIS Lab Moscow members at the International Congress on Intelligent Systems and Information Technology (Gelendzhik, Black Sea) Also two educational and research LoI were signed to establish industry-oriented educational and research clusters drawing the partnerships of Moscow State University of Railway Engineering and the Gubkin Russian State University of Oil and Gas with Russian Railways and LUKOIL, respectively, coupled with leadership of HSE/ERCIS Lab Moscow into the sphere of economical and managerial education in the region and leverage access to innovative technologies provided by SAP University Alliances.



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ERP COMPETENCE CENTER

Within the ERCIS network, the Center provides theoretical and applied research in the ERP area. It supports ERP related customer oriented consulting and case study development for student teaching in Production Planning and Control as well as other related areas. In 2012 Prof. Dr. Axel Winkelmann joined the University of Wuerzburg and Dr. Dr. Taratoukhin took over the Competence Center day to day operations.

Competence Center Mission: Understanding the design and management of business software/ERP

Some of the key activities of the Competence Center in 2012 were:

- the research on understanding and shaping algorithms for automatic forecasting (in conjunction with Remira GmbH)
- the development of a reference process landscape for telecommunication as part of the worldwide e-TOM standard (in conjunction with the University of Magdeburg)
- active promotion of Integration of Business Processes in SAP ERP course (TERP 10) for ERCIS students
- to establish expertise in SAPs latest software system Business byDesign (integration scenarios created between Münster, Wuerzburg, and Lausanne)
- cooperation initiated with the new ERP lab at the University of Wuerzburg in order to provide students and researchers with various systems for teaching and research
- participation in SAP University Alliances EMEA Congress in Dresden and SAPPHIRE NOW+TechEd in Madrid
- academic consultancy support for one of

the leading Oil and Gas Company in ERP related research to visit ERCIS HQ

- Successful certification of first ERCIS MSCs for SAP's Business by Design software
- Cooperation with the ERCIS member Higher School of Economics Nizhny Novgorod in opening of the first Academic Competence Center in ERP for small businesses (SAP Business One Competence Center)
- Agreement reached on ERCIS participation in SAP University Alliances HANA initiative

Academic partners

University of Wuerzburg, Cranfield University, University of Cologne, Higher School of Economics, ERCIS Lab Moscow ...

Industry partners

SAP, SAGE, Microsoft, COMARCH, Proalpha, Remira board ...

The discussion is underway to extend the research directions of the center outside of traditional ERP concepts and to bring integrated aspects of enterprise software and software-related services into the portfolio.



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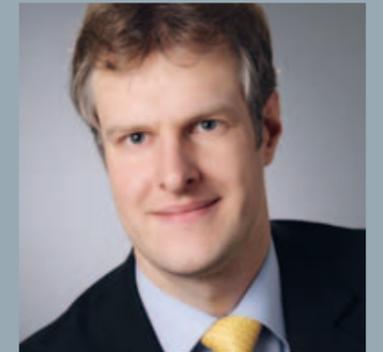


Service Research at the
European Research Center for Information Systems

SERVICE SCIENCE

With the rise of the service economy, the prosperity of industrial countries is based more than ever on engineering, selling, and delivering highly advanced services. In Germany, the trend for servitization is particularly recognized in the high-tech industries, leading to integrated solutions of goods and services that jointly fulfil customers' requirements. In the Service Science Competence Center at ERCIS, we focus on analyzing emerging research phenomena in the service economy, as well as designing IT artifacts for managing the transition towards service orientation. Our research is devoted to investigate service phenomena in an international setting, with an equal emphasis on advancing theory and management. In 2012, we focused on three areas of research. First, we added to the results of the research project FlexNet that was carried out in Münster from 2006 to 2010. Drawing upon the theoretical frameworks of boundary spanning and service blueprinting, we presented a method for identifying IT-based boundary objects that allow for digitally connecting manufacturing companies, service companies, and customers. By using the concepts of the 'line of visibility' and 'line of interaction' from service blueprinting, the method helps to govern key dimensions of boundary spanning (i.e., information transfer and process coordination) in service networks. In addition, we presented a socio-technical approach for analyzing and designing interaction routines in service networks that comprise manufacturing and service companies. Second, in the Networked Service Society (NSS) project,

the permanent presence of an Information Systems researcher from the University of Münster was continued at the Queensland University of Technology (QUT) in Brisbane. Short-term research visits to Seoul and Ulsan were carried out in order to further frame our cooperation for the second funding period on the NSS project which will start in January 2013. In turn, Prof. Dr. Han Gyun Woo (UNIST, Ulsan) and Stuart Dillon (Waikato University, Hamilton) conducted research visits in Münster. A new student exchange program between UNIST and WWU was established in order to increase student mobility. Third, in the research project ServDEA, theories and artifacts for service productivity analysis were designed. In research collaborations with DECKEL MAHO GILDEMEISTER, Trumpf, and RWE Services, we performed service productivity analyses in different settings in order to theorize on the utility of the Data Envelopment Analysis (DEA) in industrial service settings. In order to enable companies to perform their own productivity analyses, the software prototype ServDEA was designed. From these projects, we successfully published our work in leading peer-reviewed journals and conferences. In 2012, papers were accepted for publication in the journals IEEE Transactions on Engineering Management, in the Scandinavian Journal of Information Systems (SJIS), in Enterprise Modelling and Information Systems Architectures (EMISA), and in the e-Service Journal (eSJ). As regards peer-reviewed articles in conference proceedings, we successfully published at the Pacific Asia Conference on Information Systems (PACIS), at Multikonferenz Wirtschaftsinformatik (MKWI), the Hawaii International Conference on System Sciences (HICSS), the European Conference on Information Systems (ECIS), the Workshop on Service Modelling (DLM), and at the RESER Conference. Further manuscripts are currently under review with the journals Information Systems and E-Business Management (ISEB), the International Journal of Services and Operations Management (IJSOM), the International Journal of Business Intelligence Research (IJBIR), and the International Journal of Service Technology and Management (IJSTM).



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SMARTER WORK

The Competence Center for Smarter Work provides research and transformation support in the area of Unified Communication/ Collaboration (UCC) and Social Media. The integration of the underlying technologies and concepts into the workplace provides profound challenges and opportunities for organizational development and innovation. UCC as well as social media facilitate extended and richer modes of interaction among stakeholders. Customer relations as well as partner communities can be actively transformed by the introduction of UCC and Social Media. Furthermore, tools can be used to improve cooperation among employees, to strengthen social relations or to identify experts and specific information. While focusing on the interaction and behaviour of different stakeholders, approaches for smarter work should further reflect corporate social responsibilities (CSR).

Technology and partner ecosystem

The Competence Center for Smarter Work moderates an ecosystem of both technology and industry partners (domain experts). We are hosting a large set of solutions from our technology partners in a lab in order to study innovation, adoption and use of these new technologies in a real world setting. Moreover, the lab provides an environment to study interoperability among different services and their integration into the existing infrastructures. Our network includes domain experts who contribute specific insights in social media or workplace developments. The panel of enterprises from different industries provides input to our research agenda. Based on common goals, different modes of collaboration, such as research projects, case studies, and workshops, are realized. Teaching and research are combined in project-based seminars. The Competence Center provides opportunities for students and young researchers to solve real-world problems, train project management skills and actively engage with business partners.

New website – smarter-work.de

We have launched a new blog-based website, where partners, colleges and anyone interested can get up-to-date information on the Competence Center. We will regularly post updates on our activities as well as statements to recent developments in the context of Smarter Work. Moreover we provide an overview of what makes the Competence Center unique and the services we provide.

Current research projects

The Competence Center supports enterprises by establishing long-term cooperation. Besides experienced researchers, often highly-talented students are integrated into projects. A few examples illustrate the spectrum of projects at the Competence Center. For more information please visit the website.

Mobile social media and business process integration

An efficient integration of Social Media into company intranets is a hot topic, however, hard to achieve. In a cooperation project with NextiraOne (case company) and Cisco Systems (technology provider) we have applied Enterprise Social Media and the related communication practices to the work-context of service technicians. This has resulted in a unique integration of a business process with innovative social processes, providing quicker access to experts, easier to use communication channels as well as an integrated and dynamic knowledge repository.

Enterprise social media analysis

In cooperation with Securitas we have developed a sophisticated Tool for analysing the usage of Enterprise Social Media Platforms. The tool is based on a combined Analysis of key indicators and automated content analysis. Thereby the tool creates an overview of the usage intensity, the topics that are discussed as well as the atmosphere on the platform.

Enterprise social network analyzer

The business value of Enterprise Social Media is hard to determine as such technologies usually do not support dedicated process functions. In a cooperation between the Competence Center and the viadee IT-Consulting GmbH, four students conceptualized and developed an enterprise social network analyzer. The students developed a methodology for measuring the business value, generated by means of enterprise social networks. They, moreover, realized a prototype that can gather usage data from various established enterprise social media platforms, identify Key Performance Indicators and transfer these indicators into Business Intelligence Software.

Project seminar: CRM@UNI

In cooperation with Microsoft Germany and Connective! eSolution, a local Microsoft Dynamics CRM distributor in Münster, a highly motivated team of eight students develop a customer relationship management solution supporting the workflow of one department of the University of Münster. The team is going to be one of the first in Germany, who utilize Microsoft Dynamics CRM in the context of a University. CCSW @ Conference on “Enterprise Collaboration & Communication”.

In November 2012 the conference “Enterprise Collaboration & Communication” took place in Frankfurt. The magazine “Wirtschafts Woche” promoted the event and gathered experts and decision-makers from large German companies. The chairperson, Prof. Dr. Stefan Stieglitz, delivered his keynote speech “Smarter Work – Social Media and Mobile Services as a driver creating business values”.

Selected Publications

R. Haines, N. Vehring (2012): Increasing team coordination and social motivation through awareness practices: A case study. Paper presented at the European Conference on Information Systems

S. Stieglitz, T. Brockmann (2012): Increasing the Organizational Performance by Reorganization into a Mobile Enterprise. MIS Quarterly Executive (MISQE) (forthcoming)

S. Stieglitz, T. Brockmann (2012): Mobile Enterprise – Erfolgsfaktoren für die Einführung mobiler Applikationen. HMD – Praxis der Wirtschaftsinformatik, Heft 286, 6–14

S. Stieglitz, C. Meske (2012): Maßnahmen für die Einführung und den Betrieb unternehmensinterner Social Media. HMD – Praxis der Wirtschaftsinformatik, Heft 287, 36–43

N. Vehring, M. Kramer (2012): Exploring the Dynamics of Culture in the Roll-out and Adoption of eCollaboration Technology: A Case Study Comparison. Paper presented at the Americas Conference on Information Systems

J. Vom Brocke, D. Richter, K. Riemer (2012): Enterprise Social Networking – Wie können Unternehmen Social Software sinnvoll nutzen? Wirtschaftsinformatik und Management, 2012(3), 28–37



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▶ NETWORKED SERVICE SOCIETY

Funded by the German ministry of education and research (BMBF). The German Federal Ministry of Education and Research has launched eighteen research projects to enable German universities to establish joint research structures with research institutions and companies in the Asian-Pacific region. In this context, researchers of ERCIS collaborate to theorize on and design the “Networked Service Society” (NSS). As a structural goal, the Chair of Information Systems and Information Management at the WWU Münster strives to further advance long-term research structures with QUT (Brisbane, Australia), UNIST (Ulsan, Korea), Waikato University (Hamilton, New Zealand), and Yonsei University (Seoul, Korea). Joint research initiatives are core to extending our cooperation. In 2012, guest researchers from Münster were sent permanently to the Queensland University of Technology (QUT) in Brisbane for exchange visits, just as in 2011. In addition to bilateral research and publications on the networked service society, an empirical study was performed in cooperation with University of Waikato on the e-Government strategies of local governments. Two research visits to Korea were conducted in order to further develop promising topics for cooperative research. With regards to education, a student exchange program was established between UNIST and WWU in the course of a research visit of Han Gyun Woo in Münster. Having started in 2010, the project will be extended by the ministry of education and research, starting from January 2013. It will now be funded until the end of 2014.

Towards a global service research Center

In this second project phase, we will focus on evolving the Service Science Competence Center into a center for global service research. In a first step, we will extend the collaboration between the ERCIS Partners in Australia, Germany, Korea, and New Zealand. In a second step, we plan to establish additional ties with universities in the BRICS countries in order to be able to research on service phenomena on a global scale. The long term vision is to institutionalize these research structures in a global service research center by focusing on three main areas: Joint research, joint education, and joint industry projects.

Joint research

With the rise of the service economy, the prosperity of industrial countries is more than ever based on engineering, selling, and delivering highly advanced services. In addition, some recent breakthrough innovations in IT enable companies, public administrations, and individuals around the globe to network in near real-time. Against the backdrop of these two mega trends, flexible and efficient networking is increasingly an essential prerequisite for companies to enter and serve their markets globally.

Our mission In the NSS project is to contribute to theory and to the innovative design of IT artifacts in two research areas:

Business value of social media

Social media, in particular online social network sites such as Facebook, are accessed by numerous people anywhere and anytime, free of charge. Companies increasingly strive to capitalize on the data stored on these platforms. We theorize on the inner workings of social media, as well as develop innovative IT solutions to capitalize on these data in order to benefit companies and their customers at the same time. A focal area is developing new strategies and methods for bundling services that fulfil the needs, wants, and demands of a service company's customers.

Networking service business processes Globally

As regards global business process management, service companies are faced with two major challenges. First, they need to distribute activities around the globe in order to maximize the local efficiency of their business units. Second, they need to synchronize these dispersed processes in order to keep their operation efficient and effective on a global level. We theorize on both tasks and design new solutions to help companies build up and run their business processes globally.

Publications

J. Becker, S. Hofmann, M. Räckers, D. Beverungen (2013): Old Blunders in New Media? How Local Governments Communicate with Citizens in Online Social Networks, in: Proceedings of the 46th Hawaii International Conference on System Sciences (HICSS-46), Maui, HI, USA

R. Plattfaut, T. Kohlborn, S. Hofmann, D. Beverungen, B. Niehaves, M. Räckers, J. Becker (2013): Unravelling (E-)Government Channel Selection: A Quantitative Analysis of Individual Customer Preferences in Germany and Australia, in: Proceedings of the 46th Hawaii International Conference on System Sciences (HICSS-46). Maui, HI, USA

M. Rosemann, M. Eggert, M. Voigt, D. Beverungen (2012): Leveraging Social Network Data for Analytical CRM Strategies – The Introduction of Social BI. 20th European Conference on Information Systems (ECIS)

Joint education

We plan to further increase student and researcher mobility between the institutions involved in the project. From 2010 to 2012, a series of research visits to QUT, UNIST, WWU, and Yonsei was conducted in order to scope our cooperation. In this course, selected PhD students had the opportunity to benefit from an international and leading-edge research setting. On an undergraduate level, we now have exchange programs put into place in order to increase student mobility.

In the future, international summer schools will be conducted on an undergraduate and graduate level to further leverage joint education. The long-term goal is to foster a joint PhD program in ERCIS that allows for seamless mobility of our PhD students.

Joint industry projects

We envision service research to contribute both to theory and to the management of service companies. In the second period of the project, we strive to perform research cooperatively with service companies that manage their business processes globally and want to capitalize on the business value of social media. In the long-term, we aim at getting the planned Service Research Center funded from industry projects.

Facts

The NSS project is managed by Daniel Beverungen, Andrea Malsbender, and Armin Stein (WWU, Münster). Project partners are Jörg Becker (WWU, Münster), Michael Rosemann (QUT, Brisbane), Junho Choi (Yonsei, Seoul), Minseok Song and Han Gyun Woo (UNIST, Ulsan), Jim L. Corner, Bob McQueen, Eric Deakins, and Stuart Dillon (University of Waikato, Hamilton). The NSS project is funded by the German Federal Ministry of Education and Research (BMBF), promotion sign 01DR12003, from July 2010 to December 2014.





PROPELLER WORKSHOP IN RUSSIA

In April 2012, the ERCIS organized the Innovation Forum „Propeller“ for business process management (BPM) in cooperation with the Higher School of Economics in Moscow. 25 German and 45 Russian researchers and practitioners participated in the event.

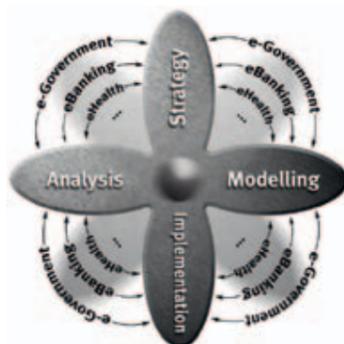
A lot of hot topics and questions were discussed during the three day workshop. The key question was “How can we address future challenges of BPM (especially in Germany and Russia) in a holistic approach?” While the concept of BPM has been discussed intensively by German Business and Information Systems researchers since the early 1990s (at least), the topic is rather new to Russian industry and researchers. In the recent years, this situation has begun to change, and it became apparent to the Russian research community that the concept of “process” is helpful in advancing organizational performance while facing global competition. Against this background, the Propeller 2012 workshop was intended to break the mold for BPM

in Russia by identifying current challenges of the industry. All participants agreed that a common language and understanding of BPM is crucial for approaching this question. Several perspectives on BPM (Strategy, Modeling, Implementation and Analysis) were discussed in four thematic breakout sessions. In line with the general areas for BPM investigated in the workshop, we conducted one breakout session for each of the core topics, i.e. Business Process Management Strategy, Business Process Modeling, Business Process Implementation, and Business Process Analysis. The breakout sessions were purposefully designed in order to allow a stimulating setting for developing new ideas and German-Russian research cooperation.

On the first day, the workshops of BPM Strategy and Business Process Analysis were conducted, whereas the sessions of Business Process Modeling and Business Process Implementation were performed on the second day. These two sessions were conducted simultaneously, such that

the participants were motivated to get involved into one subject area they were experienced in. The results of the workshop are intended to be incorporated into a joint EU research proposal.

Furthermore, the results were published in an ERCIS working paper, which can be retrieved from the ERCIS website through www.ercis.org/research/working-papers. Further information on the workshop can be found through www.propeller.ercis.org.



HITI-FELLOWSHIP PROGRAM

Elena Gorbacheva, a PhD student at the ERCIS Headquarters in Münster, spent five months this year in Liechtenstein within the Hilti fellowship program. The program gives a unique chance to combine academic learning in the field of Information Systems with practical training at Hilti. Both Master and PhD students can take part in it. The program lasts from September until January or from February until June each year. It includes working three days per week (usually Mondays to Wednesdays) at the Hilti IT department in Schaan (Liechtenstein) or Buchs (Switzerland), which are situated very close to each other. The rest of the week, PhD students can work on their dissertation theses together with the team of Jan vom Brocke at the Hilti Chair of Business Process Management (BPM), University of Liechtenstein. Collaboration is usually possible on any BPM-related topic. One of the advantages is flexibility in a way one can manage time and implement tasks both at Hilti and at the University. The students can live in a dormitory located just 50 meters from the Chair. The application procedure is straightforward and involves filling in an application form, writing a motivation letter and collecting some standard documents (CV, copies of diploma(s), other certificates and letters of reference).

Further information about the program can be found under the following link: www.uni.li/hilti-fellowship

EXPERIENCE REPORT:

STAFF EXCHANGE WITH NORWAY

Tim A. Majchrzak from the ERCIS headquarters in Münster, Germany, spent six weeks in Norway as part of the ERASMUS staff exchange programme. He was welcomed by the Department of Information Systems of the Universitetet i Agder (UiA) in Kristiansand. Tim already visited UiA for a guest talk during a private stay in 2011 after establishing contact with Bjørn Erik Munkvold via the ERCIS network. He intended to take some teaching duties in another country and scrutinize possibilities for joint research. Planning was kindly supported by Bjørn Erik Munkvold in Norway, the ERCIS team in Münster, and the International Office of the University of Münster. Since the visit was mainly meant to exchange teaching routines and to experience teaching in a different setting compared to Münster, Tim took part in three courses: Programming Related Topics from the IS Bachelor programme, Information System Development from the IS master programme in Kristiansand, and Generative Programming from the IKT Master programme in Grimstad. For all three courses, close cooperation with the respective lecturers – Even Åby Larsen of Kristiansand and Andreas Prinz of Grimstad – was sought. This enabled a very fruitful exchange of ideas as well as reasonable management of a quite high workload (15 hours of regular teaching per week).

Teaching indeed proved to be quite different to Münster: class sizes are much smaller, even in the Bachelor programme.

In general, the lecturing style is more interactive, even though students tend to be rather shy in the beginning – probably owed to changing the teaching language from Norwegian to English for the duration of Tim’s stay. Besides, differences can be noted in detail: for example, Norwegian students use to buy one textbook per course, which is rather uncommon in Germany. Working with the students and jointly preparing lectures was challenging yet very rewarding. Particularly notable is the teaching model chosen for the IS Master course: either Tim A. Majchrzak or Even Åby Larsen lead the preparation of a particular lecture and held it while the other one commented and amended. Information systems development is a topic that allows for different views and several approaches to tackle one problem. Therefore, this style led to discussions that also encouraged students to participate and thereby grasp the challenges of development activities. A side activity of the visit was to fathom about joint research. Several activities have been planned, including writing a paper on “Tandem Teaching” for an IS education journal. Besides having a great time at the two campuses and making friends with the staff, Tim took the chance to see the local nature. This included taking some of the famous hikes (e.g. to the Preikestolen as shown on the photo), as well as activities with the colleagues. Even Åby Larsen presented the King’s Road between Lillesand and Grimstad by bike, and Hans Olav Omland showed a little-known hike. Both trips complemented a fantastic experience.



› GOTTFRIED VOSSEN AS GUEST RESEARCHER IN WAIKATO

ERCIS partner University of Waikato Management School (WMS) and its Department of Management Systems, which joined ERCIS in 2008, has been a “second home” for Gottfried Vossen since 2003. He has spent two sabbaticals there, each of which was followed by the publication of a book. He has been actively doing research with members of the department ever since, which also has resulted in various conference and journal publications. These activities have motivated WMS to appoint Gottfried Vossen Honorary Professor; this appointment will now make him return to New Zealand on an even more regular basis.

› GUEST LECTURE AT THE NRU HSE MOSCOW

In the context of the scientific cooperation between the NRU HSE Moscow and the University of Münster, Matthias Voigt and Mathias Eggert were invited as guest researchers at the Russian University. They gave lectures within the course “Enterprise Architectures” by Professor Gromoff, comprising a six-day block seminar on “Enterprise Systems and Business Process Management” and “Theories, Methods and IT for Creative Business Processes”, which was conducted by the staff from Münster. One essential part of the seminar was a workshop with the students of NRU HSE, in which a business modeling tool, developed by the research project KollaPro, was applied to develop practical business models. In addition, the German guests presented the IS education curriculum of the University of Münster at the 20th anniversary of the HSE School of Business Informatics. The work contributes to strengthen teaching and research ties between the ERCIS headquarter in Münster and the ERCIS Lab Moscow.

› LECTURE NOTES IN INFORMATION SYSTEMS AND ORGANIZATION (LNISO)

New Lecture Notes Series launched by ERCIS members. First book published in memory of Professor Alessandro D’Atri. Great publishing opportunity for book projects and proceedings within the ERCIS network.

About LNISO

Lecture Notes in Information Systems and Organization – LNISO – is a series of scientific books that explore the current scenario of information systems, in particular IS and organization. The focus on the relationship between IT, IS, and organization is the common thread of this collection, which aspires to provide scholars across the world with a point of reference and comparison in the study and research of Information Systems and organization. LNISO is the publication forum for the community of scholars investigating behavioral and design aspects of IS and organization. The series offers an integrated publication platform for high-quality conferences, symposia and workshops in this field. Materials are published upon a strictly controlled double blind peer review evaluation made by selected reviewers.

Series Editors: Paulo Spagnoletti, Marco De Marco, Nancy Pouloudi, Dov Te’eni, Jan vom Brocke, Robert Winter, and Richard Baskerville.

Book in memory of Sandro D’Atri

The first book in the LNISO series is dedicated to the memory of Professor Alessandro (Sandro) D’Atri, who passed away in April 2011, and who was an ERCIS Member from the very beginning of our network. The book is titled “Designing Organizational Systems” and it is edited by Richard Baskerville, Marco De Marco, and Paulo Spagnoletti.

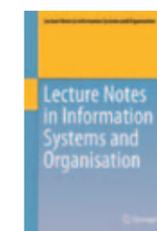
Professor D’Atri started his career as a brilliant scholar interested in theoretical computer science, databases and, more generally information processing systems. He journeyed far in various applications, such as human-computer interaction, human factors, ultimately arriving at business

information systems and business organization after more than 20 years of research based on “problem solving”. Professor D’Atri pursued the development of an interdisciplinary culture in which social sciences, systems design, and human sciences are mutually integrated.

Rather than retrospection, this book is aimed to advance in these directions and to stimulate a debate about the potential of design research in the field of information systems and organization studies with an interdisciplinary approach. Each chapter has been selected by the Editorial Board following a double blind peer review process. The general criteria of privileging the variety of topics and the design science orientation and/or empirical works in which a design research approach is adopted to solve various field problems in the management area. In addition several chapters contribute to the meta-discourse on design science research.

Call for manuscripts

The Series Editors would like to encourage all ERCIS members to suggest books and proceedings to be published in LNISO.



› SPRINGER BRIEFS ON INFORMATION SYSTEMS

New SpringerBriefs, SpringerBriefs in Information Systems, launched.

About Springer Briefs

SpringerBriefs is a well-established series that contains concise summaries of up-to-date research with a practical relevance across a wide spectrum of topics with a fast turnaround time to publication. The series publishes small but impactful volumes with a clearly defined focus. Therefore, readers of the new series are able to get a quick overview on a specific topic in the field. This might cover case studies, contextual literature reviews, state-of-the-art modeling techniques, news in software development or a snapshot on an emerging topic in the field.

SpringerBriefs in Information Systems present research from a global author community and allow authors to present their ideas in a compact way and readers to gain insights into a specific topic with minimal time investment. With succinct volumes of 50 to 125 pages, SpringerBriefs are shorter than a conventional book but longer than an average journal article. Thus, publishing research in the SpringerBriefs series provides the opportunity to bridge the gap between research results already published in journal articles or presented on conferences and brand new research results.

Information Systems research is concerned with the design, development and implementation of information and communication systems in various domains. Thus, SpringerBriefs in Information Systems give attention to the publication of core concepts as well as concrete implementations in different application contexts. Furthermore, as the boundary between fundamental research and applied research is more and more dissolving, this series is particularly open to interdisciplinary topics.

Series Editor: Jörg Becker

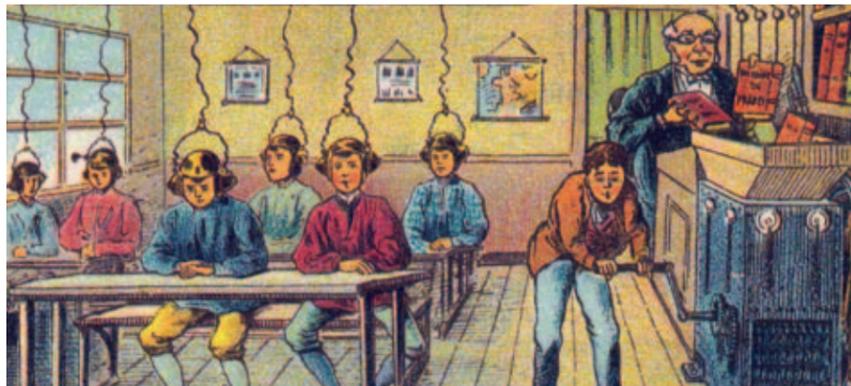
Call for manuscripts

We would like to encourage all ERCIS members to submit manuscripts that fit in the scope of this new series.



› **JOINT ERCIS SEMINAR**

During the Winter Term 2012/2013, 28 students from the University of Liechtenstein, University of Münster, and the University of Twente elaborate on the question how the Digital Information Systems Society will look like in 2020 in terms of the topics Entertainment, Living, Gaming, Transportation, Education, Participation, Culture, Health, Dating, Science, Tourism, and Retail. Their task in this second virtual seminar is to write a scientific paper through full virtual collaboration. The intention of the seminar is to add soft aspects like internationalization, virtualization, and collaboration to the BPM/IS education at the participating institutions, better preparing the graduates for their future work. The outcome of the seminar is intended to be published as ERCIS Working Paper.



› **IT SECURITY**

Thomas Hoeren from the Institute for Information, Telecommunication and Media Law and Rainer Böhme from the Department of Information Systems organised a joint seminar for both Law and Information Systems students. The wide range of topics included legal aspects of hacking, problems of digital estate as well as technical possibilities and legal obligations of secure digital identities.

The students prepared their seminar theses in interdisciplinary teams of two. During the seminar, the students gained insights into legal and technical aspects and learnt about the relations between the two fields. They found out that interdisciplinary methods were necessary to understand the development of a society proliferated by IT.



Participants of the BPM Winterschool 2012

› **BPM WINTERSCHOOL 2012**

Becoming a tradition, the Hilti Chair of Business Process Management at the Institute of Information Systems of the University of Liechtenstein again organizes a BPM Winter School in Vaduz, Liechtenstein, welcoming students from more than seven countries. During their stay, the students work on the field of Business Process Management during a 5 day intensive course. They gain a comprehensive understanding of the contemporary state-of-the-art in BPM. Classes are taught by BPM thought leaders from both academia and practice. In additional case studies and exercises, participants practically apply concepts and methods. Topics covered in the course include Introduction to BPM, Methods along the BPM lifecycle, Process-aware information systems, Alignment of BPM with corporate strategy, Governance of BPM programs and projects, Human factors in BPM, and Culture in BPM. Additionally, the students gain insights into local companies like Hilti or Swarovski during on-site visits and get the opportunity to get new contacts during social events like sledge-riding or eating cheese fondue.

› **SOCIAL MEDIA BARCAMP 2012**

AT THE UNIVERSITY OF MÜNSTER

"This is my first BarCamp and I am surprised by the great quantity of sessions available here. I would come again next year" says Michelle, student of Art History, about the "WWU Social Media Barcamp", an (un)conference, at which the participants can determine and run the agenda, topics, and sessions themselves. Already the second time this year the BarCamp was organized by Prof. Dr. Stefan Stieglitz and Tobias Brockmann of the research group for communication and collaboration management at the University of Münster. They were both very content to observe the public interest and participation and see the BarCamp maturing and becoming a professional established event for the students in Münster. In 2012 about 70 students from different disciplines joined (e.g. Information Systems, Business Administration, Biology, Linguistics, and Theology), as well as young entrepreneurs and scientists. After the opening by Prof. Dr. Stefan Stieglitz

the session topics were determined. The resulting 20 topics eventually ranged from "Virtual Currencies" and "Enterprise 2.0" over "The Web as an Operating System" to "Coffee and Cake – the strongest Social Media Weapon".

As it is typical for BarCamps, a big part of the communication was also posted at the micro blogging service Twitter and was also displayed live on big walls in the plenary for everyone to follow. Altogether some 34 different authors tweeted about 147 messages.

The representatives of the sponsors from Microsoft, LWL, Virtimo, Stepstone, and Zweitag participated actively in the sessions and very much appreciated the creativity and interactivity of the students. It has been collectively decided to conduct the BarCamp again next year in May.

Those interested can already sign up on the platform for the BarCamp:

www.wwu-barcamp.mixxt.de



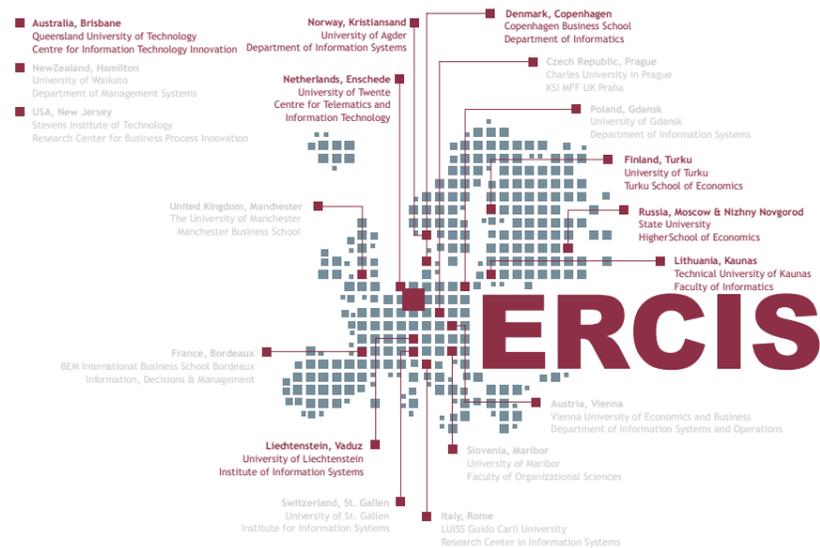
Participants of the Social Media Barcamp



Participants of the Social Media Barcamp

▶ THREE NEW ERASMUS AGREEMENTS BETWEEN THE ERCIS HEADQUARTERS AND INTERNATIONAL PARTNERS

Since 2012, we are actively working on the establishment of exchange agreements between the ERCIS headquarters in Münster and our international partners. Besides the already existing agreements we managed to come up with three new ERASMUS agreements, namely with Vaduz (Liechtenstein), Enschede (Netherlands), and Kaunas (Lithuania). These agreements include not only student exchanges but also the possibility of staff exchanges to intensify research cooperations. Have a look on the map to find out about existing agreements! We would be more than happy to strengthen our ties with our other international partners by setting up further exchange agreements. If you are interested, just contact the ERCIS team at team@ercis.org!



▶ IS PROJECT SEMINAR AT ERCIS MÜNSTER HILTI – STORE OF THE FUTURE

In October 2012, the “Store of the Future” project seminar in cooperation with Hilti was launched. The team consists of nine IS Master Students that are participating this winter term (2012/2013) at the University of Münster. They are working on ideas for process improvements in the Hilti Retail Centers. In this context, the students also bring new and upcoming technology artifacts into focus in order to raise the centers up to the overall high quality and innovative standard of Hilti. Within the project seminar, the students are engaged in exploring new and future oriented IT solutions to enhance productivity and customer excitement in Hilti Centers. These IT solutions should fulfill Hilti’s vision of customer interaction in sales. They are supported by efficient leading-edge technologies and transactional processes.

Organization

To ensure a correct alignment of the goals for this project, Hilti and ERCIS have bi-weekly virtual meetings. In order to provide a transparent overview of the current project status, the students meet on a weekly basis with their supervisors at the university.

Current development

After a kickoff meeting together with Hilti representatives, the students immediately started with literature and web research to develop a better understanding of the topic and to clarify the goals of the project. In weekly meetings the results were examined and further specified. To get a better understanding of Hilti’s specific retail processes, the students visited Münster’s Hilti Center. A handbook was defined as the first milestone, containing structured information about the developed ideas. All students are involved and contribute to its production by writing a seminar paper about an idea and its possible application in the Hilti environment.



Further milestones

The next milestone will be a mid-term presentation at the Hilti Headquarter (HQ) in Schaan, Liechtenstein. Therefore all participants travel to Liechtenstein and present the current developments to Hilti. Furthermore, a workshop will be held to agree on further project targets. Thereupon, the project team will focus on prototype implementations of specific ideas. In March 2013 the final presentation takes place again at Hilti HQ in Schaan, Liechtenstein.

Experience so far

“So far the experience of this project seminar is outstanding. We have the possibility to work with an exciting company that shows deep passion regarding new information technologies. We apply up-to-date research and technology, while gaining a great insight into a large, world-wide acting company.”

▶ KITESURF SEMINAR “PLAYER VERSUS NATURE”

In August 2012 the Kitesurf Seminar was held for the first time. The seminar took place at the Maritime Biology Observatory of the University of Münster, located in Carolinensiel close to the North Sea.

It was organized by the chair of Information Systems and Supply Chain Management (Prof. Dr.-Ing. Bernd Hellingrath) and the IT Security Research Group (Prof. Dr.-Ing. Rainer Böhme).

Dr. Benjamin Johnson of UC Berkley’s Math Department was invited as a guest lecturer to present the fundamental aspects of Game Theory in a Block Lecture to the master and PhD students before they started working on their theses.

The main focus of the seminar was on applied Game Theory in the context of supply chain management and information security. During the seminar at the North Sea, master students presented their findings in game theoretic methods and their application to specific domains of research.

The studying activities in the evening were combined with kitesurf courses during the day, organized by the kitesurf school located only a few kilometers away from Carolinensiel. Most of the student took the opportunity of making the 4-day kitesurf course followed by an examination, and got kitesurf licenses on the last day. Others enjoyed the good weather playing volleyball and basketball on the beach.





› 24TH INTERNATIONAL CONFERENCE ON ADVANCED INFORMATION SYSTEMS ENGINEERING

The 24th International Conference on Advanced Information Systems Engineering CAISE'12 was held from 25th to 20th June at the University of Gdansk. There were 240 participants from 39 countries representing fields like Computer Science, Business Informatics and Software Engineering. Most researchers came from Western Europe but there were also some participants from North and South America, Asia and Australia. The main theme of the conference was Information Services. About 300 papers had been submitted to the conference, which were peer-reviewed. A few hundred scholars and practitioners from all over the world participated in the reviewing process. They selected 42 papers, which were presented in 14 thematic sessions. The main conference was enriched by two working conferences: Business Process Modeling, Development and Support – BPMS

as well as Exploring Modelling Methods for Systems Analysis and Design-EMMSAD/EuroSymposium. The last symposium is yearly organized by PLAIS – the Polish Chapter of the Association of Information Systems. There were also 10 thematic workshops devoted to detailed, current themes. The conference was accompanied by a forum, in which attendees presented their research problems on posters, as well as by a Doctoral Consortium. The opening keynote “Looking at Future Research Challenges in Enterprise Information Systems” was given by Professor Michele Missikoff from the University “La Sapienza” in Rome. The conference was organized by the Universities of Barcelona, Gdansk, Geneva and Utrecht. The head of the Department of Business Informatics at the Faculty of Management of Gdansk University, Prof. Stanislaw Wrycza, was chairing the CAISE'12 Organizing Committee.

› BIR CONFERENCE

From September 24th to September 26th the National Research University Higher School of Economics (NRU HSE) in Nizhny Novgorod held the 11th International Conference on Perspectives in Business Informatics Research (BIR 2012). Being an important scientific event in the domain of business informatics, this conference is annually organized in well-known European universities and attracts a considerable number of leading scientists and business experts for discussions of critical results and research perspectives in such realms as: Design of effective IT-infrastructure, Business Intelligence, Semantic Web and Knowledge Management or Business Systems Development. Participants from Austria, France, Germany, Latvia, Italia, the Netherlands, Russia, and Sweden took part in the conference sessions. Within the conference framework professor Robert Winter (St. Gallen University, Switzerland) and professor Boris Mirkin (HSE, Moscow) presented very interesting key note lectures about architecting the enterprise and hierarchical domain ontology correspondingly. The satellite conference workshops were organized with such topics as information logistics and knowledge supply, intelligent educational systems and e-learning or social-economic aspects of the IT-industry on the modern stage. Best conference papers were published in the Volume 128 of the Springer Lecture Notes in Business Information Processing. Young researchers were able to discuss their PhD theses during the doctoral consortium. The organization of the conference was supported by local and well-known international IT-companies, such as MERA, SAP AG, TECOM, and AltaVision. Live broadcast of all conference activities was organized using the latest achievements in digital television.



› BLED ECONFERENCE

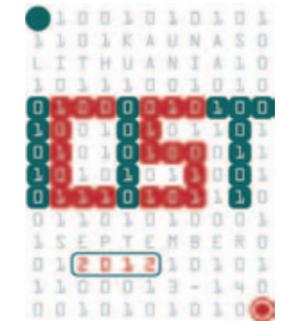
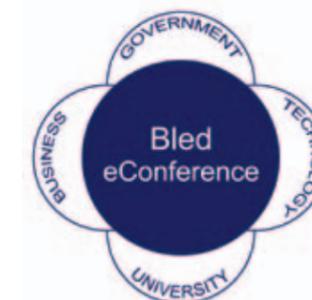
The Bled eConference is the world's longest-running international eCommerce Conference, organized annually by the Faculty of Organizational Sciences, at the University of Maribor in the beautiful Alpine village of Bled. Every June, the Bled eConference attracts speakers and delegates from business, government, universities and information technology and e-service providers. With its fully refereed Research Track and Journal Partnerships, it is a major venue for researchers working in all aspects of “e”. This eCommerce conference uniquely addresses current developments, opportunities and challenges reflected in demographic, organizational and technological changes, the well-being and health of individuals, age groups and organizations; the demands of big data and the formation and management of online communities. Furthermore, the conference encourages contributions focusing on novel organizational forms of participation, collaboration, engagement, trust development, and leadership in virtual organizations; the role of social commerce as well as social networks and media, together with other numerous forms and issues of eCommerce. Since 1999, a selected paper from the fully refereed research track is awarded by the Outstanding Paper Award. Each year, authors of selected papers are invited to submit enhanced versions for consideration for a Special Section in EM – The International Journal on Networked Business www.electronicmarkets.org. Beside the fully refereed research track, the conference also organizes a business

track with workshops and panels, where representatives of business, government and research institutions together with ISP providers discuss the relevant issues of recent “e” developments. Students are invited to present their innovative ePrototype ideas at the ePrototype Bazaar. Doctoral students have the opportunity to present and discuss their ongoing research at the Graduate Student consortium.

Research Papers and business track papers are available at the Bled eConference proceedings website: www.bledconference.org/proceedings

Research papers are available at the AIS eLibrary: www.aisel.aisnet.org/bled2012 and indexed in the Web of Science – ISI Proceedings.

26th Bled eConference
eInnovation: Opportunities and Impacts on Individuals, Organizations and Society
June 9–2, 2013, Bled Slovenia
www.BledConference.org



› ICIST CONFERENCE GAINING MOMENTUM

The International Conference on Information and Software Technologies – ICIST (formerly known as the IT Conference) is an annual event hosted by the Kaunas University of Technology (KTU), and is one of the leading events of its kind in Lithuania. Since going international in 2008, the conference is organized by the Lithuanian ERCIS member – the KTU Department of Information Systems. 2012 saw the 18th iteration of ICIST. Thematically, the goal of ICIST has always been to bring together practitioners and researchers in the field of software, hardware, and information systems engineering aiming at further simplifying convergence between business, software, and system requirements as well as assimilation of new supporting technologies. At the same time, we strive to promote interdisciplinary approaches and multidisciplinary ways of thinking that could help achieve those aims. Although research takes the central stage, the need to bring theory and practice together calls for additional measures. Therefore, this year event was co-located for the third time with a full day long Industrial Tutorial on Software Development Practices by well-known practitioners. ICIST is a compact event – only 40 papers were accepted this year. Nevertheless, if you happen to have some interesting IS research results that you would like to share in the Eastern European context, Kaunas could be the place for you.

ICIST 2012 homepage: isd.ktu.lt/icist2012
ICIST 2012 Proceedings: www.springerlink.com/content/978-3-642-33307-1



› AIM CONFERENCE IN BORDEAUX

Between May 21st and 23rd 2012, BEM hosted the 17th AIM conference in Bordeaux where we celebrated the 20th anniversary of the French Information and Management Association. The main topic of this year's AIM Symposium was: "Towards responsible and ethical business management: What contribution from information systems?" Since the advent of the economic and financial downturn, a large number of managerial practices have been severely criticized and questioned. Social and environmental responsibility means applying the principles of sustainable development to business management. It may however seem utopian to aspire to apply responsible principles in an environment which can sometimes be prone to fostering irresponsible behaviors, be they motivated by the continuous search for ever-improving performance at all costs or by the pursuit of more individual interests. Questions that were discussed during the conference were for instance: Can information systems really help in the drive to reshape responsibility and ethics in business management? What roles can they play in improving the inclusion of social and environmental issues in managerial practices?

150 researchers, students and professionals from 12 countries attended this "French" IS conference. A specific ERCIS session was organized to explain the purpose of the research center, to present its members and to describe its latest projects. Jörg Becker and Armin Stein have also been able to meet potential new members of the ERCIS network.

› ERCIS LAUNCHPAD 2012

The ERCIS Launch Pad, an IT contest for potential founders, took place for the fifth time this year. Gottfried Vossen and Stefan Stieglitz from the ERCIS headquarters in Münster organized the contest. Six finalists introduced their ideas and had to face the questions of the jury. The presented projects were Medero, an online platform for elderly people in need of long-time care and their relatives, DocMan, a collaborative document management system for students, Prezi Helden, a service offering workshops, webinars and tutorials for the online presentation software Prezi, Students Innovate, which is a platform enforcing companies to invite student tenders to solve business related problems, clubApp, a mobile app where bar and club owners shall be able to offer their coupons and special offers to their guests in one place, and last but not least rooming, an international online marketplace for temporarily rented accommodation, which was this year's winner. Supported by the funding of GAD eG and the consulting and assistance

in terms of infrastructure by Technologiehof Münster, the two students Johanna Behnsen and Benedikt Scholz are enabled to push forward the development of their product. "Presentations held by entrepreneur coaches and a discussion on possibilities for support of young founders in the region Münsterland created an attractive program framing the contest" claims Gabriele Felder of Technologiehof, who supported the contest all along. Everyone who is interested in the contest or could not make it to this year's presentations can take a look at the finalists' presentation at:

www.ercis-launchpad.de



› DAGSTUHL PERSPECTIVES WORKSHOP: SOCIAL, SUPPLY-CHAIN, ADMINISTRATIVE, BUSINESS, COMMERCE, POLITICAL NETWORKS: A MULTI-DISCIPLINE PERSPECTIVE

The information society is shaped by the increasing presence of networks in various manifestations. Increasingly efficient computer networks are regarded as a significant enabler for the process of change towards networks of any size and complexity. The objective of this perspectives workshop was to identify, systematize, and advance these factors based on multi-disciplinary views. The results are expected to yield highly significant input for industrial research and the daily business of high-tech companies, as well as for the information society.

During the workshop the participants focused on three fundamental aspects of networks to analyze and to consider the design and behavior of networks in the Information Society:

- Drivers: Networks can be regarded as systems that are continuously shaped by their environment. In fact, the emergent structure and properties of networks are subject to self-organizing processes – not unlike evolutionary processes – that create structure in the form of temporarily stable patterns of interaction between actors.
- Cohesion: In a general context, cohesion describes the phenomenon of (economic and/or social) solidarity, or, in other words, the intention of actors to act in the middle of their neighbors. Structural cohesion is the sociological and graph-

theoretical conception for evaluating the behavior of social groups and networks.

- Dynamics: A dynamic system is a system that changes its state over time. Concerning different network application areas, we regard the dynamics of a system as the change of states a system takes. On the one hand, we regard a change of state in a network as the exchange of entities (information, goods, etc.) between its actors. On the other hand, the change of state in a network is regarded as the change of the underlying system's structure over time, i.e., its evolution.

The resulting research question of the workshop was: "How do online networks evolve, how can they be conceptualized, and how can they be consciously designed and influenced?"

The workshop was held at Schloss Dagstuhl from May 1st to May 4th 2012. Amongst others, the Networked Service Society project partner from the Waikato School of Management, New Zealand, Stuart Dillon, joined the workshop in order to further deepen the collaboration between Hamilton and Münster. Schloss Dagstuhl – Leibniz Center for Informatics (German: Schloss Dagstuhl – Leibniz-Zentrum für Informatik GmbH) is the world's premier venue for informatics. World-class scientists, promising young researchers, and practitioners come together to exchange their knowledge and to discuss their research findings.



ABOUT THE COMPANY

Maxess systemhaus gmbh is one of the leading suppliers of enterprise resource planning (ERP) systems for the retail trade. We work closely with our customers, striving for solutions which are perfectly suited to their individual requirements. Our industry and process expertise means that we are a reliable and committed partner, who approaches new challenges with the utmost flexibility. The comprehensive ERP system x-trade suite, together with the store solution x-trade store, warehouse management system x-trade wms and the data warehouse x-trade dwh address the specific requirements of the retail trade and can be easily combined to create a perfect, entirely compatible solution. As a result, for years the Trovarit ERP satisfaction survey has rated maxess best in terms of “satisfaction with the system” and “satisfaction with the system partner.” As an IBM Cloud specialty partner, maxess also provides its solutions as Cloud and leasing models. In addition, maxess has established itself as an elite partner for the business intelligence tool QlikView and has a wealth of experience in implementing and monitoring QlikView projects, combined with detailed knowledge of the structures and operational sequences in retail, logistics and industry. The business intelligence tool QlikView is the perfect tool for evaluating all the relevant company figures. It integrates the company's various source systems (e.g. ERP, WMS, databases, Excel and text) and provides a comprehensive overview of the business processes which are critical to success and the company's

key performance indicators. As a sales and project partner for iMAGOTAG in Germany, maxess also offers leading-edge electronic shelf labeling (ESL) technology. The new and innovative comprehensive solutions for electronic labeling are based on the brilliant electronic paper technology and offer rapid data transfer, sustainability and flexibility due to their full graphic display. Furthermore, our product portfolio includes innovative Linea-Pro mobile solutions for the iPhone, iPod and iPad. With the help of Linea-Pro scanning attachments, Apple devices can be converted into a mobile handheld and open up new application possibilities, for example, in the traditional store environment, as a ticketing center, in the area of supply services or as support for sales representatives, service technicians and field representatives. The Linea attachments comprise both a barcode scanner and a magnetic card reading device, as well as a pin entry field (on request).

TOPICS OF INTEREST

- Interest in European (sales) partnerships
- Development of new approaches to tackling retail-specific questions and problem areas bearing in mind the Cloud approach
- Integration of the iPod, iPhone and iPad in operating procedures
- ePaper integration options (e.g. ESL)

JOB OPPORTUNITIES

- For students: Diploma/bachelor theses in the fields of IT, software development and marketing
- For graduates: Consultants, software developers, project managers and sales representatives



COLLABORATION WITH ECWT

Since June 2011 ERCIS is a member of the European Centre for Women and Technology (ECWT), which is a network of public actors, private organizations, academia, and NGOs, who share the common vision that ECWT can measurably and significantly increase the participation of women in the knowledge-based economy in Europe. The ultimate goal with the launch of the centre was to secure European leadership in the global agenda for women in technology.

ERCIS takes part in the creation of a joint project proposal initiated by ECWT under the COST (European Cooperation in Science and Technology) framework with ICT as a preferred domain called “European Network on the added value of gender in research and innovation in ICT” (GenICOST). The proposal is now in the 3rd round of revision and, in case of final approval, will enable high-level networking of interdisciplinary team of leading researchers from universities and companies. The actions proposed will act as an open framework for organizations interested in developing new IT systems by taking into account gender perspectives. The aim of the GenICOST is to strengthen networking and knowledge exchange between universities, industry, and local government in order to develop excellence on the added value of gender in research and innovation for IT system design.

Another project proposal in the Gender & IS field (within European Union FP7 Science in Society call) was triggered by ERCIS headquarters in Münster and is currently under development together with the ECWT, the ERCIS partners, and experts in Gender & IS field.

The goal stated in the project call is to identify and put into practice the best systemic organisational approaches to increase the participation and career advancement of women researchers, improve working conditions of women and men, as well as the integration of gender in curricula and research content at target research institutions.

Our vision for this project is to build and enhance the gender equity capacity at ERCIS and ECWT partner research institutions. The main objectives include conducting a rigorous and systematic analysis of gender equality at each institution, followed by the development and implementation of the corresponding Gender Equality Plans with further evaluation of the results and continuous improvement.

If you would like to participate in this project and in general collaborate with us within Gender & IS research, feel free to contact us! Learn more about ECWT at:

www.womenandtechnology.eu



CHRIST

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IQ-OPTIMIZE

IQ-optimize Software AG is an innovative Software-Technology supplier. With over 60 motivated employees, IQ-optimized develops, implements, and supervises software solutions for Business Process Management (BPM) and Workflow-Automation. Those solutions embrace all administrative and commercial domains of a company. The core competence of IQ-optimize is the development and maintenance of web-based Workflow-Solutions and the integration of Software-Applications (EAI) for the improvement of business processes.



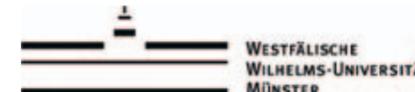
SAP

As the world's leading provider of business software*, SAP delivers products and services that help to accelerate business innovation for our customers. SAP believes that doing so will unleash growth and create significant new value; for customers, SAP and, ultimately, entire industries as well as the economy at large. Today, customers in more than 120 countries run SAP applications, from individual solutions addressing the needs of small businesses and midsize companies to suite offerings for global organisations. Founded in 1972, SAP has a rich history of innovation and growth as a true industry leader. SAP currently has sales and development locations in more than 50 countries worldwide and is listed on several exchanges, including the Frankfurt Stock Exchange and NYSE under the symbol "SAP".



STATE NORTH RHINE-WESTFALIA

North Rhine-Westphalia is the state "deep in the West" of Germany. It is located in the region between Selfkant in the West and Höxter in the East, Hellenthal in the South and Rahden in the North, and is home to some 18 million people who live on a surface area of over 34.000 square kilometers. This not only makes North Rhine-Westphalia the most populous of the 16 German states, it also means that more people live in this state than, for instance, in the Netherlands, Belgium, Austria or Switzerland. Nearly half of North Rhine-Westphalia's land area is used for agriculture, forests cover one quarter of the state's surface. Altogether, North Rhine-Westphalia has 14 nature parks, some of which it shares with other states, and one national park, the Eifel. There are 29 cities with more than 100.000 residents. The largest city in North Rhine-Westphalia is Cologne with a population of about one million while Düsseldorf is the state capital of North Rhine-Westphalia.



UNIVERSITY OF MÜNSTER

The research profile of the WWU Münster is marked by a considerable number of research focal points of proven excellence: in the humanities (including the Theological Faculties), law, business administration, natural sciences, mathematics and medicine. For example the Leibniz Prize, also known as the "German Nobel Prize", has been awarded to WWU Münster no fewer than four times since 2003. The award-winners are Prof. Hubert Wolf (theology), Prof. Barbara Stollberg-Rilinger (history), Prof. Klaus Mezger (geochemistry) and Prof. Wolfgang Lück (mathematics). The WWU increasingly offers modular courses of study leading to bachelor and master degrees. This not only makes international exchanges easier, but also ensures high-quality teaching which can compete with the world's best. The German Science Council (Wissenschaftsrat) also emphasises the quality of teaching at the WWU Münster.

OUTLOOK FOR 2013

FEBRUARY 2013

- 11th International Conference on Wirtschaftsinformatik (WI 2013), Leipzig, Germany
- Erwin Folmer from Twente will be guest researcher at the ERCIS headquarters in Münster

MARCH 2013

- International Conference on Organizational Science Development March 20–22, 2013, Portoro, Slovenia, www.fov.uni-mb.si/conference

MAY 2013

- ERCIS Annual Workshop in Turku, Finland
- Summer School on Operational Research and Applications May 2013, Nizhny Novgorod www.nnov.hse.ru/en/latna/conferences/school2013

JUNE 2013

- 21st European Conference on Information Systems (ECIS 2013) Utrecht, Netherlands
- 2013 Gmunden Retreat on NeuroIS, Gmunden, Austria
- 26th Bled eConference *elnnovation: Challenges and Impacts on Individuals Organizations and Society*, June 9–12, 2013, Bled Slovenia, www.BledConference.org

AUGUST 2013

- CEC 2013 *The 15th International Conference on Electronic Commerce* August 13–15, 2013, Turku

SEPTEMBER 2013

- 19th International Conference of Information and Software Technologies and the accompanying Industrial Tutorials in Kaunas

OCTOBER 2013

- 16th International multiconference *Education in Information Society* October 2013, Ljubljana, Slovenia, www.vivid.fov.uni-mb.si

DECEMBER 2013

- 2013 International Conference on Information Systems (ICIS 2013), Milan, Italy

ERCIS TEAM

> ERCIS Team www.ercis.org



For everything that concerns the ERCIS network simply write an email to team@ercis.org. You will for sure get an answer from one of our team members.

The team consists of Dr. Armin Stein, who is the managing director of the ERCIS network, as well as the three PhD students Katrin Bergener, Sara Hofmann and Marcel Heddier, who work part-time for the network during their PhD studies. Besides answering emails, the team helps organizing events, maintains the website, organizes the network communications, and supports project applications. If you are interested in the network, get in touch with them!

THE IS RESEARCH NETWORK



IMPRINT

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EDITING KATRIN BERGENER, MARCEL HEDDIER, SARA HOFMANN, DR. ARMIN STEIN

LAYOUT LIVING CONCEPT GRUPPE MÜNSTER 2012

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