

ANNUAL REPORT 2016



European
Research
Center for
Information
Systems



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GDANSK POLAND GUIMARÃES PORTUGAL HAMILTON NEW ZEALAND KAUNAS LITHUANIA
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ROME ITALY ST. GALLEN SWITZERLAND TURKU FINLAND ULSAN SOUTH KOREA
VADUZ LIECHTENSTEIN VIENNA AUSTRIA

www.ercis.org



ERCIS – the **European Research Center for Information Systems** – is an international network of scientists conducting cooperative research in the field of Information Systems (IS). The Network was founded in 2004 at the University of Münster and is funded by the German State of North Rhine-Westphalia and the University of Münster.

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

ERCIS is notable for excellent communication and uncomplicated initiation of research cooperation and research projects. Among ERCIS' associated major strengths are the personal contacts between researchers, which make it a vibrant network. ERCIS covers a wide range of disciplines associated with IS and perspectives on IS research.

The Network is headed by the Board of Directors in Münster, which is composed of one academic director, namely Prof. Dr. Jörg Becker, and eight additional professors all active in the IS research field. Moreover, ERCIS involves numerous internationally renowned researchers from more than 20 associated research institutions, as well as members of the Advisory Board coming from diverse industry companies.

All ERCIS research partners are experts in a wide variety of disciplines related to IS. Research conducted by ERCIS ranges from fundamental research to application-oriented research. Besides individual research activities of ERCIS members, the Network brings together and supports selected research aspects of IS in Competence Centres aimed at strengthening research in specific areas. The Advisory Board members come from various industry sectors, which guarantees that the research conducted at ERCIS is relevant for practice. Regular meetings of the Board of Directors with the Advisory Board members, as well as annual workshops of ERCIS' associated research institutions, ensure continuous, direct and productive exchange of knowledge.

Finally, students and young researchers also benefit from collaboration at ERCIS, as many ERCIS research partners offer exchange programs that last one or two semesters, which gives students an opportunity to acquire international experience. Joint lectures and guest talks organised by several ERCIS members contribute to the internationalisation of teaching.

If you are interested in connecting with the Network, please feel free to contact us! For further information please visit

www.ercis.org

DEAR FELLOW ERCIS PARTNERS AND INTERESTED READERS OF THIS REPORT,

After a great year 2015 with the European Conference on Information Systems (ECIS) in Münster and lots of commitment for this conference from all our ERCIS partners, I was wondering what 2016 would bring about. I thought that it would maybe be a calmer year but we still had a lot of interesting activities going on during the last 12 months – joint teaching, projects, research, advisory board meetings, new network members, or our great annual meeting. But read for yourself!

The two ERASMUS+ projects (MASTIS and BPM_online) both started with their kick-off meetings in Lyon and Vienna at the beginning of this year. It will be great to accompany the progress of those projects, where several ERCIS partner institutions are involved, during the next years and to see where the results will lead us – in our way of teaching but also with regard to those educational projects, we also started a Horizon2020 project within the ERCIS network in June this year. The EQUAL-IST project (Gender Equality Plans for Information Sciences and Technology Research Institutions) aims at introducing structural changes to enhance gender equality in Information Sciences and Technology (IST) research institutions. Those three projects are not “core” IS research projects but, in my eyes, are extremely helpful in reflecting our discipline and our way of working together and shaping the future for the next generation of IS students and researchers.

Speaking about projects, last but not least, the RISE_BPM project that started last year is also running smoothly by now. As a RISE project is primarily about research and innovation staff exchange, I recently like to talk about not only being Head of the Department of Information Systems and Academic Director of the ERCIS network but also head of a travel agency. It is great to watch how our junior researchers spend some time at partner institutions to jointly work on BPM topics and it is also great to regularly welcome visiting researchers here in Münster.

Apart from the projects that are currently going on, we again had our ERCIS Annual Workshop at one of our partner universities. This year, the University of Kristiansand offered to host our Annual Workshop in beautiful Norway. Thanks again, Bjørn Erik and Leif, for organising this meeting and taking care of everything. We spent two interesting days talking about topics like IS and open innovation or IT programme management. In addition, we took the opportunity of this meeting to officially welcome the University of Leiden as new ERCIS partner institution, as well as Sara Hofmann, Oliver Müller, and Stefan Stieglitz as Personal Members. This type of membership is part of some new regulations of the network, you can read a bit about that in this report. As good tradition, they directly offered to host next year's Annual Workshop.

Well, I believe that this short recap shows that this year, again, was full of great events and achievements that were possible because of all of us being members and contributing to the ERCIS network. Let's keep up that spirit and let's see what lies ahead for 2017!



All the best,

Jörg Becker

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7TH ANNUAL ERCIS WORKSHOP IN KRISTIANSAND

> 7th Annual ERCIS Workshop in Kristiansand www.ercis.org



7TH ANNUAL ERCIS WORKSHOP

Following Vaduz (Liechtenstein) in 2010, Bordeaux (France) in 2011, Kaunas (Lithuania) in 2012, Turku (Finland) in 2013, Rome (Italy) in 2014, Guimarães (Portugal) in 2015, this year's ERCIS Annual Workshop took place at the University of Agder in Kristiansand, Norway. Bjørn Erik Munkvold kindly hosted the workshop in August.

Following the traditional structure, the workshop started with a welcome reception at Christianssand Brygghus (Micro Brewery) in the city center of Kristiansand for those who had already arrived Monday evening. This year, participants from Belgium, Canada, Denmark, Finland, France, Germany, Italy, Liechtenstein, Lithuania, the Netherlands, Norway, Portugal, Sweden and Switzerland participated in the workshop.

The next day we started with a welcome speech by Bjørn Erik Munkvold and Leif Skiftenes Flak who gave an overview of the University of Agder and provided an insight into the academic organisation and different research groups as well as areas at the university.



Participants of the ERCIS Annual Workshop

Subsequently Jörg Becker presented a recap of ERCIS activities, ongoing activities and the plans for 2017.

Karsten Kraume, member of the Board arvato CRM Solutions at arvato AG, one of the ERCIS Advisory Board Members, presented the newly founded ERCIS Omni-Channel lab powered by Arvato. The lab is concerned with practice-oriented research on innovative solutions and new concepts for omni-channel challenges.



Michael Emmerich and Jörg Becker are signing the official Certificate of Membership



After a short coffee break Dag H. Olsen from the University of Agder held a presentation titled "IS and Open Innovation". It was followed by the introduction of the University of Leiden, our newest member in the ERCIS network. Michael Emmerich introduced the University of Leiden and the Leiden Institute of Advanced Computer Science, where he is dealing with research topics like multi-criteria optimisation and decision analysis as well as their applications e.g. in production or logistic optimisation.

Afterwards Heike Trautmann invited the workshop participants to visit Münster next spring, because in 2017 the EMO conference is going to be hosted in Münster. The 9th International conference on Evolutionary Multi-Criterion Optimisation takes place from 19th–22nd of March 2017.

The next session was led by Carl Erik Moe from the University of Agder, titled "Telehealth and Integrated Care". Dealing with a topic that gains more and more importance, he presented the project TELMA – Telemedicine and Integrated Care at Agder, which runs for three years starting in September 2016. The project aims to establish a hub for telemedicine in the region and to facilitate the realisation of different types of benefits from this hub like less hospitalisation, health promotion, preventive care and the preservation of patient's quality of life.

The day closed with a workshop dinner at the restaurant Sjøhuset (Sea House), situated by the sea.

The second workshop day started with a presentation by Jan vom Brocke und Oliver Müller about "The Power of Text Mining". MineMyText is a cloud app that allows to discover, quantify and visualise topics and sentiments in large collections of unstructured text documents.

In the last session of the workshop the KU Leuven, ERCIS member since 2015, was presented. Jan Vanthienen and Joep Cromptvoets introduced the two involved institutes, the Leuven Institute for Research on Information Systems and the Public Governance Institute, and gave an impression of the organisational structure of the university and the research topics they are dealing with.



Workshop Dinner

Robert Winter gave an overview of the "IT Programme Management" and its progress since last year's presentation. The project performed by the university of St. Gallen deals with the topic of project failures. Their handling or even mishandling, because of poor documentation and evaluation, often causes missed opportunities to learn from made mistakes.

The workshop closed with a tour over the campus and a boat trip in the beautiful skerries.

SAVE THE DATE:

The next Annual Workshop will take place in Leiden (the Netherlands), August 28th–30th, 2017.

NETWORK STRUCTURE UPDATES

“The European Research Center for Information Systems (ERCIS) is a lively international network of research institutions, active personal members and advisory board members working in the field of Information Systems.”

Since its founding in 2004, the network’s goals, ideas, and rules and obligations have basically remained rather untouched: The coordination takes place at the University of Münster, Germany; the network extends to the international partner institutions, who are being accepted on a one-partner-per-country base; the advisory board members build the connection to practice. However, from 2004, the year of its foundation, to today, the network grew from 12 international partner institutions to 24! We increased the amount of partners in our advisory board from four to fifteen! We meet informally at the two major conferences (the European and the International Conference on Information Systems: ECIS, ICIS) and, since our first meeting in 2010 in Vaduz, Liechtenstein, each year in a formal way at one of our partner institutions.

What did not change is the common goal: accessing the www.ercis.de (we did not put the org too much in the focus back then) webpage from 2004 on www.archive.org reveals: “[ERCIS]’ objective is to undertake joint research projects that span different disciplines and countries, thus fostering research at a level that cannot be achieved by individual go-it-alone projects. The exchange of researchers, such as PhD students, lecturers or (associate) professors, is encouraged and cooperative masters and doctoral programs are also part of the overall objective.” You will find almost the same wording on our website today, which we solely disseminate under one address: www.ercis.org, which puts the network organisation in the centre, not so much Germany.

We still believe that good and successful research requires collaboration of dedicated people with different perspectives. With the information systems discipline becoming more and more diverse, a good choice of partners should not be limited by rules. If an institution or a researcher fits the network and can bring additional value, we will not be exclusive, but rather inclusive. We do not want to grow uncontrolledly, but give diversity more space.

For this reason, we might, as presented to the network in Kristiansand during the Annual Workshop 2016, also invite institutions from countries where we are already represented with a partner – in very special cases and only as an exception! Furthermore, we introduced the notion of “Personal Members”. This role has been specifically introduced to keep the connection to the network’s early stage researchers. Young academics might be recommended by members to be affiliated with the network on a personal level.

To make us in Münster and our fellow partners more credible to the environment, we decided to ask our applicants to document their vision on how they would like to collaborate with the network. These statements will support us to find out if we share the same vision, and to revise our partnership regularly. We will introduce this measure to all our network partners, to the headquarters in Münster, as well as to our international partners. We believe that with this measures, we will get the best out of the is research’s motto: ERCIS is, what we make of it!

NEW ERCIS MEMBERS

As the ERCIS is an ever-growing network, we are happy to welcome our newest ERCIS members: Kalle Delfmann and Fritz Fleischer were both born in 2016 and as you may imagine from the pictures, they are glad to be part of our network and to show their relatedness.



Kalle Delfmann



Fritz Fleischer



THE 9th INTERNATIONAL CONFERENCE ON EVOLUTIONARY MULTI-CRITERION OPTIMIZATION

The 9th International Conference on Evolutionary Multi-Criterion Optimization (EMO), supported by the ERCIS team, will bring together both the EMO and the multiple criteria decision making (MCDM) communities and moreover focus on solving real-world problems in government, business and industry. The classical EMO format will be supplemented by an EMO competition.

March 19–22, 2017,
University of Münster, Germany
<http://www.emo2017.org>



ELENA GORBACHEVA AWARDED WITH THE AIS DOCTORAL STUDENT SERVICE AWARD

For her support of the “Women in IS network” of the Association of Information Systems (AIS), Elena Gorbacheva from the University of Münster has been awarded the “AIS Doctoral Student Service Award”. The AIS Doctoral Student Service Award was established in 2014 and recognizes volunteer contributions made by doctoral students toward the success of AIS conferences, journals, and programs.

LIVING SMART CAMPUS PROJECT AT THE UNIVERSITY OF TWENTE

In 2016 the Living smart campus project launched: The Living Smart Campus programme provides an environment for working on complex social issues that call for scientific solutions. In the search for these solutions, the campus living environment becomes part of the experiments, offering a unique setting in which to prepare solutions before they are introduced into society. Students and scientists live and work close by, which makes the experiments easier to carry out while raising awareness of the work being conducted.

SUPPLY CHAIN HACKATHON AT THE UNIVERSITY OF TWENTE

On October 14th, for the fourth time, the supply chain hackathon was organized at the campus. Several teams competed developing creative solutions based on open and closed data that several companies contributed. A jury of academics and business representatives awarded a 1000 euros to the best performing team.

SYMPOSIUM CTIT CITIZENSHIP IN A DIGITAL SOCIETY

On November 1st, 2016, CTIT will host its annual symposium on Symposium CTIT Citizenship in a digital society. At CTIT, the Digital Society has since long been a focal point. We work on innovative ICT technology, study interactions between humans and ICT systems, and have a deep understanding of the consequences of digitalizing society. With this year’s symposium we zoom into the implications of being a citizen in a digitalizing society. What does digitalization do to us, and what can or should we do about digitalization?



ERCIS OMNI-CHANNEL LAB – POWERED BY ARVATO

This March, the new ERCIS omni-channel lab – powered by Arvato has been founded at the University of Münster (<https://omni-channel.ercis.org>). The lab combines knowledge from research and experience from practice to innovate omni-channel customer relationship management.

Its main focus areas are processes, data and analytics. For this reason, three chairs have joint forces: The chair for Information Systems and Information Management (Prof. Dr. Dr. h.c. Dr. h.c. Jörg Becker), the Databases and Information Systems Group (Prof. Dr. Gottfried Vossen) and the chair for Information Systems and Statistics (Prof. Dr. Heike Trautmann). The team is completed by experienced practitioners from Arvato CRM solutions – a leading global provider of omni-channel CRM. All involved parties are working hand in hand to tackle the challenges and improve customer satisfaction.

TASK FORCE FOR THE REVISION OF MODEL CURRICULA FOR GRADUATE DEGREE PROGRAMS IN IS

UMINHO is participating in the joint ACM/ AIS MSIS 2016 task force to revise the MSIS 2006: Model Curriculum and Guidelines for Graduate Degree Programs in Information Systems (<https://msis2016review.wordpress.com/>). The task force released its first public deliverable in June 2015, the second one in March 2016, and a comprehensive MSIS 2016 draft in July 2016.

BEST INFORMATION SYSTEMS (IS) PUBLICATIONS AWARD 2016 GOES TO ERCIS MEMBER STEFAN STIEGLITZ

ERCIS member Stefan Stieglitz and his colleagues Kai Riemer (The University of Sydney) and Christian Meske (University of Duisburg-Essen) have been recognized with a Best Information Systems (IS) Publications Award for their publication “From Top to Bottom: Investigating the Changing Role of Hierarchy in Enterprise Social Networks”. The article has been published in 2015 in *Business & Information Systems Engineering* (BISE).

BEST PAPER AWARD FOR JOINT PUBLICATION OF THE UNIVERSITY OF MÜNSTER AND THE UNIVERSITY OF LEIDEN

An author team of Leiden University and University of Münster received the best paper award of the International Conference on Parallel problem solving from nature (PPSN 2016), which was held at the John McIntyre Centre from September 17–21st, 2016. This biennial conference aims to bring together researchers and practitioners in the field of Natural Computing. The joint work of the partners, who collaborate via the ERCIS network, was on groundbreaking studies on the the analysis of multiple criterion optimization problems. Such problems occur, for instance, in large scale decision support systems. DOI of paper: http://dx.doi.org/10.1007/978-3-319-45823-6_90

FIRST GRADUATES COMPLETE MASTER’S PROGRAMME IN BIG DATA SYSTEMS AT THE HSE MOSCOW

On June 27, 2016, the first graduation ceremony for the double-degree Master’s programme in Big Data Systems was held at the Higher School of Economics in Moscow. Master’s programme in Big Data Systems (<http://www.hse.ru/en/ma/bigdata>) was launched in 2014. The programme is focused on the value aspect of Big Data for large enterprises and the implementation of Big Data technology in the enterprise. It provides students with a knowledge and understanding of the fundamental principles and technological component of Big Data, preparing them for a career within companies or in scientific research.

BUSINESS INFORMATICS JOURNAL IN ENGLISH AND RUSSIAN

The Business Informatics Journal (<http://bijournal.hse.ru>) from 2016 is published in English and in Russian languages. It will also remain being available online for free at the website of the journal. Business Informatics is a peer reviewed interdisciplinary academic journal published since 2007 by National Research University – Higher School of Economics (HSE), Moscow, Russian Federation. The journal is administrated by the School of Business Informatics.

The mission of the journal is to develop business informatics as a new field within both information technologies and management. It provides dissemination of latest technical and methodological developments, promotes new competences and provides a framework for discussion in the field of application of modern IT solutions in business, management and economics.

TRAIN-THE-TRAINER: WINTER SCHOOL ON BIG DATA

The professors of the school of Business Informatics involved in the teaching process of the Big Data management systems MSc program took part in the Winter School on Big Data organized by SAP University Alliances in February 2016 and mastered several curricula on semantic analysis, open data analysis based on SAP product. The train-the-trainer session offered insights into the new In-Memory database SAP HANA. Participating faculty members learned to work with the SAP HANA database, acquired first hands-on experience.

SAP INNOJAM

The team of 5 students of School of Business informatics won SAP InnoJam partnering Sberbank in April 2016. The team developed an App which combined a functionality of a project management system and mobile bank using as a back-end SAP HANA Cloud Platform and among other student teams got the highest score from jury chaired by SAP Global EVP Tanja Reuckert. The winning team will join the Future Logistics Hackathon partnered by SAP which will take place in Antwerp on Dec. 9–11.

9TH EUROSYMPOSIUM AT THE UNIVERSITY OF GDANSK

On 29th of September 2016, the Department of Business Informatics organized an annual conference, the 9th Eurosymposium 2016, under auspices of AIS SIG-SAND group. The participants, including the former President of AIS, Mrs. Jane Fedorowicz, presented 14 papers. The papers were published in Springer series LNBI.

MICROSOFT IMAGINE CUP

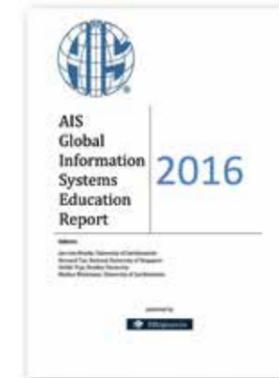
In 2016, students of the Department of Business Informatics, were awarded with distinction in the Microsoft Imagine Cup design challenge. Their innovative projects achieved approvals from international experts.

AIS STUDENTS CHAPTERS COMPETITION

Students in the new specialization Informatic Applications in Business took 3rd place and one distinction in the World AIS Students Chapters Competition 2016 at Indiana University, USA.

NEW IS SPECIALIZATION AT THE UNIVERSITY OF GDANSK

Since October 2016 – a new innovative specialization – Business Informatics has been released on Bachelor studies. It is a specialization made in cooperation with business partners that were involved in the programme creation. At the last semester, the studies are carried out in the dual mode – two days a week of studies at University and three days a week internship in Pomerania IT firms cooperating with the specialization within Panel of Business Partners.



EDUGLOPEDIA.ORG: UNIVERSITY OF LIECHTENSTEIN DEVELOPS ENCYCLOPAEDIA ON IS COURSES AND RECEIVES AIS TECHNOLOGY CHALLENGE AWARD

Prof. Dr. Jan vom Brocke and his team, including researchers from Liechtenstein and Münster, developed *EDUglopedia.org*, an international encyclopedia on courses in the area of Information Systems. As of today, already more than 2,700 courses from over 600 teaching programs from more than 400 institutions in 77 countries are registered on it, including the programs of the ERCIS members. Thus, *EDUglopedia.org* is the world’s most comprehensive catalogue of study opportunities in the field of Information Systems, and it is being ever more widely used.

Based on the data of *EDUglopedia.org*, Jan vom Brocke and Markus Weinmann (both University of Liechtenstein), together with Bernard Tan (National University of Singapore) and Heikki Topi (Bentley University, USA) published the first Global Information Systems Education Report in which they present the available study programs.

In recognition for the development of *EDUglopedia.org*, Prof. Jan vom Brocke was awarded with the Technology Challenge Award by the Association for Information Systems (AIS). With this price, individuals, who render outstanding services to the development of the discipline of information systems, particularly through the development of innovative technologies, are rewarded.

BEST PAPER AWARD FOR A JOINT PUBLICATION OF LUISS AND THE UNIVERSITY OF AGDER

2015 Best Paper of the Journal of Strategic Information Systems awarded to a paper resulting from the joint research effort of two ERCIS partners, LUISS and the University of Agder.

MINEMYTEXT.COM – TEXT MINING ACCESSIBLE FOR PRACTICE AND RESEARCH

As part of the research activities on big data analytics at the University of Liechtenstein, a text mining tool, MineMyText.com, has been developed. The tool is used by several companies as well as research institutions, for instance by the ERCIS partners Münster and St. Gallen. Prof. Dr. Jan vom Brocke, Dr. Oliver Müller and Dr. Stefan Debortoli were awarded with the Best Prototype and Demo Award at the Business Analytics Congress 2015 for developing the tool and showing a great example for the transfer of research results into practical application.

LNISO NOW ON SCOPUS

The Springer series Lecture Notes in Information Systems and Organization (LNISO), started by CeRSI-LUISS in 2012, is now indexed on Scopus. ERCIS members are invited to propose new volumes.



ABOUT THE INSTITUTION

The Institute of Business-to-Business Marketing (IAS) is part of the ERCIS Headquarters located in Muenster. Founded in 1986, the IAS celebrates its 30th anniversary in 2016 and represents the first senior professorship under the roof of the Marketing Center Muenster (MCM).

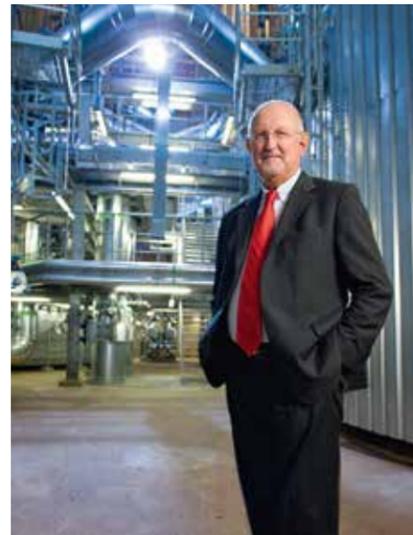
Business-to-Business Marketing is traditionally the main research area of the IAS. In addition, the research program is continuously expanded to other interesting and current areas of research, such as the emergence of dominant designs on platform markets, the acceptance of sharing economy models, or the usage of virtual realities in innovation processes. Parts of the research program are realized with the help of associates from research and industry. For instance, the IAS has recently started to extend scenario analysis techniques in a research project in cooperation with the University Hospital Muenster and the Institute of Public Auditors in Germany.

Beyond high-quality research, the IAS has always defined itself through outstanding educational efforts. We maintain close ties with partners from a variety of industries and academic institutions all over the world to offer our marketing students compelling lectures and extraordinary seminars.

Despite the senior professorship, the IAS still regularly offers a course on industrial marketing for master students in Muenster. Additionally, Professor Backhaus is mainly responsible for the development and the coordination of the bachelor program in Business Administration at the Turkish-German University in Istanbul.

RESEARCH TOPICS

Our research area encompasses traditional fields of industrial marketing, like risk management for international large scale projects, via methodological research on applying multivariate analysis within scenario-building processes, up to research on customer preferences concerning system architecture of sharing economy models. The results of this applied research have, inter alia, been documented in the following five important textbooks: “Industriegütermarketing”, “Strategisches Marketing”, “Multivariate Analysemethoden”, “Fortgeschrittene Multivariate Analysemethoden”, and “Vermarktung hybrider Leistungsbündel”. A further major research topic is the early customer integration in the development process of technological innovations. Therefore, virtual reality-based product representation in conjoint analysis is used. The high quality of research of the IAS has been highlighted by several awards. Among those, the IAS was awarded repeatedly with the “Transferpreis” of the University of Muenster.



CURRENT RESEARCH PROJECTS

The majority of research projects are funded institutionally. Therefore, the IAS collaborates closely with industrial companies and practice-oriented associations to generate knowledge with a direct impact for the industry. Further research projects are focused on topics in the field of marketing and conducted in the course of dissertation projects.

For four years the IAS has been part of the leading edge cluster “it’s OWL”. In collaboration with industrial companies located in eastern Westphalia, the IAS continuously expands its expertise in multivariate methodology by developing a statistical method that is able to test the acceptance of technological complex innovations. In the course of this project the above mentioned virtual reality-based product representation is investigated.

In cooperation with other research institutions, like the ERCIS, the IAS is working on a research project, funded by the Federal Ministry of Education and Research, to develop a business model for electrical mobility. The core of this project is to support the diffusion process of electric mobility by providing a solution for making private charging points publicly available. The basic idea originates in the sharing economy and opens private people new possibilities to share their charging points and to gain extra money by getting paid for providing their charging points.

Since July 2016, the IAS is conducting a scenario analysis project in order to develop future environmental scenarios and to derive strategies for the municipality of Muenster. Even though the scenario analysis is not a core marketing topic, we use our expertise in multivariate methodology and our experience from previous projects to realize methodological extensions in the scenario analysis.

PUBLICATIONS

Books

Backhaus, K., Erichson B., Plinke, W. und Weiber, R. (2015): Multivariate Analysemethoden – Eine anwendungsorientierte Einführung, 14th edition.

Backhaus, K., Erichson B., Weiber, R. (2015): Fortgeschrittene Multivariate Analysemethoden – Eine anwendungsorientierte Einführung, 3rd edition.

Backhaus, K., Voeth, M. (2015): Handbuch Business-to-Business Marketing, 2nd edition.

Backhaus, K., Voeth, M. (2014): Industriegütermarketing, 10th edition.

International Journals

Lügger, K., Geiger, I., Neun, H., Backhaus, K. (2015): When East meets West at the bargaining table: adaptation, behavior and outcomes in intra- and intercultural German-Chinese business negotiations, in Journal of Business Economics, Vol. 85, Issue 1, pp 15–43.

Dissertations

Gausling, Philipp: Bewertung und Management von Risiken internationaler Großprojekte – Eine Untersuchung des Einflusses der Partitionierung auf die Risikosituation internationaler Großprojekte am Beispiel der Fallstudie DESERTEC.

Hildebrand, Luise: Evaluating Risks and Response Measures for International Projects – A Comprehensive Methodological Approach and Empirical Insights for Risk Management Using the Example of Large-Scale Infrastructure Projects.

Mohr, Sina: Decomposing Consistency Matrices – A Methodological Approach to Increase Efficiency and Applicability of Consistency Analysis in Scenario Processes.



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KEY FACTS

INSTITUTION

- Founded in 1986
- 6 researchers

RESEARCH TOPICS

- Industrial marketing
- Customer preferences in sharing economy models
- Scenario analysis
- Updatable products
- Multivariate analysis
- Market orientation



ABOUT THE INSTITUTION

The Chair for Information Systems and Information Management at the University of Münster, directed by Prof. Dr. Dr. h.c. Dr. h.c. Jörg Becker, Professor h.c. (NRU-HSE, Moscow), currently comprises ten postdocs and 19 research assistants. The courses offered by the chair for BSc and MSc in Information Systems study programs include Application Systems, Information Modeling, and Workflow Management (Process Modeling field), as well as Data Management and Management Information Systems and Data Warehousing (Data Modeling field). Members of the Chair are involved in research projects funded nationally and internationally. They publish results of their work in journals like BISE (Business & Information Systems Engineering), BPMJ (Business Process Management Journal), Electronic Markets, EMISA (Enterprise Modeling and Information Systems Architectures), ISeB (Information Systems and e-Business Management), and GIQ (Government Information Quarterly), as well as in conference proceedings like ICIS (International Conference on Information Systems), ECIS (European Conference on Information Systems), ER (International Conference on Conceptual Modeling), and HICSS (Hawaii International Conference on System Sciences).

RESEARCH TOPICS

Conceptual modeling has become a mainstream method for describing, designing, and reorganizing Information Systems in the last decade. Many large companies use conceptual models for such common tasks as business process reengineering, software introduction, and compliance management. Conceptual Modeling, when being transferred into practice, supports creation of business value for companies and governmental organizations.

Retail is a research area, which is focused on organizations and application systems in the respective domain including wholesale, stationary retail and e-commerce. Focal topics to account for interdependencies between an organization and an application system involve process management and conceptual modeling in retail, as well as Enterprise Resource Planning (ERP) systems.

E-Government deals with the aspects of administrative processes and services within governmental and inter-governmental organizations and the citizens and businesses through the use of Information and Communication Technology (ICT). E-Government links the field of the strategic management with aspects of process management and economic viability and focuses on front- and back-office. E-Government topics can be addressed in terms of content, as well as from technical and conceptual perspectives.

Service Science research addresses such aspect as servitization – the integration of industrial machinery with customized service offerings without selling physical goods. Our research is focused on understanding and facilitating the creation of value in service systems, which involves interactions between service providers and service customers. The goals of the Service Science team are to develop a sound theory on service phenomena and to design innovative IT artifacts supporting the competitive edge of the service economy.

SELECTED CURRENT RESEARCH PROJECTS



EQUAL-IST aims at introducing structural changes to enhance gender equality within Information Systems and Technology Research institutions, which have been demonstrated to be among the research sectors most affected by gender inequalities at all levels. The project aims at supporting seven RPOs from Northern, Southern and Central European countries plus a CSI country, in developing and implementing Gender Equality Action Plans. The project will combine gender mainstreaming and positive actions on 3 main levels: HR practices and management processes, research design and delivery, student services and institutional communication. For addressing and solving issues of horizontal and vertical segregation in research and administrative careers, work life balance, gender neutral-blind approaches to IST research, gender gaps in students' enrollment, EQUAL-IST will try to operate at the same time on organizational structures, discourses and behaviors.

For more information, please visit: <http://www.equal-ist.eu/>



End-Of-Life Solutions for eCar-Batteries – Development of Product-Service-Systems and Information Systems for Decision Support (EOL-IS): An immature battery technology appears to be the crucial obstacle to impede a quick diffusion of electric mobility in Germany. One core factor is the high initial costs of electric car batteries which cause electric vehicles to be significantly more expensive than vehicles propelled by a combustion engine. One way to improve the total cost of ownership of batteries and electric vehicles is the repurposing of batteries that are no longer usable for automotive applications. In the project, a decision support system was implemented to identify the best second-life application for each single battery as well as to offer additional services to provide customers with fitting value propositions.

For more information, please visit: <http://www.eol-is.de>

AWARDS

Prof. Dr. Dr. h.c. Dr. h.c. Jörg Becker was awarded with the Best Reviewer Award of the “Business Research” journal.

Best Student Paper Award: *Jauernig, D., Köffer, S., & Becker, J. (2016).* E-Mails und kein Ende. Eine Forschungsagenda für mehr Effizienz. In Proceedings of the Multikonferenz Wirtschaftsinformatik (MKWI), Ilmenau.

SELECTED PUBLICATIONS

Please see <https://www.wi.uni-muenster.de/departments/groups/is/publications> for a complete list of publications.

Bräuer, S., Monhof, M., Klör, B., Plenter, F., Siemen, C., & Beverungen, D. (2016). Residential Energy Storage from Repurposed Electric Vehicle Batteries – Market Overview and Development of a Service-Centered Business Model. In Proceedings of the IEEE Conference on Business Informatics (CBI 2016), Paris.

Breuker, D., Matzner, M., Delfmann, P., & Becker, J. (2016). Comprehensible Predictive Models for Business Processes. MIS Quarterly, forthcoming. (In press)

Gorbacheva, E., Stein, A., Schmiedel, T., & Müller, O. (2016). The Role of Gender in Business Process Management Competence Supply. Business and Information Systems Engineering (BISE), 58, 1–19.

Höhenberger, S., Riehle, D. M., & Delfmann, P. (2016). From Legislation to Potential Compliance Violations in Business Processes – Simplicity Matters. In Proceedings of the European Conference on Information Systems (ECIS 2016), Istanbul, Turkey.

Matzner, M., Chasin, F., von Hoffen, M., Plenter, F., & Becker, J. (2016). Designing a Peer-to-Peer Sharing Service as Fuel for the Development of the Electric Vehicle Charging Infrastructure. In Proceedings of the 49th Annual Hawaii International Conference on System Sciences (HICSS-49), Kauai, Hawaii, USA, 1587–1595.

DISSERTATIONS

Clever, Nico: icebricks – Konstruktion und Anwendung eines Prozessmodellierungswerkzeugs.

Gorbacheva, Elena: A Gender Perspective on the Business Process Management Workforce – Addressing the Lack of Qualified Business Process Management Professionals.

Köffer, Sebastian: The Digitalization of the Knowledge Workplace – Implications to Manage Work in the Future.

Neumann, Maria: Application of Usability Methods to the Development of a Business Process Modeling Tool – The icebricks Case.

Püster, Johannes: Prozessmodelle für Einzelhandel, Großhandel und E-Commerce – Erweiterung eines Referenzmodells für Handlungsinformationssysteme.



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KEY FACTS

INSTITUTION

- 10 post docs
- 19 research assistants
- 24 student assistants

RESEARCH TOPICS

- Process management
- Conceptual modeling
- Retail
- E-Government
- Service science
- Business intelligence



TMF-Workshop in Berlin about MDM-Portal (June 17, 2016) with participants from Germany, Austria and Belgium, organized by Institute of Medical Informatics

ABOUT THE INSTITUTION

The Institute of Medical Informatics (IMI) is dedicated to research and teaching for the full range of informatics applications in medicine. It was founded in 1973 and belongs to the Medical Faculty. Since 2009 it is headed by Martin Dugas. It provides lectures, seminars and courses in small groups regarding Medical Informatics for medical as well as informatics students. The institute has a long tradition regarding research on information systems in healthcare. Nowadays, the future of information systems in healthcare, specifically regarding electronic health records (EHRs), is a key research focus. Personalised medicine is built upon clinical and molecular data. Therefore data mining and pattern recognition techniques for genomic data, in particular derived from next-generation sequencing of cancer tissue, is an important research focus.

RESEARCH TOPICS

IMI focuses on informatics for personalised medicine. The relevance of informatics within all fields of medicine is constantly rising. There is a wide scope of applications, ranging from molecular biology over clinical medicine to public health.

The integration of clinical and molecular data, especially analysis of next-generation sequencing (NGS) in cancer research, is a well-established focus of the institute with national and international cooperations

for many years. The rapid increase in data volumes of high-throughput sequencing in molecular medicine (“big data”) poses constant challenges from an informatics point of view.

A major proportion of the data needed for clinical studies is also relevant for routine patient care. At present, data for studies and patient care are managed in separate systems. Hence, design and efficient implementation of interoperable information systems in healthcare is a major research topic. Open Metadata is key for interoperability. Specific research topics are data models with semantic annotations and methods for metadata management. Application fields are electronic health record (EHR) and electronic data capture (EDC) systems.

CURRENT RESEARCH PROJECTS

Health Informatics (eHealth)

The world-wide largest public portal of medical data models (<http://www.medical-data-models.org>) was established by IMI. It is an official European Research Infrastructure (http://portal.meril.eu/converis-esf/publicweb/research_infrastructure/3574). To date it contains 8.600+ data models, 580.000+ data items and 1.064.000+ terms with semantic annotations. These data models are available in 15 download formats, in particular CDISC ODM, HL7 FHIR, ODK and openEHR ADL. A Workshop with approximately 50 participants was organised at

TMF, Berlin. The IMI project mobile patient questionnaires (<http://mopat.uni-muenster.de>) integrates EHR and patient reported outcomes. Recently this software tool was applied successfully in a clinical study in 10 European countries with multilingual data collection.



Biomedical Informatics

MDS-RIGHT, a European project coordinated by Prof. Joop Jansen (Nijmegen Centre for Molecular Life Sciences), is progressing to analyse mutations in Myelodysplastic Syndrome (MDS). MDS-RIGHT will assess approximately 1000 patient cases with Next-Generation Sequencing (NGS) technology. IMI performs bioinformatics for project partners from the Netherlands, France, Sweden, and Austria. About one third of MDS patients develop leukemia - the objective of the project is to improve diagnostics and therapy using biomarkers from NGS.

In joint projects with Prof. Frank Rosenbauer (Director Institute of Molecular Tumor Biology) new algorithms to analyse STARR-seq, 4C-seq as well as ChIP-seq data are being developed. Together with Prof. Carsten Müller-Tidow (Director Oncology and Hematology Department, Universi-

ty of Halle) improved diagnostics of tumor diseases with new DNA sequencing methods and algorithms are being developed (funded by German Cancer Aid foundation).

AWARDS

Dr. Julian Varghese from IMI received the Rolf Hansen Memorial Award of the European Federation of Medical Informatics at the MIE conference 2016 in Munich for his publication “Key Data Elements in Myeloid Leukemia”. This award honors excellent scientific work in the field of electronic health records.

PUBLICATIONS

Martin Dugas, Philipp Neuhaus, Alexandra Meidt, Justin Doods, Michael Storck, Philipp Bruland, Julian Varghese. Portal of Medical Data Models – information infrastructure for medical research and healthcare. Database (Oxford) 2016 Feb 11;2016. pii: bav121. PMID: 26868052

Dugas M. Clinical Research Informatics: Recent advances and future directions. Yearb Med Inform. 2015;10(1):174-7. PMID: 26293865

Dugas Martin, Meidt Alexandra, Neuhaus Philipp, Storck Michael, Varghese Julian. ODMedit: uniform semantic annotation for data integration in medicine based on a public metadata repository. BMC Medical Research Methodology.2016, 16:65. PMID: 27245222

Ständer S, Zeidler C, Riepe C, Steinke S, Fritz F, Bruland P, Soto-Rey I, Storck M, Agner T, Augustin M, Blome C, Dalgard F, Evers AW, Garcovich S, Gonçalo M, Lambert J, Legat FJ, Leslie T, Misery L, Raap U, Reich A, Şavk E, Streit M, Serra-Baldrich E, Szepietowski J, Wallengren J, Weisshaar E, Dugas M. European EADV network on assessment of severity and burden of Pruritus (PruNet): first meeting on outcome tools. J Eur Acad Dermatol Venereol. 2015 Sep 15. PMID: 26370062

Bartenhagen C, Dugas M. Robust and exact structural variation detection with paired-

end and soft-clipped alignments: SoftSV compared to eight algorithms. Briefings in Bioinformatics 2015 May 20. pii: bbvo28. PMID: 25998133

DISSERTATIONS/HABILITATIONS

Dr. Christoph Bartenhagen: Robust and exact structural variation detection with paired-end and soft-clipped alignments: SoftSV compared with eight algorithms.

Dr. Philipp Bruland: Does single-source create an added value? Evaluating the impact of introducing x4T into the clinical routine on workflow modifications, data quality and cost-benefit.

Dr. Justin Doods: A European inventory of common electronic health record data elements for clinical trial feasibility.

Dr. Binyam Tilahun: Comprehensive evaluation of electronic medical record system use and user satisfaction at five low-resource setting hospitals in ethiopia.

Dr. Benjamin Trinczek: Design and multi-centric implementation of a generic software architecture for patient recruitment systems re-using existing HIS tools and routine patient data.

Dr. Julian Varghese: Frequency analysis of medical concepts in clinical trials and their coverage in MeSH and SNOMED-CT.



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KEY FACTS

INSTITUTION

- Founded in 1973
- Institute of the Medical Faculty

RESEARCH TOPICS

- Health informatics (eHealth)
- Medical data models
- Electronic health records
- Mobile documentation
- Biomedical informatics
- Personalised medicine
- Next generation sequencing



ABOUT THE INSTITUTION

Today's supply chains (SC) have to cope with growing uncertainties and complexity, e.g. from increasingly volatile customer demand, natural or human threats, or through an increasing number of actors in the value-adding process. Tackling these issues is the major objective of the Chair for Information Systems (IS) and Supply Chain Management (SCM), directed by Prof. Dr.-Ing. Bernd Hellingrath. In particular, the chair develops application-oriented research contributions in the areas of SCM, logistics and operations management with regard to the support by IS. A special focus lies in understanding current logistics and manufacturing issues and resolving them by applying and newly developing modeling and planning methods. In this context, research is fostered by a culture of internationalization, exemplified by the growing number of international research partners and projects conducted.

RESEARCH TOPICS

The group's research focuses on a variety of different research topics in the field of supply chain management and information systems.

Industrie 4.0: Technological advantages, e.g. in automation and communication, enable new paradigms in the design and operation of production systems, aiming to produce customer specific goods in small lot sizes with the efficiency of mass pro-

duction. Current production planning and -control methods are not capable of this yet. Therefore, the group is evaluating and developing new approaches and methods to be used in future information systems.

Spare Parts: Condition monitoring enables an early identification of machine breakdowns and thus facilitates more precise planning and management of spare parts and maintenance services. The group focuses on developing improved diagnostics and prognostics data analytics methods for predictive maintenance. Moreover, integrated as well as decentralized planning models for spare parts management are being developed by means of modelling processes of the spare parts supply chain.

Digitized SC: Digitization is disrupting the field of supply chain management. Digital platforms fundamentally change collaboration between supply chain actors; big data applications enable data-driven business models, and cloud computing makes supply chain data available – at anytime, anywhere. The group investigates and assesses important digitization levers that affect and re-shape the value chain and its business models.

Sales and Operations Planning (S&OP): Nowadays, cross-functional integration within a company and along the supply chain are essential for business success. As S&OP addresses this challenge by con-

stantly realigning decisions in sales, marketing, finance and operations, the interest in this field is growing rapidly. The group is investigating and evaluating the state-of-the-art in S&OP and developing concepts to facilitate efficient industrial applications.

Humanitarian Logistics: Supply chain and logistics management are crucial for effective disaster response. The group conducts research on modeling, performance measurement, and simulation of humanitarian supply chains with a special focus on the design and evaluation of supporting information systems. Additionally, the group investigates, how crisis crowdsourcing can support situation assessment, focusing on infrastructure and resources in affected areas.

RESEARCH PROJECTS

The chair is involved in various research projects, which target the main research topics of Spare Parts Management, Supply Chain Planning and Humanitarian Logistics.

The project **I2MS2C** (Integrating Intelligent Maintenance Systems and Spare Parts Supply Chains) is related to the chairs' research on spare parts management and predictive maintenance. [DFG 2012–2016; UFRGS Porto Alegre, UFSC Florianópolis, FURG Rio Grande]

Within the European Commission-funded demonstration project **DRIVER** (Driving Innovation in Crisis Management for European Resilience), the chair contributes with modeling, simulation and measurement of humanitarian logistics processes to the sub-project focusing on professional response in crisis management. [EC FP7, www.driver-project.eu]

MatuFlex (Development of a Maturity Measurement Framework for Supply Chain Flexibility) targets the development of a maturity measurement framework for Supply Chain Flexibility. [DAAD PROBRAL 2016; UFSCar Sao Carlos, PUC Rio de Janeiro]

Together with Prof. Stefan Klein the group was part of the Marie Curie Initial Training Network dedicated to the international

Graduate School **NITIM** (Networks, Information, Technology and Innovation Management). Herby, two humanitarian logistics PhD projects have been supervised. This project ended in September 2016 [EC FP7, www.nitim.org]

EVENTS

In conjunction with Prof. Frazzon (Federal University of Santa Catarina), Prof. Hellingrath chaired two special sessions at the 8th IFAC Conference on Manufacturing Modelling, Management, and Control in Troyes, France and at the 4th IFAC Symposium on Telematics Applications in Porto Alegre, Brazil. Both sessions covered recent improvements in intelligent maintenance systems and spare parts supply chain planning.

For the first time, an ERCIS after-work panel discussion took place. Adam Widera moderated the panel on humanitarian information systems. Professor Marc Haselkorn, Dan McClure, Robin Mays, offered a valuable and lively discussion with interested people from all stages of their academic career path.

As member of the EU Project DRIVER, the group participated in two experiments dedicated to humanitarian logistics. In the first event, advanced crisis simulation models have been applied in the planning of logistics tasks in a simulated flooding scenario. Another simulated flooding took place in the City of The Hague, involving volunteers to use the crowdsourcing app GDACSmobile.

With funding of the Alexander von Humboldt-foundation two guest professors of renowned Brazilian universities visited the chair for extended periods to deepen the existing collaborations. Prof. Buarque (UPE Recife) extended his Humboldt Fellowship during June/July to follow up active PhD co-supervisions, book co-authorship and further establishing research links with ERCIS. Furthermore, Prof. Scavarda (PUC Rio de Janeiro) connected his research on Sales & Operations Planning during his stay in Münster with the groups' research.

PUBLICATIONS

Horita, Flávio E. A.; Link, Daniel; Porto de Albuquerque, João; Hellingrath, Bernd (2016). oDMN: An Integrated Model to Connect Decision-Making Needs to Emerging Data Sources in Disaster Management. HICSS, Kauai, USA.

Horstkemper, Dennis, Hellingrath, Bernd (2016). Employing order allocation flexibility in cyber-physical production systems. Procedia CIRP, Stuttgart, Germany.

Fischer, Jan-Hendrik; Hellingrath, Bernd (2016). Global production network design with integrated operational and financial hedging. EUROMA, Trondheim, Norway.

Link, Daniel; Hellingrath, Bernd (2016). GDACSmobile – An IT Tool Supporting Assessments for Humanitarian Logistics. In Kovács, G., Spens, K., & Haavisto, I. (Eds.), Supply Chain Management for Humanitarians. Tools for Practice. (pp. 285–297). Kogan Page.

Wagner, Carolin; Saalmann, Philipp; Hellingrath, Bernd (2016). An Overview of Useful Data and Analyzing Techniques for Improved Multivariate Diagnostics and Prognostics in Condition-Based Maintenance. PHM, Denver, USA.

Widera, Adam; Hellingrath, Bernd (2016). Making Performance Measurement Work in Humanitarian Logistics – The Case of an IT-supported Balanced Scorecard. In Kovács, G., Spens, K., & Haavisto, I. (Eds.), Supply Chain Management for Humanitarians. Tools for Practice. (pp. 339–352). Kogan Page.

DISSERTATIONS

Terlunen, Sebastian: Vertikale Supply Chain Segmentierung – Ein quantitativer Gestaltungsansatz für die kundengruppenorientierte Festlegung des prognosebasierten und kundenauftragsbasierten Supply Chain Bereichs.



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KEY FACTS

INSTITUTION

- 2 visiting professors
- 16 research assistants
- 19 student assistants

RESEARCH TOPICS

- Supply Chain Flexibility
- Sales and Operations Planning
- Spare Parts Management
- Decentralized Supply Chain Planning
- Meta-Heuristics for Supply Chain Planning
- Supply Chain Security
- Humanitarian Logistics

UNIVERSITY OF MÜNSTER – INSTITUTE FOR INFORMATION, TELECOMMUNICATION AND MEDIA LAW (ITM) – CIVIL LAW DEPARTMENT



itm

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 emphasises the importance of interdisciplinary work, since a proper understanding of technological or economic backgrounds is a prerequisite 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 TIMBUS, 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 characterised 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

ABIDA (Assessing Big Data) is an interdisciplinary research cluster funded by the German Federal Ministry of Education and Research (BMBF) focusing on social, legal, political, ethical and economic research with regard to Big Data. The project is managed by the ITM and the Institute for Technology Assessment and System Analysis in Karlsruhe (ITAS). Furthermore, the Humboldt University of Berlin, the Technical University Dortmund, the Ludwig-Maximilians-University Munich as well as the University of Hannover are project partners. The project aims at monitoring and

assessing current developments regarding Big Data, taking into account public opinion and bringing together expert knowledge. Several research groups will work on interdisciplinary in-depth studies, which will be assessed in expert workshops and a national symposium. Moreover, three citizens' conferences and a representative opinion survey are scheduled in order to ensure an extensive involvement of the public. On this basis, all relevant issues will be analyzed and evaluated to provide options for political decisions, further research and economic approaches as well as to point out possible alternatives. Initiated in March 2015, the project is scheduled for a period of 48 months.

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

ITS.APT (IT-Security Awareness Penetration Testing) is an interdisciplinary project promoted by the BMBF. Since January 2015 the responsible try to develop a measuring dial for the IT-security awareness of IT-users. Because of the increasing number of appearing cyber attacks, operators of critical infrastructure struggle to ensure IT-security. Up to now they did not take into account how IT-users create risks by themselves. With the usage of special software, the project wants to answer the question to what extent IT-users influence the IT-security of a company or an institution. Regarding the research work, the ITM focuses on aspects of liability law concerning the usage of such scale software. Besides, the ITM gives expert advice to law-related questions concerning the project.

Matters of Law in the German Research Network (DFN): The German Research Network (Deutsches Forschungsnetz / DFN) supports communication and the exchange of information or data between representatives of science, research, education and culture in national and international

networks. Our DFN-Members increasingly face issues regarding legal questions on liability, telecommunications and data protection. Therefore, the ITM acts as a legal consultant in terms of communication and data protection services.

AWARDS

Deutschland – Land der Ideen: „Ausgezeichneter Ort im Land der Ideen“

DISSERTATIONS/HABILITATIONS

Julian Fischer (2016): Die Weiterveräußerung von Eintrittskarten – Zulässige Unterbindung des Ticket-Zweitmarktes durch den Veranstalter?

Joachim Poggemann (2016): Patentverfahrensrecht und Verwaltungsrecht

Kathi Christine Stein (2016): Der Gebrauchtsoftware-Handel nach den „UsedSoft“-Entscheidungen des EuGH und des BGH



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KEY FACTS

INSTITUTION

- Founded in 1997
- 26 researchers
- 3 additional education programmes

RESEARCH TOPICS

- Information law
- Telecommunication law
- Media law
- Informatics in the legal profession



ABOUT THE INSTITUTION

Our research explores the impact of information and communication infrastructures in an organisational context. We are interested in the development of the digital organisations: how do organisations and leaders respond to the challenges and opportunities of an informed society and economy. In particular we study new modes of organising, 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 approaches, which facilitate research and experimentation in complex real world settings addressing business or societal innovation. Typically multiple stakeholders and researchers from different disciplinary backgrounds are involved.

RESEARCH TOPICS

We pursue this agenda through three inter-related fields of research:

1. The Communication and Collaboration Management group, led by Dr. Simeon Vidolov, is broadly concerned with understanding the role of technologies, knowledge and collaborative processes, both within and between organisations and broader social networks. The principal aim of the group is to promote the critical study of communication, coordination and collaboration practices that are seen as central to the relationship between technology and organisational and societal changes. A prominent focus in our research is the examination of the material and affective aspects of organisational and social life, and the practices through which they are being mediated and performed. Some of our research themes include:

- Virtual and distributed forms of working and organising
- Collaborative practices and trust production in complex network arrangements
- Role of affectivity and embodiment in the process of learning and collaboration
- Critical approaches to project management, and its performativity and politics
- Manipulation, propaganda and influence in the Digital Age

2. The research group on Strategic Information Management, led by Dr. Alexander Teubner, comprises a team of researchers particularly interested in the executive de-

cision making on the use of ICT in today's "Information Age" organisations. We distinguish two important decision areas: First, decisions on ICT adoption and the design of the corporate IT-based infrastructure. And second, decision on how to source, organise and govern tasks and responsibilities involved in running and maintaining such an infrastructure. The research group's current research is on:

- IT Strategies and Digital Business
- The implementation of IT strategies via IT investments and programs,
- IT sourcing and the governance of (multiple) outsourcing relationships,
- IT operations management with a particular interest in the viability of the IT service management paradigm

The research group's aim is to provide guidance to senior executives by offering recommendations that are both, theoretically well founded and carefully validated in industry practice.

3. The Interorganizational Systems group studies the evolution of information infrastructures, such as electronic markets or electronic platforms for the exchange of logistics or health care information, over long periods of time. We take a particular interest in the development and transformation of interorganisational information infrastructures and related theoretical as well methodological questions. Specifically, we study:

- how to facilitate collective action in heterogeneous actor constellations or coalitions, as the development of infrastructures involves commitment and coordination of diverse actors,

- how standards, which may affect strategic interests, can be developed and widely diffused,

- how industry structures, specifically structures of intermediation, are transformed alongside the proliferation of ICT

We study these issues in the context of international accreditation agencies and crisis management, the health care sector, the tourism and the publishing industry.

CURRENT RESEARCH PROJECTS

Online search in an online multi-channel environment

In order to explore online search patterns, we have conducted a series of experiments in which test persons look for airline tickets for specified routes and dates. We document the online search paths across airline, price comparison or online travel agency sites by screencasts and audiocasts of speak aloud input. The experiments complement the analysis of online panel and airline customer data.

The empirical work is used to critically examine established concepts of search behaviour based on search economics, the customer search funnel and consideration set. (PI: Julia Jacobs)

IT service management

Given the discrepancy between the practical relevance of IT service management and the lack of conceptual clarity, this research focuses on developing an IT service definition and methods for service specification. The evaluation of the conceptual work is done in two case studies (University and Publishing Company IT Department). (PI: Christian Remfert)

Member – network relations: On identities, organizational becoming and sensemaking

AACSB is an international accreditation agency organised as a club with a network administration organisations. AACSB emphasise formative evaluation, in order

to facilitate its members learning and continuous development. Our research studies the precarious alignment between the identities of highly diverse members and AACSB's standards and values, which are subject to an ongoing collective review and development, and are enacted by peer review teams throughout accreditation or continuous improvement visits. (PI: Sophie Wohlhage)

PUBLICATIONS

Holland, C. P., Jacobs, J. A., & Klein, S. (2016). The role and impact of comparison websites on the consumer search process in the US and German airline markets. In: *Information Technology & Tourism*, 16(1), 127–148.

Lansmann, S. (2016). User-Centred Introduction of Enterprise Social Software: A Literature Review and Case Study Analysis. MSc thesis, Münster.

Sabou, J., & Klein, S. (2016). How Virtual and Technical Communities Can Contribute to U.N. Led Humanitarian Relief Operations – Boundary Spanning and The Exploration of Collaborative Information Practices. In: *PACIS 2016 Proceedings*, Chiayi, Taiwan.

Schellhammer, S., Klein, S., & Ebner, E. (2016). Primary prevention for Employees in the Information Age Organization. In: *Health Policy and Technology* (Published online: August 21, 2016).

Vidolov, S. & Sabou, J., 2016. Unpacking trust development in networked environments. In: N. Gillespie, G. Moellering, A. Weibel eds. 32nd EGOS Colloquium. Naples, Italy.

Teubner, R. A., Remfert, C. (2016). ITOMEX: Eine Fallstudie zum IT Service Management. In Becker, J., Hellingrath, B., Klein, S., Kuchen, H., Müller-Funk, U., Trautmann, H., & Vossen, G. (Eds.), *Arbeitsberichte des Instituts für Wirtschaftsinformatik*. Münster.



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KEY FACTS

RESEARCH TOPICS

- Information and communications infrastructures
- Strategic alignment
- IT value
- Organisation theory of IS
- Transformation of work
- Appropriation of communication infrastructures
- Communities of practice
- Collective action and standardisation
- 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. Maintaining close partnerships and collaborations with several local companies, his group is offering students the chance to write bachelor and master theses with high practical relevance.

RESEARCH TOPICS

The research of the group focuses on selected aspects of Software Engineering. Our fields of research are Business Apps, Model Driven Software Development, Domain-Specific Languages, Programming Languages, Testing, Parallel Programming, and E-Assessment.

CURRENT RESEARCH PROJECTS

With the increasing importance of mobile devices, mobile applications for business purposes (so called Business Apps) have become a major topic for software vendors and IT-departments of companies. We explore cross-platform development approaches that handle platform heterogeneity. In this regard, we specifically look into model-driven approaches to app development. Our MD² framework allows modeling an app in a suitable domain-specific language (DSL) and automatically generates Android and iOS apps from this specification. Current research focuses on a visual app development language called MAML to improve business applicability and to empower non-technical users to model apps in a process-oriented fashion. Based on the MD² framework, apps can thereby be created without writing a single line of code.

For our E-Assessment system EASy, we are developing a further module that supports exercises for the functional programming language Haskell. Further, we are developing an e-assessment module to support assessment of UML class diagrams. This research focusses on the correct application of design patterns in the context of software engineering.

Experience shows that the development of parallel programs is an elaborate and time-consuming task. The Muenster Skeleton Li-

brary (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 recurring parallel programming patterns, which can be easily and efficiently combined to develop parallel applications. Recently, we have extended Muesli for hybrid and heterogeneous architectures and have evaluated simultaneous executions on CPUs and GPUs.

Software testing is essential for the creation of high-quality software. In a DAAD project in cooperation with our partners from the Universidad Complutense de Madrid we have worked on ways to improve the Münster generator of glass-box test cases (Muggl). In particular, we have focused our efforts on two new fields: Creating test cases for Android applications and interactions with databases. Aside from this project we have developed approaches relevant to practice for improving the software development process for projects involving the Spring framework and explored the potential of software containers for testing.

The symbolic Java virtual machine (SJVM) created for Muggl also serves as a basis for our most recent research project, which aims at integrating logic programming features into the Java programming language. This integration of programming paradigms promises simpler development of programs that require constraint solving, as constraints will be stated declaratively and solved implicitly by the SJVM runtime.

In the field of matching markets, we study the problem of assigning children to day care facilities. In particular, motivated by the German day care market, we discuss the possibility of heterogeneity in the strength of preferences of the day care facilities, in view of private versus public facilities. In order to meet the requirements of this two-sided market, we combine known market mechanisms while focusing on game theoretical properties such as stability and Pareto efficiency.

PUBLICATIONS

Caballero, R., Von Hof, V., Montenegro, M., Kuchen, K. (2016). A Program Transformation for Converting Java Assertions into Control-flow Statements. ERCIS Working Papers, Volume 25.

Dageförde, J. C., Reischmann, T., Majchrzak, T. A., & Ernsting, J. (2016). Generating App Product Lines in a Model-Driven Cross-Platform Development Approach. In Proceedings of the 49th Hawaii International Conference on System Sciences, Kauai, Hawaii, 5803–5812.

Ernsting, J., Rieger, C., Wrede, F., & Majchrzak, T. A. (2016). Refining a Reference Architecture for Model-Driven Business Apps. Proceedings of the 12th International Conference on Web Information Systems and Technologies (WEBIST 2016) (pp. 307–316).

Ernsting, S., & Kuchen, H. (2016). Data Parallel Algorithmic Skeletons with Accelerator Support. International Journal of Parallel Programming, 2016, 1–17.

Evers, S., Ernsting, J., & Majchrzak, T. A. (2016). Towards a Reference Architecture for Model-Driven Business Apps. In Proceedings of the 49th Hawaii International Conference on System Sciences, Kauai, Hawaii, 5731–5740.

Fögen, K., Von Hof, V., Kuchen, K. (2016). Attributed Grammars for Detecting Spring Configuration Errors. ERCIS Working Papers, Volume 26.

Rieger, C., & Majchrzak, T. (2016). Weighted evaluation framework for cross-platform app development approaches. In Wrycza, S. (Ed.), Information Systems: Development, Research, Applications, Education: 9th SIGSAND/PLAIS EuroSymposium 2016, Gdansk, Poland, September 29, 2016, Proceedings (pp. 18–39). Lecture Notes in Business Information Processing: Vol. 264. Springer Verlag.

Reischmann, T. & Kuchen, H. (2016). Towards an E-Assessment Tool for Advanced Software Engineering Skills. In Proceedings of the 16th Koli Calling International Conference on Computing Education Research. ACM, 2016.

Von Hof, V., Fögen, K., & Kuchen, H. (2016). Compilezeit-Prüfung von Spring-Konfigurationen. CEUR Workshop Proceedings, 96–108.

DISSERTATIONS

Ernsting, S.: Data Parallel Algorithmic Skeletons with Accelerator Support.

Ernsting, J.: Facilitating Information System Development.

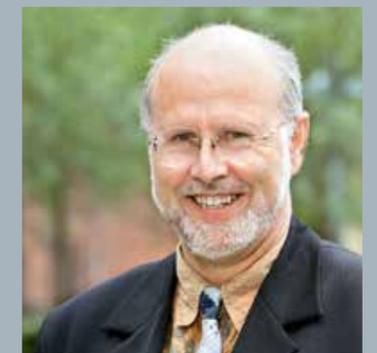
EVENTS

In June 2016, the 9th International Symposium on High-Level Parallel Programming (HLPP) was organized in Münster. Moreover, Prof. Kuchen served on the program committees of the following conferences: HLPP, QRS, ACM SAC, SBD, SACLA, HLPGPU, SOFTENG, GEOProcessing, and HICSS. Moreover, he was:

- Member of the Scientific Advisory Board of IMDEA-Software, Spain.

- Managing Director of the Institute for Applied Informatics at the University of Münster.

- Editor of the Open Journal of Web Technologies.



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KEY FACTS

INSTITUTION

- Founded in 1997
- Researchers: 9

RESEARCH TOPICS

- Business Apps
- Model Driven Software Development
- Parallel Programming
- Software Testing
- Integration of Programming Paradigms
- E-Learning



ABOUT THE INSTITUTION

Heike Trautmann is head of the Information Systems and Statistics group and a director of ERCIS. Currently, three post-doctoral researchers and three post-graduate researchers are part of the group. The team contributes to the research areas of Data Science and Big Data, multiobjective optimization, evolutionary computation, algorithm evaluation and selection and computer games in international collaborations. The group offers many courses in Bachelor and Master Degree programs. Industrial collaborations support the transfer from theory to applications in industry.

RESEARCH TOPICS

Some of the most challenging real-world problems involve the systematic and simultaneous optimization of multiple conflicting objective functions. **Multiobjective Optimization** deals with the simultaneous optimization of contradicting objectives. As most of the multi-objective problems cannot be solved exactly, we apply optimization techniques from Evolutionary Computation. Heike Trautmann organized the Evolutionary Multiobjective Optimization Track at this year's GECCO Conference together with a researcher from University of Coimbra, Portugal. Moreover, the group develops and evaluates new algorithm architectures and hybridization principles with a user-centric perspective.

In the context of **Algorithm Benchmarking**, the group evaluates the performance of different evolutionary and nature inspired techniques and contributes to algorithm development and enhancement. Directly related, **Algorithm Selection** means the selection process of suitable algorithmic approaches. Methodologically, identified problem properties are matched to known algorithms' solving characteristics in order to find the best performing approaches for a given problem (**Exploratory Landscape Analysis**). Due to cooperation with international researchers of the COSEAL research group, the team is strongly involved in this area. Specifically, transportation and continuous black-box problems as well as multiobjective problems are matters of current research.

Computational Intelligence methods are also well suited to **Computer Game AI** problems because they can deal well with partial information, uncertainties, and real-time conditions. Currently, we are mainly dealing with three hot topics in Game AI, namely game balancing, procedural content generation, and game data analysis. Our specific focus is on providing methods that are not only cutting edge from a research perspective but also well suited for our industrial partners.

We address **Data Science** issues related to **Big Data** applications such as omnichannel customer relationship management, specifically customer segmentation, or propaganda detection in online media. Special courses and project seminars are currently offered to the students. Moreover, Heike Trautmann launched a new executive program on Data Science at the Center of Scientific Executive Education in Münster in collaboration with G. Vossen (DBIS group), T. Wiesel (Marketing) and T. Quandt (Communication Science).

CURRENT RESEARCH PROJECTS

PropStop, Detection, Analysis and Mitigation of Online Propaganda: The three-year project, started in June 2016, is concerned with the detection of propaganda attacks in online media. It aims at establishing technical means for identifying automated and coordinated postings in social networks and online forums, such as campaigns of political propaganda and covered advertising. The project is joint work with the Department of Communication at the University of Münster, the Institute of System Security, University of Braunschweig, Spiegel Online, Süddeutsche Zeitung und Pallas GmbH. It is funded by the Federal Ministry of Education and Research (BMBF).

This March, the new **ERCIS omni-channel lab – powered by Arvato** has been founded at the University of Münster (<https://omni-channel.ercis.org>). The lab combines knowledge from research and experience from practice to innovate omni-channel customer relationship management.

The **COSEAL** (configuration and selection of algorithms) research group (<http://www.coseal.net>) is an international consortium of researchers which addresses current challenges from Algorithm Selection, Algorithm Configuration and Machine Learning. Members of COSEAL, including the group from Münster, created an online platform for benchmarking algorithm selection problems (<http://www.coseal.net/aslib>).

AWARDS

PPSN XIV Best Paper Award (2016) 09/2016 – Edinburgh Napier University and Organising Committee of the Parallel Problem Solving from Nature (PPSN) Conference XIV

GECCO 2016 Niching Methods for Multimodal Optimization Competition – 1st place (Ali Ahrari, Kalyanmoy Deb, and Mike Preuss, method RS-CMSA-ES) and 3rd place (Mike Preuss, method NEA2+)

EVENTS

Genetic and Evolutionary Computation Conference (GECCO), Denver, Colorado, July 20–24, 2016: Heike Trautmann and Mike Preuss were part of the organization, i.e. coordinated the Evolutionary Multiobjective Optimization Track as well as the competitions (<http://gecco-2016.sigevo.org/index.html/Organizers+and+Tracks>).

Parallel Problem Solving from Nature (PPSN) Conference, Edinburgh, Scotland, September 17–21, 2016: Mike Preuss organized a workshop and a tutorial on “Advances in Multimodal Optimization” (<http://www.epitropakis.co.uk/ppsn2016-niching/>).

Heike Trautmann organized a Dagstuhl seminar on “Automated Algorithm Selection and Configuration” in October together with colleagues from Canada and Australia.

PUBLICATIONS

Bischl, B., Kerschke, P., Kotthoff, L., Lindauer, M., Malitsky, Y., Fréchet, A., Hoos, H. H., Hutter, F., Leyton-Brown, K., Tierney, K., & Vanschoren, J. (2016). ASlib: A Benchmark Library for Algorithm Selection. *Journal of Artificial Intelligence*, 237, 41–58.

Rudolph, G., Schütze, O., Grimme, C., Domínguez-Medina, C., & Trautmann, H. (2016). Optimal averaged Hausdorff archives for bi-objective problems: theoretical and numerical results. *Computational Optimization and Applications*, 64(2), 589–618.

Schütze, O., Sosa, H. V., Trautmann, H., & Rudolph, G. (2016). The Hypervolume based Directed Search Method for Multi-Objective Optimization Problems. *Journal of Heuristics*, 22(3), 273–300.

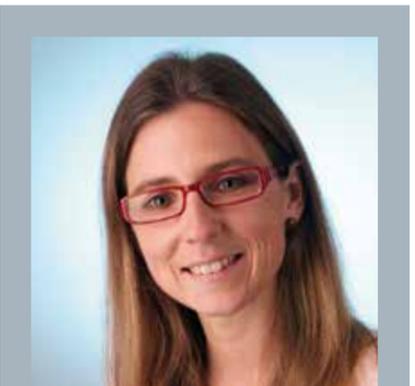
Beyer, M., Agureikin, A., Anokhin, A., Laenger, C., Nolte, F., Winterberg, J., Renka, M., Rieger, M., Pflanzl, N., Preuss, M., & Volz, V. (2016). An Integrated Process for Game Balancing. In *Proceedings of the IEEE Conference on Computational Intelligence and Games (CIG 2016)*, Santorini, Greece.

Bossek, J., & Trautmann, H. (2016). Evolving Instances for Maximizing Performance Differences of State-of-The-Art Inexact TSP Solvers. In *Proceedings of the Learning and Intelligent Optimization*, 10th International Conference, Ischia.

Carnein, M., Schöttle, P., & Böhme, R. (2016). Telltale Watermarks for Counting JPEG Compressions. In *Proceedings of the Electronic Imaging '16*, San Francisco, USA, 1–10.

Kerschke, P., Wang, H., Preuss, M., Grimme, C., Deutz, A., Trautmann, H., & Emmerich, M. (2016). Towards Analyzing Multimodality of Multiobjective Landscapes. In *Proceedings of the 14th International Conference on Parallel Problem Solving from Nature (PPSN XIV)*, Edinburgh, Scotland, 962–972.

Li, L., Yevseyeva, I., Basto-Fernandes, V., Trautmann, H., Jing, N., & Emmerich, M. (2016). An Ontology of Preference-Based Multiobjective Evolutionary Algorithms. eprint arXiv:1609.08082, submitted to *IEEE Transactions on Evolutionary Computation*.



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KEY FACTS

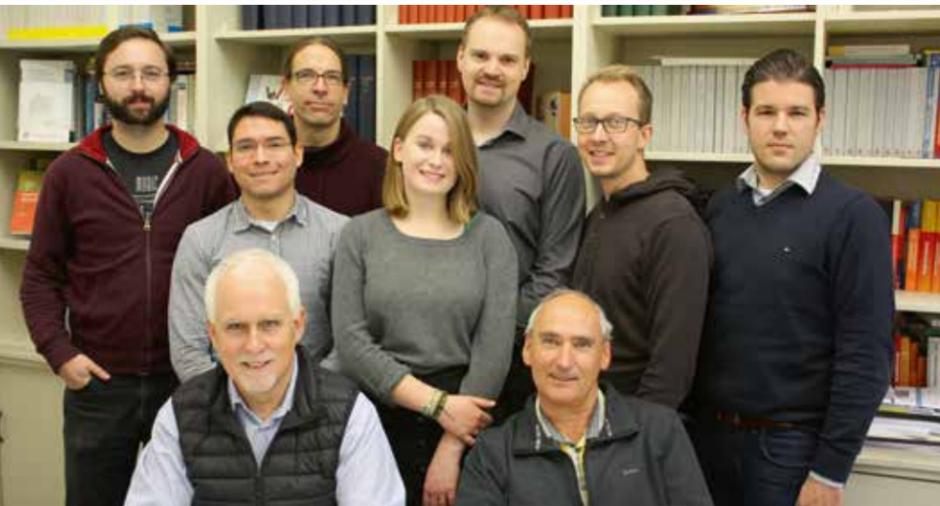
INSTITUTION

- Launched in April 2013
- 7 Researchers

RESEARCH TOPICS

- Multiobjective Optimization
- Evolutionary Computation
- Decision Support Systems
- Algorithm Benchmarking
- Algorithm Selection
- Computer Game AI: Balancing, PCG, Game Data Analysis
- Hybridization of Algorithms
- Statistical Quality Management
- Data Mining
- Big Data/Data Science

UNIVERSITY OF MÜNSTER – CHAIR OF COMPUTER SCIENCE – DBIS GROUP



ABOUT THE INSTITUTION

Databases and Database Systems have always been at the heart of Information Systems. While their visibility has been decreasing in recent years, their importance as a core infrastructure underlying modern IT systems, including those on the Web and in the cloud, has always been growing. This is due to the fact that database systems offer functionality, such as high-level querying or transactional contracts, that is central to many applications, and that they have adapted to the growing requirements regarding availability, scalability, and data modelling. The DBIS Group in the Department of Information Systems at the University of Münster is a member of the European Research Center for Information Systems (ERCIS) and as such studies challenges regarding the adoption, application, exploitation, and usage of databases, data warehouses, and other data management systems in business-oriented domains.

Dr. Gottfried Vossen, Professor of Computer Science and head of the group, is a Fellow of the German Computer Science Society (GI), Honorary Professor at the University of Waikato Management School in Hamilton, New Zealand, and a European Editor-in-Chief of Information Systems, an International Journal. He is chairman of the steering committee of the German information technology certification agency Cert-IT and serves on several editorial boards and program committees.

RESEARCH TOPICS

Research topics currently studied by the DBIS Group include challenges involving data and processes, data warehousing, (social) business process management, Big Data processing and handling, data marketplaces, data pricing, information provisioning and specific modern applications involving social media. Our approach is based on the conviction that (business) processes and process models are elementary tools for perceiving and analyzing data-driven applications. In order to execute a process, however, appropriate means for managing the data that arises are needed. This data typically comes in high quantities, high frequency, and high variety, and hence requires suitable tools for its processing. This is where we derive our research topics from.

CURRENT RESEARCH PROJECTS

ERCIS Omni-Channel Lab Powered by Arvato

In the summer term 2016 the ERCIS Omni-Channel Lab Powered by Arvato was founded in cooperation with the University of Münster involving the chairs of Prof. Dr. Becker, Prof. Dr. Vossen, and Prof. Dr. Trautmann. Arvato as one of the world's leading providers for customer services faces the necessity to serve clients a holistic view about their customers across different communication channels, e.g. voice, mail, e-mail, chat, and social media to improve the customer interaction for the

client. The challenge to implement such an omni-channel solution from the data management perspective is given by the volume, the variety, and the accessibility of the data. Therefore, the DBIS group will focus on developing a Big Data integration concept and an appropriate data management architecture.

Gamification of Business Process Modelling

Business Process Modelling is an activity during which a modeler creates a graphic representation of the business processes of an organization. As part of its research portfolio, the DBIS Group is working together with Horus software GmbH from Ettlingen to analyze the potentials of Gamification within this context. The relatively novel term Gamification describes the use of game elements within non-game contexts to enable the design of better products and services and to increase customer engagement. The goal of this research endeavor is the conceptualization, implementation, and evaluation of a Gamification module for the Horus Business Modeler, a process modelling software developed and marketed by Horus software GmbH. Expected benefits are an increased motivation of process stakeholders to participate in modelling, a higher quality of process models through timely and suitable feedback, and process modelling “learning-by-doing.”

Goal-oriented Business Intelligence Architectures

Goal-oriented Business Intelligence Architectures (GOBIA) are a current research effort of the DBIS Group. GOBIA aims to fuse traditional Data Warehouses (DWH) and novel Big Data technologies, such as the Apache Hadoop ecosystem, on an architectural level. In previous days, mostly DWH technologies were considered for Business Intelligence (BI) architectures. With the advent of Big Data, technological possibilities grew so tremendously that it became challenging to select the “right” technology for an analytical task. Often, even a combination of technologies is needed to fulfill it.

To navigate through these choices, GOBIA enhances a reference architecture (GOBIA.REF) for analytical tools with a development process (GOBIA.DEV). GOBIA.DEV focuses on the actual business goals and requirements to derive a conceptual architecture and, using this, to find suitable technologies. In the end, GOBIA should allow to employ a specific use case to narrow down the most fitting choices from a vast technology solution space and to clarify upon the needed analytical functionality and data.

PUBLICATIONS

H. Al Namani, E. Deakins, S. Dillon, G. Vossen: Achieving Government-Citizen Dialogue in Arab Nations via Social Media: Contextual Considerations; to appear in Electronic Government, an International Journal.

D. Fekete: The GOBIA Method: Fusing Data Warehouses and Big Data in a Goal-Oriented BI Architecture. GvD 2016: 50–55.

D. Fekete, G. Vossen: Mit GOBIA zu zielgerichteten Business-Intelligence-Architekturen; DOAG Business News, 15 (1-2016), 9–10.

T. Haselmann, G. Vossen, S. Dillon: Cooperative Hybrid Cloud Intermediaries — Making Cloud Sourcing Feasible for Small and Medium-sized Enterprises; Open Journal of Cloud Computing (OJCC) 2 (2) 2015, 4–20.

J. Lechtenbörger, G. Vossen: NoSQL, NewSQL, MapReduce und Hadoop; Kapitel 10 in: P. Gluchowski, P. Chameni (Hrsg.): Analytische Informationssysteme — Business Intelligence-Technologien und -Anwendungen, 5. Auflage, Springer-Verlag, Berlin 2016, 205–223.

J. Lechtenbörger, G. Vossen: Hauptspeicherdatenbanken: Denkgeschwindigkeit für alle? DOAG Business News 3-2016, 5–7.

N. Pflanzl: Gameful Business Process Modeling; in Proc. 7th International Workshop on Enterprise Modeling and Information Systems Architectures (EMISA), 2016.

N. Pflanzl, T. Classe, R. Araujo, G. Vossen: Designing Serious Games for Citizen Engagement in Public Service Processes; in Proc. 9th Workshop on Social and Human Aspects of Business Process Management (BPMS2) 2016, Rio de Janeiro, Brazil.

F. Schomm: Data Profiling as a Process - Bridging the Gap Between Academia and Practitioners. GvD 2016: 98–102.

F. Stahl, G. Vossen: Data Quality Scores for Pricing on Data Marketplaces; in Proc. 8th International Conference on Intelligent Information and Database Systems (ACIIDS), Da Nang, Vietnam, 2016, Springer LNAI 9621, 2016, 215–224.

F. Stahl, F. Schomm, G. Vossen, L. Vomfell: A Classification Framework for Data Marketplaces; Vietnam Journal of Computer Science, 3(3), 2016, 137–143.

F. Stahl, G. Vossen: Fair Knapsack Pricing for Data Marketplaces; in Proc. 20th East-European Conference on Advances in Databases and Information Systems (ADBIS), 2016, Springer LNCS 9809, 46–59.

G. Vossen, K.-U. Witt: Grundkurs Theoretische Informatik — Eine anwendungsbezogene Einführung für Studierende in allen Informatik-Studiengängen; 6. erweiterte und überarbeitete Auflage 2016, ISBN 978-3-8348-1770-9, Springer Vieweg.



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KEY FACTS

RESEARCH TOPICS

- (Social) Business process management and gamification
- Big data processing and handling
- Data marketplaces and data pricing
- Data warehousing, ETL processes, data profiling
- Information provisioning (Web in your Pocket)
- Modern applications involving social media

EVENTS

- Regular meetings of the TDWI Roundtable as well as of the GI Regional Group Münsterland
- ERCIS Launch Pad, annually in Münster, in 2016 on 7th December

KEDGE BUSINESS SCHOOL – DEPARTMENT OF OPERATIONS MANAGEMENT AND INFORMATION SYSTEMS

› Kedge Business School – Department of Operations Management and Information Systems www.kedgebs.com



KEDGE
BUSINESS SCHOOL

ABOUT THE INSTITUTION

KEDGE Business School

Kedge Business School offers a large portfolio of degree programs ranging from bachelor's and master's degrees to MBAs and Executive Education. Research performed by its faculty is highly regarded, and covers such areas as global responsibility, supply chain management, wine and spirits management, arts and culture management and innovation in SME. International students can also take a semester abroad in one of its 280 partner universities.

Kedge Business School holds three accreditations – from EQUIS, AACSB and AMBA – and has been ranked by the Financial Times since 2008. Kedge Business School is committed to excellence, social responsibility and diversity. Therefore, it has decided to offer financial support to talented international students.

The “Operations Management and Information Systems” department is valued for its competency in purchasing, logistics, supply chain and information systems management. The team members are highly recognized for expertise in the area of Information and Decision Science, in Knowledge Management, Serious games, e-business, 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 modelling for the different organizational learning mechanisms and causal mapping applications in managerial decision-making.

CURRENT RESEARCH PROJECTS

Data envelopment analysis (DEA) methodology and the DEA applications

DEA is a well-established non-parametric methodology, which is used to assess the performance efficiency of a set of decision making units (DMUs) in production systems. DEA generates efficiency scores for each assessed element of the system – DMU (subsidiaries, or regions or companies) - thus constructing a Pareto-like frontier of optimal solutions, providing information about the performance of the DMUs and setting the targets needed to perform as the efficient units. DEA offers a range of different models (oriented and non-oriented models, radial, additive, directional-based measures, etc.) to assess the technical efficiency of the given DMUs in terms of economic and process efficiency.

In the theoretical studies, the focus is made on the single-stage DEA models with weight restrictions, in the CRS (constant return to scale) and VRS (variable return to scale) technologies. The special conditions on the effective bound are studied; it is shown that the effective bounds in the input and output orientations, for both CRS and VRS models, are generally different, and their evaluation requires solving different linear programs. The effective bound of an inefficient DMU may be smaller than the efficient bound of any of the strongly efficient DMUs. This implies that assessing the effective bounds for all observed DMUs is generally insufficient to identify the common effective bound that would be suitable for all (including unobserved) DMUs in the CRS or VRS technology. The questions of the trade-offs between inputs and outputs which appear in many DEA applications is also in the center of our research works.

An environmental perspective to help in implementing sustainability in wine industry using the DEA models was in the center of my recent DEA applications. The objective is to evaluate the performance efficiency of the different wine regions in France in terms of carbon footprint practices using data envelopment analysis. An output oriented version of the weighted additive DEA model introduced by Lovell and Pastor (1995) is used. This methodology is characterized by accounting for slacks as a source of technical inefficiency contrary to other approaches that neglect slacks leading to an overestimation of the allocative inefficiency. The major interest is in the three sources of carbon emission which are the biogeochemical field emission, packaging and transportation.

The joint project on the DEA applications in sustainable project on the use of land resources is developed together with Argonne National Laboratory (USA) and is under evaluation in the framework of France-US cooperation.



The e-DENT Project

The e-DENT project sets out to provide access to a dental consultation for those for whom access to a dentist is limited, such as the dependent elderly and disabled people, by offering an asynchronous remote consultation to the patient, assisted by a healthcare professional. It is based in Languedoc-Roussillon and involves a specially designed “intraoral” camera and collaboration between Montpellier University Hospital and ORAL-B (Procter & Gamble).

Currently, the key challenge is finding a robust method to evaluate technology acceptance for patients who may suffer from minor, mild or severe cognitive impairment. So far, data on the acceptability of the system has been gathered from over 100 of the expected 800 patients and some initial descriptive statistics have been produced. The long term aim is to be able to use this data in models such as TAM (Technology Acceptance Model) or the UTAUT (Unified Theory of Acceptance and Use of Technology) model.

PUBLICATIONS

Allal-Chérif, O., Bidan, M., and Makhlof, M. (2016). Using Serious Games to manage knowledge and competencies: a study of the banking sector. *Information Systems Frontiers*, in press.

Allal-Chérif, O., and Makhlof, M. (2016). Using serious games for human resource management in the top 40 companies in France. *Global Business and Organizational Excellence*, 35(3), 27–36.

Allal-Chérif O., & Makhlof, M. (2016). Using serious games to manage knowledge: the SECI model perspective. *Journal of Business Research*, 69(5), 1539–1543.

Bouzdine-Chameeva, T., and Podinovski, V. V. (2016). On single-stage DEA models with weight restrictions. *European Journal of Operational Research*, 248(3), 1044–1050.

Gombault, A., Allal-Chérif, O., and Decamps, A. (2016). ICT adoption in heritage organizations: crossing the chasm. *Journal of Business Research*, 69(11), 5135–5140.

Jiang, S., Gong, L., Wang, H., and Kimble, C. (2016). Institution, Strategy and Performance: A Co-Evolution Model in Transitional China. *Journal of Business Research*, 69(9), 3352–3360.

Kimble, C., Vasconcelos, J., and Rocha, Á. (2016). Competence management in knowledge intensive organizations using consensual knowledge and ontologies. *Information Systems Frontiers*, in press.

Podinovski, V. V., and Bouzdine-Chameeva, T. (2015). Consistent weight restrictions in data envelopment analysis. *European Journal of Operational Research*, 244(1), 201–209.

Vasconcelos, J., Kimble, C., Carreiro, P., and Rocha, Á. (2016). The application of knowledge management to software evolution. *International Journal of Information Management*, in press.

Wang, H., and Kimble, C. (2016). How External Factors Influence Business Model Innovation: A Study of the Bosch Group and the Chinese Automotive Aftermarket. *Global Business and Organizational Excellence*, 35(6), 53–64.

DISSERTATIONS/HABILITATIONS

Oihab Allal-Cherif defended his habilitation to supervise doctoral students (Habilitation à Diriger des Recherches) on October, 7th 2016 on the topic “Digital Management: a dual approach by the procurement and the human resources functions” at Nantes University, France.



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KEY FACTS

INSTITUTION

- Founded in 1874
- One of the oldest "Grandes Écoles" in France
- 20 programmes
- 160 permanent professors
- EQUIS, AMBA and AACSB accredited

RESEARCH TOPICS

- Information Systems Management
- E-business
- E-commerce
- E-distribution
- Decision-Making and Decision Analysis
- Organizational Learning and Knowledge Management
- Serious games
- Digital tools in museums



ABOUT THE INSTITUTION

The Department of Information Technology Management (ITM) is one of the largest ITM departments in Europe. 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 inter-relationships 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, internet of things, or open big 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.

Example Research Theme IoT. The group 'Internet of Things' (IoT) has the objective to create an Internet of People and Societies by creating multidisciplinary and cross-disciplinary approaches with researchers, politicians, citizens, NGO's and enterprises pursuing socially productive scenarios in the merging of our physical world and the virtual world.

CURRENT RESEARCH PROJECTS

BPM-Online. In this EU project, in collaboration with other ERCIS network members, CBS participates in the development of an EU reference curriculum for business process management. CBS's focus is on the challenges and the role of BPM with regards to organizational flexibility, innovation and employee's expertise.

The Center for Business Data Analytics (cbsBDA) has started at the Department of Information Technology Management of the Copenhagen Business School. It conducts transdisciplinary basic research at the socio-technical intersections of computer science and social science with specific applications to managers in companies, teachers in schools and residents in cities.

Big Social Data Analytics. CBS ITM received a 6.2 m DKK grant from the Danish Industry Foundation and starts a research project on big social data analytics. The research project is case based and can, by building new analytical models that collect big data streams from company databases, websites and social media such as Facebook, Instagram, Pinterest, Twitter and LinkedIn, provide companies with necessary algorithmic approaches to address current business challenges.

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 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 students 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.

PUBLICATIONS

Chee-Wee Tan; Izak Benbasat; Ronald Centefelli / An Exploratory Study of the Formation and Impact of Electronic Service Failures. In: M I S Quarterly, Vol. 40, No. 1, 2016, p. 1–29.

Robert D. Austin; David Upton / Leading in the Age of Super-Transparency. In: M I T Sloan Management Review, Vol. 57, No. 2, 2016, p. 25–32.

Roya Gholami; Richard T. Watson; Helen Hasan; Alemayehu Molla; Niels Bjørn-Andersen / Information Systems Solutions for Environmental Sustainability : How Can We Do More? In: Journal of the Association of Information Systems (JAIS), Vol. 17, No. 8, 8.2016, p. 521–536.

Torkil Clemmensen; Victor Kaptelinin; Bonnie Nardi / Making HCI Theory Work : An Analysis of the Use of Activity Theory in HCI Research. In: Behaviour and Information Technology, Vol. 35, No. 8, 2016, p. 608–627.

Jonas Hedman; Stefan Henningsson / Developing Ecological Sustainability : A Green IS Response Model. In: Information Systems Journal, Vol. 26, No. 3, 2016, p. 259–287.

Jonas Hedman; Saonee Sarker; Daniel Veit / Digitization in Business Models and Entrepreneurship. In: Information Systems Journal, Vol. 26, No. 5, 2016, p. 419–420.

Robert D. Austin; Richard L. Nolan; Shannon O'Donel / The Adventures of an IT Leader. 2.ed. Boston : Harvard Business School Press 2016, 352 p.

Eaton, Ben; Elaluf-Calderwood, Silvia; Sørensen, Carsten; Yoo, Youngjin / Distributed Tuning of Boundary Resources : The Case of Apple's iOS Service System. In: M I S Quarterly, Vol. 39, No. 1, 2015, p. 217–244, A1-A12.

Stein, Mari-Klara; Newell, Sue; Wagner, Erica L.; Galliers, Robert D. / Coping with Information Technology : Mixed Emotions, Vacillation, and Nonconforming Use Patterns. In: M I S Quarterly, Vol. 39, No. 2, 2015, p. 367–392.

Trier, Matthias; Richter, Alexander / The Deep Structure of Organizational Online Networking : An Actor-oriented Case Study. In: Information Systems Journal, Vol. 25, No. 5, 2015, p. 465–488.



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KEY FACTS

INSTITUTION

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

RESEARCH TOPICS

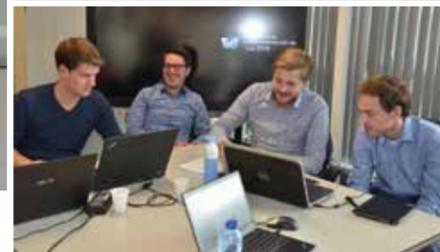
- Information Management
- Social Media Management
- Social Media Analytics
- IT in Mergers and Acquisitions
- IT Strategy and Organization
- Internet of Things
- Open Data, Big Data
- Electronic Communication
- Human Computer Interaction
- Systems Development
- E-Government

UNIVERSITY OF TWENTE – CENTRE FOR TELEMATICS AND INFORMATION TECHNOLOGY

› University of Twente – Centre for Telematics and Information Technology www.utwente.nl/mb/iebis



UNIVERSITEIT TWENTE.



PhD defense Vipin Suri

ABOUT THE INSTITUTION

The University of Twente (UT) is where talent can best realize its full potential. Students and staff are the key. All in all 3,300 scientists and professionals carry out ground-breaking research, bring about socially relevant innovation and provide inspiring teaching for more than 9,000 students. To us, entrepreneurship comes as second nature. The campus is home to around 100 businesses, including student-run ones. The University of Twente has also generated more than 700 successful spin-off companies including well known E-businesses such as *Booking.com* and *Takeaway.com*. The university's business park, Kennispark Twente, encourages and assists entrepreneurs to start new companies. But there's so much more than what happens on our wonderful, green campus. Our sports and cultural facilities are unique and we host events such as the world's largest student think tank: Create Tomorrow. Another highlight of the Twente campus is the Netherlands' largest student sports event, the Batavieren Race. The campus is a hive of activities – a truly inspirational place to be! – University of Twente, the entrepreneurial university.

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 spin-off companies per year. CTIT recently co-founded ICT labs, a European EIT dedicated towards accelerating ICT innovations in business.

RESEARCH TOPICS

The research of CTIT is organised in centres that bundle efforts and closely align to topics addressed in the Dutch top-sector agenda and the European Horizon 2020 framework programme.

The CTIT centers are:

- Centre for Dependable Systems and Networks (C.DSN)
- Centre for Cyber Security and Public Safety
- Centre for Interactive Service Robotics
- Centre for Green ICT
- Centre for Array Technology (CAT)
- Centre for Wireless and Sensor Systems (WISE)

- Centre for Healthcare Operation Improvement (CHOIR)
- Centre for Sustainable Supply Chain Innovation (SSI)
- Centre for Tele-monitoring and Coaching
- Centre for Service Science

Various departments are joining efforts in these centres to address research challenges in an interdisciplinary way. More information on the centres can be found via www.ctit.nl.

CURRENT RESEARCH PROJECTS

CTIT is active in dozens of research projects financed at the national and European level and directly by industry. Departments directly related to ERCIS research themes are the IEBIS (Industrial Engineering and Business Information Systems) group and the SCS (Services, Cybersecurity and Safety research) group.

Current research projects include:

The IEBIS group is concerned with studying novel ways of managing business processes and supply chains using innovative techniques such as simulation, (social)

data mining, multi-agent coordination and gamification. Researchers in IEBIS use design science methods to develop Decision Support Systems and Inter-Organizational Systems connecting networks of businesses and governments.

The goal of the SCS group is to develop methods and techniques for developing IT-based services that balance service levels with safety- and security levels, and to develop methods and techniques that make existing IT-based services more secure.

Selected research projects include:

Catalog – E-business architecture and fulfillment

Social media content analysis – Data-driven service development. Integrating Internet and social media content reports with internal log data for service development decisions.

TREsPASS – methods and tools to analyse and visualise information security risks in dynamic organisations as well as possible countermeasures.

SynchromodalIT – this project aims at designing advanced algorithms and business-IT architectures to facilitate dynamic planning of logistics across various modalities.

Hubways – development of a serious game to design and experience inter-organizational processes for a coordination hub for the flower industry.

EVENTS

A free open online course (MOOC) was developed and launched on Supply Chain Innovation. Over 8,000 students enrolled and participated in the discussions. The course was developed in a collaborative effort of several researchers of academia and industry. The central theme was how to use ICT to innovate supply chains and achieve more sustainability. The course materials were closely linked to ongoing research projects. The course will run again in 2017, see <https://www.futurelearn.com/courses/supply-chain-innovation>.

PUBLICATIONS

Aulkemeier, F., Schramm, M., Iacob, M. E., & van Hillegersberg, J. (2016). A service-oriented e-commerce reference architecture. *Journal of theoretical and applied electronic commerce research*, 11(1), 26–45.

van Capelleveen, G., Poel, M., Mueller, R. M., Thornton, D., & van Hillegersberg, J. (2016). Outlier detection in healthcare fraud: A case study in the Medicaid dental domain. *International journal of accounting information systems*, 21, 18–31.

Ehrenhard, M., Wijnhoven, F., van den Broek, T., & Stagno, M. Z. (2016). Unlocking how start-ups create business value with mobile applications: Development of an App-enabled Business Innovation Cycle. *Technological Forecasting and Social Change*.

Effing, R., & Spil, T. A. (2016). The social strategy cone: Towards a framework for evaluating social media strategies. *International journal of information management*, 36(1), 1–8.

Folmer, E., Matzner, M., Räckers, M., Scholta, H., & Becker, J. (2016). Standardized, Flexible Information Exchange for Networked Public Administrations—A Method. *Transforming Government: People, Process and Policy*, 10(2).

DISSERTATIONS

Spoel, Sjoerd Jurrian van der (2016) Prediction instrument development for complex domains, PhD thesis

Suri, Vipin (2016) A Methodology for Integrated Delivery of Business Support Services, PhD thesis

Knapik, Peter (2016) Automotive security functions: the use of new technologies to tackle vehicle-related crime. PhD thesis.

All publications are available at: doc.utwente.nl



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Head of Department:
Prof. Dr. Roel Wieringa

CTIT: <http://www.ctit.nl>
Scientific Director:
Prof. Dr. Maarten van Steen

KEY FACTS

INSTITUTION

- Centre for Telematics and IT
- One of the largest academic ICT research institutes in Europe
- 375 researchers / 239 fte
- Budget: 29 million Euro



ABOUT THE INSTITUTION

With almost 30,000 students, eleven faculties and about 1,700 academic staff members, the University of Gdansk is the largest institution of a higher education in the Pomeranian, Poland. It offers the opportunity to study in almost seventy different fields with over a two 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 Business Informatics of the University of Gdansk is conducting intensive teaching and research activities. Some of its academic manuals are bestsellers in Poland. The Department is also active internationally, organizing conferences including the 10th European Conference on Information Systems (ECIS 2002), The 7th International Conference on Perspectives

in Business Informatics Research (BIR 2008), The 8th International Conference on European Distance and E-learning Network (EDEN 2009) and 24th Conference on Advance Information Systems Engineering (CAISE 2012). The Department is the partner of the European Research Center for Information Systems (ERCIS) consortium.

The Department is involved in the following international and research initiatives:



- Polish Chapter of Association for Information Systems – PLAIS



- The Annual International Conference on Perspectives in Business Informatics Research – BIR



- NTIE (Naukowe Towarzystwo Informatyki Ekonomicznej) – Polish Society for Business Informatics Research

The Department of Business Informatics established a Polish Chapter of AIS – PLAIS. The Polish Chapter of Association for Information Systems (PLAIS) was established in 2006 as the joint initiative of Prof. Claudia Loebbecke, University of Cologne, Germany, former President of AIS and Prof. Stanisław Wrycza, University of Gdansk, Poland. PLAIS co-organizes international and domestic conferences on Systems Analysis and Design as well as on Business Informatics and Systems Engineering.



RESEARCH TOPICS

The areas of research interest at Department of Business Informatics cover the following themes:

- Big Data
- Business Informatics
- Business Processes Modelling, BPMN
- Cloud Computing
- Databases
- E-Business
- E-Learning
- Enterprise Modelling
- ERP, CRM, SCM, WFM, BI Systems
- ICT Global Development
- Information Systems Development
- IT/IS Acceptance Research
- Social networks
- UML and SysML

CURRENT RESEARCH PROJECTS

Development and launching of the specialisation of Bachelor and Master Studies at Faculty of Management of University of Gdansk – Business Informatics: Informatic Applications in Business (AiB);

World IT project, coordinated by University of North Carolina – in cooperation with teams from different universities worldwide. The survey on IT in Polish enterprises in respect of IT occupational culture (ITOC) has been conducted with funding grant of energy producer Energa. The results are going to be published in the numerous research papers.

EVENTS

The 9th SIGSAND/PLAIS EuroSymposium' 2016 (Gdansk, Poland, September 29, 2016)

PUBLICATIONS

Wrycza S., Gajda D., Palvia P., Turan A.H., (2016) Representativeness in the “World IT Project” survey research. The methodological prerequisites and verification, 17th Annual Global Information Technology Management Association (GITMA) World Conference 2016 : August 9-10, 2016: conference proceedings.

Kralewski D., (2016) Business models of Internet of Things, LNBIP 264, Springer.

Maślankowski J., (2016) Towards De-Duplication Framework in Big Data Analysis. A Case Study, LNBIP 264, Springer.

Marcinkowski B., Gawin B., (2016) Project Management in International IT Ventures – does the Practice Go Hand in Hand with Theory?, LNBIP 264, Springer.

Kuciapski M., (2016) Students acceptance of m-learning for higher education – UTAUT model validation, LNBIP 264, Springer.

Wrycza S., (ed.), Information systems : Development, Research, Applications, Education: 9th SIGSAND/PLAIS EuroSymposium 2016, Gdansk, Poland, September 29, 2015 : Proceedings Springer, LNBIP 264, 2016.



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KEY FACTS

ABOUT THE PERSON

- Head of Department of Business Informatics at the University of Gdansk
- Senior Editor of Information Systems Management Journal
- Editorial Review Board of Journal of Database Management
- Advisory Board of Information Systems Journal
- Editorial Board of Information Systems and e-Business Management
- President of PLAIS
- General Chair of SIGSAND/PLAIS EuroSymposium
- Steering Committee of BIR
- Honourable Ambassador of Polish Congresses

INSTITUTION

- Founded in 1967
- Researchers: 12 staff members





Universidade do Minho



ABOUT THE INSTITUTION

The University of Minho (UMinho) is one of the Portuguese new universities created in the early 1970s. Currently it has around 20,000 students enrolled in the degree programs offered by its eleven schools that cover most areas of knowledge (sciences, engineering, psychology, education, social sciences, economics and management, law, humanities and arts, architecture, medicine, nursing).

The University is named after the Northwest region of Portugal where it is located. The University campi, and other main infrastructures, are situated in the cities of Braga and Guimarães.

UMinho was the first Portuguese university to offer a full degree program in Informatics in the country. It is not surprising, thus, that informatics is an important area at UMinho, with more than 10% of its students enrolled in degree programs in the area. The Department of Information Systems aims at providing a rich and challenging environment for teaching and research. Cultural diversity is viewed as an asset. Creativity and innovation are valued as crucial to the department's academic mission. The department has mobility agreements with a large set of partners from several countries and promotes the affiliation to networks whose thematic motivation might facilitate the exchange of students (e.g., ERCIS, IS-LINK, AIS Student Chapter@UMinho).

EVENTS

UMINHO successfully organized in Guimarães the Dual EGOV 2016 and ePart 2016 conference – 15th IFIP Electronic Government (EGOV) and 8th Electronic Participation (ePart) Conference 2016, the working conference of the IFIP Working Group 8.5. The conference took place in Sept 5–8, 2016 (<http://www.egov-conference.org/egov-2016>). These conferences provide a successful forum for the presentation of research results obtained by academics and researchers who develop activity in the field of e-Government, e-Governance and related fields of study. The conference was organized in collaboration with the Operating Unit in Electronic Government of the United Nations University (UNU-EGOV <http://egov.unu.edu/>) hosted by UMINHO in a smaller campus in Guimarães, Campus de Couros.

UMINHO organized SaTE 2016 – Stakeholders and Information Technology in Education, an IFIP TC3 joint conference, in Guimarães (July 6–8, 2016).



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KEY FACTS

- Founded in 1999, 35 faculty (27 tenure track)
- Exploitation of Information Technology to enhance desirable organizational and societal traits, namely collective intelligence, agility, resilience, transparency and citizen empowerment.
- Adaptive systems that use data to enhance individual, group or organizational work or to enable new work practices and structures.
- Processes of building and deploying information systems.





ABOUT THE INSTITUTION

The 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.

The Department of Management Systems is one of seven departments in the Waikato Management School and oversees the disciplines of Digital-Business, E-Commerce, Management Systems, Supply Chain Management, and Logistics. The department also teaches project management, decision making and knowledge management. It was one of the first institutions in the world to introduce a degree in Electronic Commerce. More recently it has begun offering a fully online Master of Electronic Commerce degree.

The department has undergone a lot of changes in 2016. Professor Jim Corner and Associate Professor Chuda Basnet both retire at the end of 2016. In August, Dr Gohar Khan joined as a senior lecturer in Digital Business. Khan is an expert on social media analytics and has written a book on the topic: *Seven Layers of Social Media Analytics: Mining Business Insights from Social Media Text, Actions, Networks, Hyperlinks, Apps, Search Engine, and Location Data*.

RESEARCH TOPICS

Our research reflects the multidisciplinary nature of the department. Recent relevant research projects focus on:

- Gamification
- Health Informatics
- Social Media Analytics
- Beacons
- Mobile Commerce
- Supply Chain Management
- Knowledge Management

CURRENT RESEARCH PROJECTS

2016 has been a year of establishing new areas of research focus. Part of this has been due to changes in staffing, however the rapidly changing nature of information systems (of which we focus on “digital business”) has also played a role.

A number of new projects in the health domain have begun. This includes exploring the opportunities for gamification to improve patient engagement, medication adherence and healthy lifestyles. Research is underway to look at ways in which information visualization can improve the understanding of heart attack patients concerning the impact medication has on their recovery and health. Another project is looking at the role of e-referrals for specialist treatment within the hospital system.

There is a project underway exploring the practicalities of Beacon technology and also the possible business applications of beacons. Part of this work was carried out by Honorary Professor Gottfried Vossen during his visit in February and March.

There is on-going work applying social media analytics to a range of business- and social settings.

Finally, Associate Professor Stuart Dillon is working on a book project, led by Professor Gottfried Vossen that is intended to provide broad coverage of all the contemporary technologies and issues associated with the web of today.

PUBLICATIONS

Wood, J; Kim, W; Khan, G (2016), Work engagement in organizations: a social network analysis of the domain, *Scientometrics*, 109, 1, 317–336.

Seuring, S; Basnet, C (2016), Demand-oriented supply chain strategies: A review of the literature, *Operations and Supply Chain Management: An International Journal*, 9, 2, 73–89.

Basnet, C (2016), Technical note: A single-pass heuristic for multi-mode single-resource constrained project scheduling, *International Journal of Operational Research*, 26, 1, 52–61.

Bohme, T; Williams, SJ; Childerhouse, P; Deakins, E; Towill, D (2016), Causes, effects and mitigation of unreliable healthcare supplies, *Production Planning and Control*, 27, 4, 249–262.

Al Saifi, S; Dillon, S; McQueen, R (2016), The relationship between management support and knowledge sharing: An exploratory study of manufacturing firms, *Knowledge and Process Management*, 23, 2, 124–135.

Corner, J; Tran, HTT (2016), The impact of communication channels on mobile banking adoption, *International Journal of Bank Marketing*, 34, 1, 78–109.

Al Saifi, S; Dillon, S; McQueen, R (2016), The relationship between face to face social networks and knowledge sharing: An exploratory study of manufacturing firms, *Journal of Knowledge Management*, 20, 2, 308–326.

DISSERTATIONS

Mandal, Debashish: Social Media Adoption by Microbusinesses, 2015

Luo, Wen (Clark): Dynamics of supply chain relationships; a qualitative study of logistics triads, 2015

Ekanayake, Samantha: The Symbiotic Existence of Interorganizational and Interpersonal Networks in Collaboration, 2015.



CONTACT DETAILS

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KEY FACTS

INSTITUTION

- Founded in 1964
- The Department of Management Systems is one of seven departments in the Faculty of Management
- 2 full professors
- 3 associate professors
- 2 senior lecturers
- 1 lecturer
- 7 PhD students

RESEARCH TOPICS

- Gamification
- Health Informatics
- Social Media Analytics
- Beacons
- Mobile Commerce
- Supply Chain Management
- Knowledge Management

KAUNAS UNIVERSITY OF TECHNOLOGY – DEPARTMENT OF INFORMATION SYSTEMS / CENTRE OF INFORMATION SYSTEMS DESIGN TECHNOLOGIES

› Kaunas University of Technology – Department of Information Systems ktu.edu



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 leading departments in the KTU Faculty of Informatics. In 2012, the Department's Laboratory of Information Systems and Databases Design was restructured into the Centre of Information Systems Design Technologies (headed by prof. R. Butleris). In 2014, the Centre has been expanded as part of the move to the newly established Integrated Science, Studies and Business Centre (Valley) „Santaka“. As of autumn 2016, the Department and Centre combined employed 24 researchers, teachers, and engineers. Being among the leading IS R&D hubs 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 has developed first and second cycle study programmes titled “Information Systems” and “Information Systems Engineering” respectively. Since their establishment, admissions to both programmes have remained



stable even though the overall number of students entering the universities in Lithuania has been declining steadily. In 2016, 35 students were accepted to the Bachelor study programme, and 20 to the Master's. There were also 11 PhD students at the Department.

RESEARCH TOPICS

The KTU Department of Information Systems / Centre of IS Design Technologies specialize in areas related to Information Systems Engineering, namely:

- Model driven development, model-to-model transformations
- Computer aided software engineering (CASE) technologies
- Conceptual modelling and databases

- Modelling of business processes, business vocabularies, and business rules
- User needs analysis and requirements modeling
- Ontologies and solutions for the Semantic Web
- Project management
- Data mining and business intelligence
- Knowledge-based systems
- Model-driven testing of information systems
- Information systems user interface and usability

CURRENT RESEARCH PROJECTS

Here are the main projects the Department and Centre staff have been involved in 2016:

Establishing Modern Master-level Studies in Information Systems – MASTIS (2016–2018), which is sponsored by the Erasmus+ Program. The project is aimed at modernisation and/or establishment of second cycle IS studies in 7 Ukrainian and 2 Montenegrin universities. The efforts are coordinated by the University Lyon 2 (France) and Simon Kuznets Kharkiv National University of Economics (Ukraine) and involve 7 other EU universities. In October, the Centre hosted a week-long working meeting aimed at specification of requirements for the study programmes to be developed at partner universities.

Professional network of Master's degrees in Informatics as a Second Competence – PROMIS (2013–2016, extended until June 2017). Financed by the Tempus Program and coordinated by the Grenoble Alpes University, this project is carried out by 5 European universities, 3 enterprises, and 10 beneficiary universities from five Central Asian countries. In 2016, in addition to other activities, 4 teachers of the Faculty of Informatics taught short courses at partner universities in Kazakhstan, Kirghizstan and Turkmenistan.

Lithuania's Membership in the International Research Infrastructure – CLARIN ERIC (2015–2016). In this Lithuanian Ministry of Education and Science supported initiative aimed at the development of the Common Language Resources and Technology Infrastructure, the Department is working together with the specialists of two other Lithuanian universities.

Continued development of the national forestry IS infrastructure in cooperation with the Lithuanian state forestry institutions and companies. In 2016, the innovative Greenhouse Gas Accounting Module has been developed at the Centre of IS Design Technologies for the National Forest Agency.

EVENTS

22nd International Conference on Information and Software Technologies, ICIST 2016, took place in the resort town of Druskininkai, Lithuania, on October 13–15. We will be looking forward to meeting you at ICIST 2017!

PUBLICATIONS

Skersys, T.; Danėnas, P.; Butleris, R. (2016): Model-based M2M transformations based on drag-and-drop actions: Approach and implementation // Journal of Systems and Software. Elsevier, vol. 122, p. 327–341.

Karpočiū, J.; Ablonskis, L.; Nemuraitė, L.; Paradauskas, B. (2016): Experimental investigation of transformations from SBVR business vocabularies and business rules to owl 2 ontologies // Information technology and control. Kaunas : KTU, 2016, vol. 45, iss. 2, p. 195–207.

Linaburgytė, R.; Butleris, R. (2016): Semi-supervised learning approach for ontology mapping problem // Information and software technologies : proceedings of the 22nd International Conference, ICIST 2016, Druskininkai, Lithuania, October 13–15, 2016. Cham : Springer, p. 67–77.

Milosz, M.; Merceron, A.; Kapočius, K.; Luján-Mora, S.; Adam, J.-M. (2016): Challenges in large international projects – Findings from ERAMIS and PROMIS projects // INTED2016 : proceedings of the 10th International Technology, Education and Development Conference, Valencia, Spain, March 7–9, 2016. Valencia : IATED Academy, p. 103–111.

Vileiniškis, T.; Šukys, A.; Butkienė, R. (2015): An approach for semantic search over Lithuanian news website corpus // IC3K 2015 : proceedings of the 7th international joint conference on knowledge discovery, knowledge engineering and knowledge management, Lisbon, Portugal, November 12–14, 2015. Vol. 1: KDIR. Setúbal : Scitepress, p. 57–66.



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KEY FACTS

INSTITUTION

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

SIMON KUZNETS KHARKIV NATIONAL UNIVERSITY OF ECONOMICS – INFORMATION SYSTEMS DEPARTMENT

› Simon Kuznets Kharkiv National University of Economics (KhNUE) – Information Systems Department ei.hneu.net



ABOUT THE INSTITUTION

Simon Kuznets Kharkiv National University of Economics is the leading higher education institution of the Eastern Ukraine, which provides a full range of educational services, carrying out multistage training, retraining and upgrading experts' skills in 15 specialties, such as Economics and Entrepreneurship, Management and Administration, Information Systems and Computer Science, Publishing and Printing Business.

The Information Systems Department has 48 professors, 279 students on bachelor level, 121 on master level, 1 PhD student and 1 PostDoc. The department is an active member of IT Ukraine Association. At the Kharkiv IT cluster, 15 professors are Microsoft certified specialists. Microsoft IT-Academy works since 2009, IBM Academic Centre "Smarter Commerce", since 2012.

The Information Systems Department is a member of National Educational Methodi-

cal Commission in Information Systems and Computer Science. The Master Double Diploma Programme MBA "Business Informatics" with University Lumiere Lyon-2, France was established in 2005. According to research of SMBG Consulting Group, the Programme is included in the top 10 Master Programmes in Business Intelligence in France in 2012–2016. The Programme graduated 186 students.

Simon Kuznets Kharkiv National University of Economics has about 7,700 students (including 800 foreign students), 650 faculty members and offers training primarily structured around the new teaching architecture of the higher education.

Having a considerable experience in training Ukrainian students, KhNUE influences HR, scientific, technical and economic policy of industrial enterprises and organisations in the country. The University trains highly skilled economists familiar with

modern information technologies and innovative model of behavior.

The University established a flexible system of quality specialists preparation management, based on continuous monitoring of KhNUE graduates' achievements.

RESEARCH TOPICS

The majority of Simon Kuznets Kharkiv National University of Economics Information Systems Department research activities are carried out within the following topics:

- Mobile technologies in operative management of an enterprise
- Business Process Management
- System of monitoring in scientific researches in higher education
- Fuzzy logic and modelling in logistic and marketing
- Information security
- Distributed data warehouses

- Knowledge base and artificial intelligence
- Innovative IT in higher education
- e- and distance learning

CURRENT RESEARCH PROJECTS

Horizon 2020 EQUAL-IST – Gender Equality Plans for Information Sciences and Technology Research Institutions. EQUAL-IST aims at introducing structural changes to enhance gender equality within Information Systems and Technology Research institutions, which have been demonstrated to be among the research sectors most affected by gender inequalities at all levels.

ERASMUS+ CBHE MASTIS – Establishing Modern Master-level Studies in Information Systems. The wider objective is to improve the Master Programme in Information Systems according to the needs of the modern society; to bring the universities closer to changes in global labour market and world education sphere; to enable them to stay responsive to employers' needs; to give students an idea of various job profiles in the Information Systems domain; to ensure employability throughout graduates' professional and soft skills.

ERASMUS+ CBHE FabLab – Development of a network infrastructure for youth innovation entrepreneurship support on fablab platforms. The wider objective is to develop an environment that stimulates engineering creativity, entrepreneurial activities and fosters youth employability via HELs-business-industry networking on fablab (fabrication laboratory) platforms.

Cryptographic means for information protection in banking systems. Developing differential game models of cyber-attacks processes in systems for bank information protection. Developing optimal strategies for information security in banking systems.

Modern simulation technology and designing of information systems and management objects. Computer imitational modeling of industrial and commercial systems.

AWARDS

Ukrainian Student team's Programming Contest 2016 – 2nd place.

CONFERENCES

VIII Annual International Conference «IT Industry Development: Problems and Perspectives».

DISSERTATIONS

Minukhin S.V.: Models, methods, information technologies of job batch scheduling in distributed computing systems.

PUBLICATIONS

Burdayev V., About one concept of constructing a temporal knowledge base. 4th International Scientific Congress "Science and Education in the Modern World". New Zealand, Auckland, 5–7 January 2015. Volume II. "Auckland University Press, 2015, 867–872.

Korol O., Enhanced mac algorithm based on the use of modular transformations. Radio Electronics, Computer Science, Control. – 2015. – № 1(32) 2015. – p. 60–68.

Korol O., Cascade method of formation with mac modular transformation. Systems of control, navigation and communication. - 2015 - 1 (33). - p. 133–138.

Yevseyev S., Tomashevskyy B., Two-factor authentication methods threats analysis. Electronics, computer science, management. - Zaporizhzhia. - 2015. - Vol. 1 (32). - p. 52–60.

Minukhin S., Method of scheduling tasks packets with high intensity and selecting resources in distributed computing. Information processing systems. - 2015. - Vol. 4. - P. 38–44.

Minukhin S., Information technology implementation of a two-tier model jobs packet scheduling in a distributed computing system based on the solution of the problem of the lowest coverage. Systems of control, navigation and communication. - 2015. - Issue 1 (33). - p.111–115.



CONTACT DETAILS

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KEY FACTS

INSTITUTION

- Founded in 1930
- 7,700 students and 650 staff
- 8 faculties, 35 departments
- Double Master Diploma Programmes with universities of France

IS DEPARTMENT

- 48 professors
- 400 bachelor's & master's students



ABOUT THE INSTITUTION

The Department of Information Systems (IS) is one of four departments within the Faculty of Social Sciences at the University of Agder (UiA). With an academic staff of 16 permanent positions and 2 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. 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:

Centre for eGovernment focuses on how ICT can be used to improve government processes and communication with citizens, how citizen participation can be advanced through social networks and how ICT can further development in the less

developed parts of the world. The Centre is involved in research, teaching and dissemination, and is a leading eGovernment research group in Norway.

Centre for Enterprise Systems (CENS) was established as a response to the increasing demand for graduates with enterprises 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 act as a resource centre for organisations on the acquisition, implementation and use of enterprise systems.

The Research Group on Design Research focuses on how information technology artefacts, such as information systems and software solutions, are developed in and for organizations. Especially, the group views development of artefacts as interaction between the processes of technical construction of artefacts and organizational implementation.

In addition, the Department is part of two multidisciplinary centres at the University of Agder:

The Centre for e-Health and Health Care Technology focuses on teaching, research, development and testing of new technology for the health and social sector. Taking a user perspective, the aim of the centre is to make everyday life easier in today's health society by developing technological solutions such as smart house solutions and mobile home services.

The Centre for Integrated Emergency Management (CIEM) aims at releasing the potential of powerful evolving technologies for integrated emergency preparedness and management. The Centre conducts research on networks, mobile devices, human-centered sensing, social media, sensemaking, visualization, decision support, collective intelligence and technology adoption.

CURRENT RESEARCH PROJECTS

Implementation of welfare technology. Digital surveillance in municipalities and its impact on innovation of services and organization (2014–2017). Project funded by the The Research Council of Norway. The project consortium consists of University of Agder, University College of Southeast Norway, five municipalities and one business partner. The project aims at researching innovation in business processes and learning needs.

Smart Mature Resilience (SMR) (2015–2018). Project funded through the H2020 Secure Societies program. The project will develop and validate a European Resilience Management Guideline, using three pilot projects covering different security sectors in Critical Infrastructures, as well as climate change and social dynamics. The consortium involves University of Agder, TECNUN Universidad de Navarra, University of Strathclyde, Linköping University, ICLEI European Secretariat, and seven European pilot cities. More info on <http://ciem.uia.no/project/smart-mature-resilience>.

TELMA (Telemedicine in Agder) (2016–2019). Project funded by The Research Council of Norway. The project consortium consists of University of Agder, three municipalities and the regional hospital trust. The project aims at developing and implementing telemedicine for Chronic obstructive pulmonary disease (COPD), diabetes and congestional heart failure, and research the benefit realization from this.

AWARDS

The paper entitled “Design for social media engagement: Insights from elderly care assistance” was elected by the senior editors of the Journal of Strategic Information Systems as the 2015 Best Paper. The authors are Paolo Spagnoletti and Andrea Resca (both from LUISS Guido Carli University) and Øystein Sæbø (from University of Agder). See more information at: <http://www.journals.elsevier.com/the-journal-of-strategic-information-systems/news/2015-best-paper-award>

Mihoko Sakurai, postdoctoral researcher at the Department of Information Systems, won the Best Paper Award at HICSS 2016 for the paper titled “How do Organizational Processes Recover Following a Disaster? – A Capital Resiliency Model for Disaster Preparedness”, co-authored with Richard T. Watson and Jiro Kokuryo.

EVENTS

The Centre for eGovernment hosted the 13th Scandinavian Workshop in E-Government (SWEG 2016) in Kristiansand on February 2–3, 2016 (see <https://eforvaltning.wordpress.com/sweg-2016/>)

The UiA Department of Information Systems hosted the 7th Annual ERCIS Workshop in Kristiansand on August 22–25, 2016, also including the third ERCIS Doctoral Consortium.

PUBLICATIONS

Berge, G. T. (2016). Drivers and Barriers to Structuring Information in Electronic Health Records. PACIS 2016 Proceedings, Paper 18.

Edzén, S.; Sein, M. K. (2016). Designing a solution for training and exercising coordination: Theme Based Table Top Exercise. International Journal of Emergency Management, 12(1), 22–40.

Eikebrokk, T. R.; Busch, P. A. (2016). Progress and Stewardship in Information Systems Research: Addressing Barriers to Cumulation through Active Process Ownership. Proceedings of AMCIS 2016.

El-Gazzar, R.; Hustad, E; Olsen, D. H. (2016). Understanding cloud computing adoption issues: A Delphi study approach. Journal of Systems and Software, 118, 64–84.

Evers, S.; Ernsting, J.; Majchrzak, T. A. (2016): Towards a Reference Architecture for Model-Driven Business Apps. Proceedings of HICSS-49.

Harnesk, D; Thapa, D. (2016). Equipment-as-Experience: A Heidegger-Based Position of Information Security. Proceedings of ICIS 2016.

Johannessen, M. R.; Sæbø, Ø; Flak, L. S. (2016). Social Media as Public Sphere: A Stakeholder Perspective. Transforming Government: People, Process and Policy, 10(2), 212–238.

Khazanchi, D.; Munkvold, B. E.; Lazareva, A. (2016). Towards a Contingency Theory of eLearning. In Conway et al. (Eds.), Digital Media in Teaching and its Added Value, Waxmann Verlag, 35–51.

Thapa, D; Sæbø, Ø. (2016). Participation in ICT Development Interventions: Who and How? The Electronic Journal of Information Systems in Developing Countries, 75(3).

DISSERTATIONS

Anaya, Luay Ahmad Mohd, Realizing Benefits from Enterprise Systems.

El-Gazzar, Rania Fahim, Understanding Cloud Computing Adoption within Organizations.



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KEY FACTS

INSTITUTION

- Founded in 1994 (full university status from 2007)
- Approximately 12,000 students and 1,200 staff

DEPARTMENT OF IS

- 20 researchers
- Approximately 300 bachelor and master students in IS
- 13 PhD students

RESEARCH TOPICS

- E-Government and benefits realisation
- E-Participation and e-Democracy
- ICT for development
- Enterprise systems implementation in SMEs
- Business process management and process modelling
- Knowledge management and e-collaboration
- Mobile computing
- Design research
- E-health
- Emergency management IS



**Universiteit
Leiden**
The Netherlands

LEIDEN UNIVERSITY

Leiden University was founded in 1575 and is one of Europe's leading international research universities. It has seven faculties in the arts, sciences and social sciences, spread over locations in Leiden and The Hague. The university has over 5,500 staff members and 25,800 students.

Præsidium Libertatis is the motto of Leiden University. This means Bastion of Freedom. The university has always stood for freedom of spirit, thought and speech as well as freedom in research and teaching. The university wants to create an environment in which academics and students have the opportunity to excel. We welcome all who wish to study or work here and achieve their full potential. The university has a responsibility to society and to future generations. This means providing excellent research and teaching that make the world a safer, healthier, more sustainable, prosperous and just place – at local, regional and global level.

Leiden academics research the world around us and pass on their knowledge to future generations. Each with his or her individual expertise and personal fascination for a particular discipline, they are the public face of the university.



Leading academics shape our fields of research and are given the scope and the resources to excel. Time and again they demonstrate their prominent position in world research and are an example to our students. The presence of these leading academics gives Leiden University a good position in international rankings and in personal scientific subsidies and prizes. Our academics feature strongly in the Spinoza Prizes, subsidies awarded by the European Research Council (ERC), Innovation Incentives from NWO and Academy Professorships at KNAW.

LEIDEN INSTITUTE OF ADVANCED COMPUTER SCIENCE

The Leiden Institute of Advanced Computer Science (LIACS) is for research and education in computer science carried out at Leiden University. It is our mission to improve the current computer science methods, systems and techniques. We explore new research areas that are relevant to society.

LIACS exists since 1996 and employs about 170 people at the moment. Many of our employees work in companies or governmental organisations as well.

LIACS collaborates with many Dutch and foreign institutes and companies. We have formal affiliations with the national research schools Advanced School for Computing and Imaging (ASCI) and the Institute for Programming Research and Algorithmics (IPA).

LIACS is furthermore one of the founding institutes of the **Leiden Centre of Data Science (LCDS)**: a network of researchers from different scientific disciplines, who use innovative methods to deal with large amounts of data. Data Science, a quickly rising scientific discipline, forms the answer to this question.

LEIDEN CENTER FOR DATA SCIENCE (LCDS)

The LCDS trains researchers to discover and analyze meaningful patterns in data, and to convert these into useful information.

Big data is everywhere: a constantly increasing amount of data is being produced worldwide. How can we transform this ocean of data into a sea of knowledge? Again, Data Science forms the answer to this question. It trains researchers to discover and to analyze meaningful patterns in data, and to convert these into useful information. Methods from Data Science are important in order to maintain a competitive edge in research, not only in the field of Computer Science, but in all academic domains.

At the Leiden Centre of Data Science, we bring together researchers from a range of different scientific disciplines. LCDS serves as a knowledge hub for researchers who are interested in using innovative approaches and techniques for dealing with large amounts of data. We offer the expertise and facilities that are needed for this type of research.

We build bridges both within and outside academia. Many of our research partners are corporate and governmental organizations, such as BMW, the Netherlands Forensic Institute and UN Global Pulse. We highly value these collaborations, for our aim is to generate smart and innovative solutions to problems that are relevant in society.

The Leiden Centre of Data Science was founded in 2014 as an initiative of the Faculty of Science at Leiden University. Its Board of Directors consists of Jaap van den Herik (professor of Computer Science and Law), Jacqueline Meulman (professor of Applied Statistics) and Joost Kok (professor of Computer Science).

RESEARCH TOPICS

The research at LIACS is broadly oriented. Computers are becoming ever more powerful and are taking on more complex tasks. The Leiden Institute of Advanced Computer Science (LIACS) contributes to revolutionary scientific research and applies the latest inventions in the field, offering answers to today's questions of society.

Improve computer systems

With our research, we make computer systems faster and more efficient. Due to our improved algorithms and software, computers can compute faster and recognize patterns in large digital files at an earlier stage.

Applied and fundamental

We are keen to work on socially and industrially relevant questions. Behind the solutions for socially relevant questions, there are often deep theoretical discoveries, with a strong basis in statistics. In other words, we solve both fundamental and applied problems. This means that our research contributes to developments in every aspect of the field. It broadens our own conceptual world and that of other researchers.

The research is structured into 7 areas:

Theory: Computer science has its roots in mathematics. That is why at LIACS, theoretical research is undertaken by a team of computer scientists and mathematicians. Our efforts are constantly focused on better understanding the fundamental characteristics of specific mathematical problems.

Data science: The majority of scientists, from archaeologists through to zoologists, collect huge volumes of data. Their massive databases contain large amounts of information which is difficult for humans to filter. With a solid grounding in statistics, we can develop the ideal algorithms for analyzing and identifying patterns in the big data from many different specialist fields, without the need for prior knowledge.



Bioinformatics: Biology and (bio) medical sciences offer numerous applications for computer science. We are pleased to work alongside biologists and medical scientists in identifying smart solutions for medical applications. Now and in the future, computers will be decisive in fighting a whole raft of diseases.

Machine learning: Computers are capable of formulating new algorithms on the basis of data they themselves have gathered. In other words, these computers can learn without having been pre-programmed by humans. They make predictions we never expected. At LIACS, we explore the possibilities offered by this revolutionary new generation of computers.



Theme Bioinformatics



Research Theme Machine Learning

Computer systems: Researchers at LIACS are working to develop the computer systems of tomorrow. These include high performance computers, capable of simultaneously processing huge volumes of data. In that respect, we are involved in research into grand database systems and in embedded systems, the driver of the internet of things.

Media & games: New media and games are inextricably linked with the possibilities offered by computers in terms of virtual environments and interactive games. With better algorithms, we can increase the speed, enhance the reality and so improve the overall usability of these applications.

Computer vision: In principle, in the same way that young children are able to learn to recognize images, certain computers have a similar capability. On the basis of the characteristic aspects of a picture, a computer can tell us what the picture is showing. Further improving these techniques opens the way to a whole range of new applications. This is a field in which we are carrying out much research work.



Universiteit
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CURRENT RESEARCH PROJECTS

A selection of current research projects

ERC Advanced Grant HEPGAME (*hepgame.org*): The goal of HEPGAME is to solve significantly larger problems in High Energy Physics. HEPGAME combines insights from theoretical physics with artificial intelligence (with Nikhef, Amsterdam).

ICTU, a Dutch government organization that helps other government institutions in the realisation of digital services, such as DigiD, a software to open and close bridges. Leiden University helps ICTU to make more use of this system in terms of quality improvement.

PROMIMOOC: Process mining for multi-objective online control – PROMIMOOC aims at developing a generic platform to collect and integrate the data from the steel & automotive production process, model the process based the data, perform multiple-objective decision making based on data-driven models. (joint project: Tata Steel, BMW, CWI, and LIACS); funded by NWO)

Excellent Buildings via Forefront MDO, Lowest Energy Use, Optimal Spatial and Structural Performance: In this project with the TU Eindhoven (The Netherlands), a multi-criterion and multi-disciplinary approach to building design is developed, that can be integrated in building information management (BIM) approaches (funded by STW, NL).



DAMIOSO – Data Mining on High Volume Simulation Output: The DAMIOSO project, funded by NWO and Honda Research Europe, focuses on developing algorithms and tools for data management, data mining and knowledge extraction from massive volumes of data, as generated by modern simulation tools.

SAPPAO Dutch India Project: Data Mining and Many-Objective Optimization in Aviation Management (Funding: NWO, Deity (India), General Electrics Aviation (India))

And many more ...

AWARDS

Best Paper Award (with University of Münster): Kerschke, Pascal, Hao Wang, Mike Preuss, Christian Grimme, André Deutz, Heike Trautmann, and Michael Emmerich. “Towards Analyzing Multimodality of Continuous Multiobjective Landscapes.” In: International Conference on Parallel Problem Solving from Nature, pp. 962–972. Springer International Publishing, 2016. It was part of ERCIS collaboration.

Smartest Project of the Netherlands 2016: A research project by Developmental Psychology professor Carolien Rieffe and researchers of the Leiden Institute of Advanced Computer Science and University of Évora (Portugal) were awarded for their research on toddlers’ playground behavior.

Best Paper Award at the 3rd International Workshop of the European Group for Intelligent Computing in Engineering (EG-ICE), June 2016, Krakow (Poland) (with TU Eindhoven, U Auckland) on data structures and formulations of design spaces for multidisciplinary building spatial designs.

EVENTS

International Workshop on Multicriteria Decision Making & Applications in Enterprise Information Systems, Portugal 2017 – International Conference on ENTERprise Information Systems, CENTERIS 2017 (Porto, 5–7 October 2016). <http://centeris.scika.org>
A new edition of this workshop will be held in early October 2017.

Kick-Off meeting of the Data Driven Drug Discovery Network on June 10, Leiden University (in conjunction with the 13th LCDS meeting: combining data science and drug discovery).

SAMCO Lorentz Center Workshop (29 Feb – 24 March) on Surrogate-Assisted Multicriteria Optimization in Leiden: This workshop focused on developing the foundations of multicriteria optimization assisted by machine learning techniques.

PUBLICATIONS

Five selected recent publications:
Basto-Fernandes, Vitor, Iryna Yevseyeva, José R. Méndez, Jiaqi Zhao, Florentino Fdez-Riverola, and Michael TM Emmerich. “A spam filtering multi-objective optimization study covering parsimony maximization and three-way classification.” *Applied Soft Computing* 48 (2016): 111–123.

Zhiwei Yang, Michael Emmerich, Thomas Bäck, Joost N. Kok: Multi-objective inventory routing with uncertain demand using population-based metaheuristics. *Integrated Computer-Aided Engineering* 23(3): 205–220 (2016).

Longmei Li, Iryna Yevseyeva, Vitor Basto Fernandes, Heike Trautmann, Ning Jing, Michael T. M. Emmerich: An Ontology of Preference-Based Multiobjective Evolutionary Algorithms. *CoRR abs/1609.08082* (2016) (ERCIS Collaboration).

Pascal Kerschke, Hao Wang, Mike Preuss, Christian Grimme, André H. Deutz, Heike Trautmann, Michael Emmerich: Towards Analyzing Multimodality of Continuous Multi-objective Landscapes. *PPSN 2016:* 962–972 (Best Paper Award. ERCIS Collaboration).

Guo, Yanming, Yu Liu, Ard Oerlemans, Songyang Lao, Song Wu, and Michael S. Lew. “Deep learning for visual understanding: A review.” *Neurocomputing* 187 (2016): 27–48.

DISSERTATIONS

Tleis M. (6 July 2016), Image analysis for gene expression based phenotype characterization in yeast cells, Doctoral thesis. LIACS, Leiden University. Supervisor(s) and Co-supervisor(s): T.H.W. Bäck; A. Plaat.

Yang, Zh.(20 September 2016) Meta-heuristics for vehicle routing and inventory routing problems, Doctoral thesis. LIACS, Leiden University. Promoter: Th. Bäck, Supervisor: & Copromoter M. Emmerich.

Jongmans, S.-S.T.Q., (January 2016), Automata-theoretic protocol programming, Doctoral Thesis, LIACS, Leiden University, Promoter: F. Arbab.



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Computer Science (LIACS)
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KEY FACTS

INSTITUTION

The Leiden Institute of Advanced Computer Science (LIACS) is one of the institutes of the Faculty of Science. The institute is responsible for the research and education (bachelor, master, PhD) in computer science, in ICT in Business, and in Media Technology that is carried out at Leiden University.

RESEARCH TOPICS

Theory, Data science, Machine learning, Computer systems, Bioinformatics, Media & Games and Computer vision.

KU LEUVEN – LEUVEN INSTITUTE FOR RESEARCH ON INFORMATION SYSTEMS & PUBLIC GOVERNANCE INSTITUTE



ABOUT KU LEUVEN

Situated in Belgium, in the heart of Western Europe, KU Leuven has been a centre of learning for nearly six centuries. Today, it is Belgium's largest university and one of the oldest and most renowned universities in Europe. KU Leuven is a research-intensive, internationally oriented university. It counted **51,771 students** as of October 2016, from approximately 150 countries.

LIRIS

The Leuven Institute for Research in Information Systems (LIRIS), founded in 1987, coordinates research in the area of information technology and management in organizations. The LIRIS Faculty currently counts 7 professors, 3 postdocs and around 15 PhD researchers.

Important research topics of LIRIS are:

- analysis, modeling and architecture of information systems;
- knowledge discovery, data and process mining;
- architecture and infrastructure;
- data, process and decision modeling;
- business data, process, service, rules and decision management;
- information strategy.

PUBLIC GOVERNANCE INSTITUTE

The KU Leuven Public Governance Institute has as the mission to gain knowledge and insight regarding politics, administration

and public policies on local, regional, federal, European and international levels. We intend to make scientific contributions to an improvement in the policy-making, organization and management of public administrations.

Public Governance Institute focuses on three distinguishable but partly overlapping clusters within the public governance domain:

- **Politics, citizens and policies: the understanding of the relationship between governments, citizens and policy practices.**
- **Administrative organization and HRM.**
- **Management of information, performance and finance: methods and approaches to manage, use and exchange information by governments in the policy, management and financial cycles.**

CURRENT RESEARCH PROJECTS

Research projects within LIRIS are conducted in four major areas: Engineering information solutions, dealing with conceptual modeling, data quality and requirements management is a first important area. It allows creating innovative solutions, based on sound modeling principles and aligned with the business. Example:

- *KBC Research Chair, A Data Quality Framework for Effective Risk Data Aggregation and Risk Reporting, 2015–2019.*

A second important area is the area of business processes intelligence.

- *New techniques in Process Analytics, 2015–2019.*

Business decision management (modeling, mining and implementing decision representations and business rules) is an area with a long tradition in FEB.:

- *Fund for Scientific Research – Flanders (F.W.O.-Vlaanderen), Project FWO Go804 13N, Improving Process Modeling and Control using Advanced Business Process Analytics and Enriched Event Logs, 2013–2016.*

In close collaboration with a world-wide network of companies and fellow researchers, we study various research topics within the field of data science.

- *Fund for Scientific Research – Flanders (F.W.O.-Vlaanderen), Gotcha: fraud detection through network analysis, 2015–2018.*

Recent research projects of Public Governance Institute are:

- **FLEXPUB** – Next generation of flexible public services – the geospatial case (BELSPO – BRAIN)(2016–2020).
- Geospatial technology innovations for land tenure security in East Africa (H2020) (2016–2017).
- Governance for effective Spatial Data Infrastructures (NWO)(2015–2018).
- Centre of Excellence in Territorial Management and Cadastre (CENTRIC) (H2020) (2015–2016).
- Learning from Innovation in Public Sector Environments (LIPSE) (FP7) (2013–2016).
- LOCREF: Local Public Sector Reforms: An International Comparison (COST) (2013–2017).

LIRIS RESEARCH CHAIRS WITH INDUSTRY

The Business Information Systems group has a long tradition in industry-funded research chairs. Some current chairs:

- **Colruyt – Symeta** Research Chair: Smart Data and Decisions in Marketing.

- **KBC** Research Chair: A Data Quality Framework for Effective Risk Data Aggregation and Risk Reporting.
- **Coca Cola** Research Chair on Gaining Business Value out of Big Data and Predictive Analytics.
- **Bpost Bank** Research Chair on ACT: Actionable Customer Analytics.
- **VDAB** Research Chair on CARMA: CAREer Management Analytics.
- **Ageas** Research Chair on Insurance Analytics.

EDUCATION

Erasmus+: Higher Education Joint Master Degrees – Master of Science in Public Sector Innovation and eGovernance together with Westfälische Wilhelms-Universität Münster – University of Münster and Tallinn University of Technology.

AWARDS

Laurent Janssens, Jan Vanthienen and co-authors won the 10th International Rule Challenge Award at RULEML 2016 in Stony Brook University, NY.

JOURNAL PUBLICATIONS

Baesens, B., Bapna, R., Marsden, J., Vanthienen, J., Zhao, J. (2016). Transformational issues of big data and analytics in networked business. *MIS Quarterly*: forthcoming.

Baesens, B., De Winne, S., Sels, L. (2016). What to do before you fire a pivotal employee. *Harvard Business Review*, published online, art.nr. <https://hbr.org/2016/01/what-to-do-before-you-fire-a-pivotal-employee>.

Crompvoets, J., Streilein, A., and Masser, I. (2016). How should NMCA adapt to alternative sources for NMCA data? *European Spatial Data Research network Official Publication No. 65*: 1–7.

De Smedt, J., De Weerd, J., Vanthienen, J., Poels, G. (2016). Mixed-paradigm process modeling with intertwined state spaces. *Business & Information Systems Engineering*, 58 (1), 19–29.

Lismont, J., Janssens, A., Odnoletkova, I., vanden Broucke, S., Caron, F., Vanthienen, J. (2016). A guide for the application of analytics on healthcare processes: a dynamic view on patient pathways. *Computers in Biology and Medicine*, 77, art.nr. S0010-4825(16)30198-6, 125–134.

Sedrakyan, G., De Weerd, J., Snoeck, M. (2016). Process-mining enabled feedback: “tell me what I did wrong” vs. “tell me how to do it right”. *Computers in Human Behavior*, 57, 352–376.

Van Cauter, L., Bannister, F., Crompvoets, J., Snoeck, M. (2016). When Innovation Stumbles: Applying Sauer’s Failure Model to the Flemish Road Signs Database Project. *International Journal of Public Administration in the Digital Age (IJPADA)*, 3 (1), 1–18.

BOOK CHAPTER PUBLICATIONS

Bouckaert, G., and Crompvoets, J. (2016). Utopian Public Governance: Cloudy, Cloudier, Cloudiest. In: V. Achten, G. Bouckaert, and E. Schokkaert (Eds.), *A truly Golden Handbook – The Scholarly Quest for Utopia*. Leuven University Press, Leuven, 158–171.

Crompvoets, J. (2016). Geoportals. In: D. Richardson, N. Castree, M. Goodchild, W. Liu, A. Kobayashi, & R. Marston (Eds.), *The International Encyclopedia of Geography: People, the Earth, Environment, and Technology*. Hoboken, NJ: Wiley/Association of American Geographers.

DISSERTATIONS

27-05-2016, Gayane Sedrakyan, “Process-oriented feedback perspectives based on feedback-enabled simulation and learning process data analytics”.

24-3-2016, Lies Van Cauter, “Government-To-Government Information System Failure in Flanders: An in-depth Study”.



CONTACT DETAILS

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ABOUT THE INSTITUTION

The main campus of Luleå University of Technology (LTU) is located in Luleå, Sweden, on the northern coast of the Gulf of Bothnia. The university has campuses in Kiruna, Skellefteå, Piteå, and Filipstad. In 2016, the university had 1,800 employees and 15,000 students. Research is carried out in close cooperation with partners from industry such as Bosch, Ericsson, Scania, LKAB and SKF, with partners from the public sector and with other leading international universities. Externally funded research has a turnover of more than EUR 90 million per year.

Information Systems (IS) research at LTU is defined by its inter-disciplinary research approach, which covers topics connected to the design and use of information technology in relation to people, organisations and societies. IS currently involves a faculty of 25 persons and ten active doctoral students. IS-related research is also conducted within other research subjects such as Industrial Marketing and Mobile, Pervasive Computing, Industrial Internet, e-Communication, e-Commerce, e-Government, and e-Health. Externally financed projects are also organised and supported by four research centres: Centre for Critical Infrastructure and Societal Security, Centre for Distance-Spanning Technology, the e-Health Innovation Centre and Centre for Inter-Organisational Innovation Research.

RESEARCH TOPICS

The research relates to the area of Enabling ICT, which is one of nine strategic areas of excellence in research and innovation within the university. Enabling ICT highlights research and gathers researchers to collaborate within the information and communication field. Research topics at IS are Digital Service Innovation, Information Security and Sustainable Data and Information Management.

Digital Service Innovation regards services as a driver for individual, organisational, and societal change. To achieve viable change, there needs to be continuous interaction between design and evaluation processes. The challenges include enabling sustainable life through transformative services, creating and maintaining a service innovation culture, enhancing the service experience through co-creation, and assessing the value of services.

Information Security focuses on management and behavioral aspects of information, network and infrastructure security, as well as pedagogical issues of online security education. The topic covers security as a part of organisational practice, security and IT-management practices, business risk practices, privacy, and technical design of enterprise security controls. An international, online master's programme of information security and an on-line information security laboratory for both educational and research purposes are continuously developed.

Sustainable Data and Information Management regards data, information, and knowledge as valuable resources that need to be managed, cultivated, and utilised systematically throughout their life-cycle both in enterprises and in the public sector. The challenges include effective knowledge creation and acquisition, processing and storage of big data, data and information quality, open data and information distribution, data mining and analytics for decision-making, enterprise content management, digital curation and long-term digital preservation of information beyond governance of individual services and applications.

RECENT PROJECTS

LTU is an active member in the MASTIS Erasmus+ -project (<https://mastis.pro>) that aims at establishing modern master studies in Information Systems. The project was initiated through the ERCIS-network.

U4IoT (2017–2020) is a H2020 coordination and support action project, funded by the European Commission, supporting LSPs with user engagement expertise and Living Lab processes. OrganiCity (<http://organicity.eu>) is an EU project with EUR 7.2 million in funding that puts people at the centre of the development of future cities. The project brings together three leading smart cities and a total of 15 consortium members with great diversity in skills and experience. I3 – Innovations & Industrial Internet – (<http://www.interregnord.com/>) aims at supporting product and service development in the northern regions of Norway, Sweden and Finland and promoting cross-border collaboration.

USEMP (User Empowerment for Enhanced Online Presence Management) is a project funded by EU FP7 with the mission to raise citizens' awareness of their digital footprint in social media and give the users the control of their personal data. <http://www.usemp-project.eu>. My Privacy Flag (2015–2018) is an H2020 project aiming to protect citizens' privacy with user-friendly tools for interaction with websites, smartphone

applications and the Internet of Things. <http://www.privacyflag.eu>. The group contributed significantly to the establishment of the Centre for Critical Infrastructure and Societal Security, together with the regional energy and public sectors (<http://www.ltu.se/centres/Centrum-for-sakerhet-i-samhalle-och-kritiska-infrastrukturer?!=en>). Development of the online information security laboratory (<http://www.ltu.se/research/subjects/information-systems/Pagaende-projekt/Information-Security-Lab-1.120487>) is an on-going project.

EVENTS

The third biennial Luleå seminar on design-oriented research will be organized by IS and profs. Maung Sein and Tero Päiväranta in Autumn 2017. The topic for the seminar is design research and action design research. Previous mentors having participated in the seminar include Prof. Sandeep Puroo, Prof. Matti Rossi and Prof. Oliver Müller.

DISSERTATIONS

Dr. Sarfraz Iqbal, "Ensemble View on Designing Pedagogical Online Information Security Laboratories", February 2016.

Dr. Johan Wenngren, "Team Activities in Concept Development: Addressing Open-Ended Problems", February 2016.

RECENT PUBLICATIONS

Awad, A.I. (2016). From Classical Methods to Animal Biometrics: A Review on Cattle Identification and Tracking. *Computers and Electronics in Agriculture*, 123, 423–435.

Awad, A.I., Hassaballah, M. (ed. 2016). Image Feature Detectors and Descriptors: Foundations and Applications. *Studies in Computational Intelligence* vol. 630. Springer.

Charif, B., Awad, A.I. (2016). Towards Smooth Organisational Adoption of Cloud Computing: A Customer-Provider Security Adaptation. *Computer Fraud & Security*, 2016(2), 7–15.

Edzén, S., Sein, M.K. (2016). Designing Theme-Based Tabletop Exercise for Identifying and Dealing with Coordination Problems in Emergencies. *International Journal of Emergency Management* 12(1), 22–40.

Elgendy, N., Elragal, A. (2016). Big Data Analytics in Support of the Decision Making Process. *Procedia Computer Science*, 100, 1071–1084.

Haddara, M. (2016). ERP Selection: A Case of a Multinational Enterprise. *Information Resources Management Journal*, Forthcoming in Autumn 2016.

Karasti, H. et al. (2016). Knowledge Infrastructures: Part I. *Science & Technology Studies*, 29(1), 2–12.

Karasti, H. et al. (2016). Knowledge Infrastructures: Part II. *Science & Technology Studies*, 29(2), 2–6.

Karasti, H. et al. (2016). Knowledge Infrastructures: Part III. *Science & Technology Studies*, 29(3), 2–9.

King, J., Awad, A.I. (2016). A Distributed Security Mechanism for Resource-Constrained IoT Devices. *Informatica*, 40(1), 133–143.

Padyab, A., Päiväranta, T., Ståhlbröst, A., Bergvall-Kåreborn, B. (2016). Facebook Users Attitudes towards Secondary Use of Personal Information. 37th International Conference on Information Systems (ICIS), Dublin, Dec. 2016.

Sandlund, M; Lindgren, H; Pohl, P; Melander-Wikman, A; Bergvall-Kåreborn, B; Lundin Olsson, L (2016). Towards a mobile exercise application to prevent falls: A participatory design process. *International Journal of Child Health and Human Development*, 9 (3).

Wenngren, J., Ericson, Å, Parida, V. (2016). Improving Team Activities in the Concept Development Stages. *Journal of Promotion Management* 22(4), 496–510.



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www.ltu.se/research/areas-of-excellence/enabling-ICT?!=en

KEY FACTS

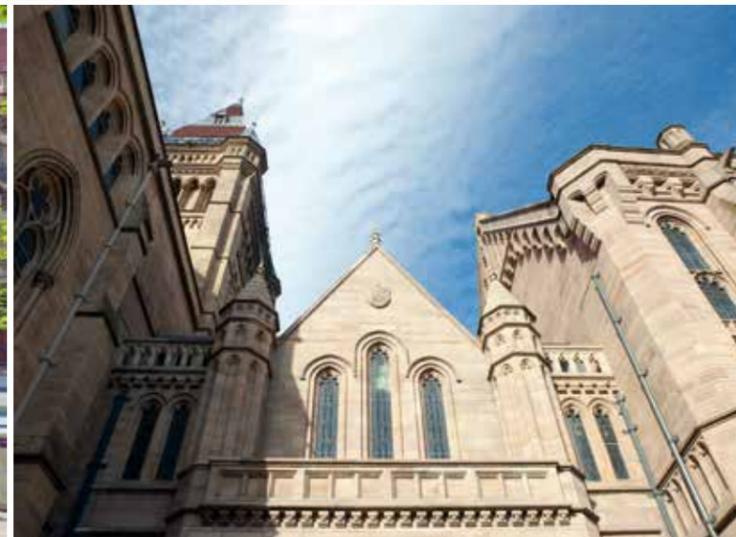
INSTITUTION

- Founded in 1971
- 15,000 students and 1,800 staff members
- Subject of Information Systems: 25 IS researchers, 3 professors
- Enabling ICT: Several IS-related research areas and topics
- International, on-line master's program in Information Security; approximately 100 students
- Bachelor programme in Systems Sciences and Digital Service Innovation; approximately 250 students





The University of Manchester



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KEY FACTS

STAFF AND STUDENTS

- 9 senior members of staff
- 15 researchers
- 11 PhD and DBA students
- Several visiting faculty and researchers

RESEARCH TOPICS

- Online consumer behaviour
- Development of software tools for big data analytics
- Social media and web 2.0 in international supply chains
- Big data and clustering techniques
- Economic models of digital strategy
- Online panel data methodology
- Decision analytic tools
- Text mining applications in business and science
- Big data policy formation

INFORMATION SYSTEMS RESEARCH AND TEACHING: ALLIANCE MANCHESTER BUSINESS SCHOOL

The Information Systems and data analytics groups cover a broad range of topics including digital strategy, big data, modelling and optimization, decision and cognitive sciences. The data analytics M.Sc. has continued to grow in popularity and now attracts 90 students per cohort. In addition, the shared degree with the faculty of Computer Science is also popular with around 50 students studying advanced computer science with management. The interdisciplinary nature of the teaching and research is a defining feature of the IS and data analytics faculty, many of whom are engaged in a mixture of technical and business projects, often with outside engagement with commercial organizations. This year, an alumnus of Manchester Business School, Mr. Karl Wills, will talk of his experiences of being an Internet entrepreneur since the 1990s in the music, fashion, logistics and telecommunications industries. His talk is titled ‘The Life of an Internet Entrepreneur’ and will be given to the strategy class hosted by Prof. Holland. As in previous years, his talk will attract interest from other groups within the University, notably researchers, MBA students and interested faculty. There will also be guest

speakers on the strategy module from the telecommunications, DIY and logistics sectors presenting on the topics of big data analytics, omni-channel retailing and managing the last mile in e-commerce delivery systems.

The big data forum is developing its objective to coordinate different groups within the University and liaising with industry around research into big data and business. The thematic research areas are policy formation; fraud; transportation; manufacturing; health sector; and marketing. Underpinning these sector themes are the integrating concepts of governance of big data, meta-level research, analytics algorithms, information management and systems integration. In January, it held a very successful conference in partnership with the Customer Management and Leadership Group (CMLG) headed up by Prof. John Murphy and in conjunction with the Centre for Service Management at Loughborough University, vide <http://www.servsig.org/wordpress/2016/01/report-photos-of-big-data-workshop-in-manchester/>. In September, it held a research workshop with visiting speakers from industry and academia, and is continuing to develop a research agenda and attract funding for specific projects.

One of the projects to come out of the big data forum is headed by Prof. Jian-Bo Yang and is titled **DART: Data-Driven Modelling and Inference to Transform Evidence-Based Decision support**. This is an exciting collaboration between researchers in decision analytics, strategy and its main objectives are:

- To advance data-driven modelling and inference theory and methodology for large-scale data analysis to support evidence-based decision making in business & society
- To develop software tools and build up large databases for facilitation of data-driven business research with critical mass and collective excellence

The project will underpin efforts to bring together researchers with diverse skills and perspectives and bring them to bear on real-life commercially driven business problems. An explicit target for the project is to generate new research applications, which are expected to be natural spin-offs from the initial project activities.

RESEARCH COLLABORATION BETWEEN THE UNIVERSITIES OF MANCHESTER AND MÜNSTER

Professor Holland continues to work closely with Professor Stefan Klein and Julia Jacobs from the University of Münster into digital marketing and the online customer journey. The project is now entering its third year and has expanded beyond its initial focus on the use of online panel data to include class-based experiments and detailed micro-search behavior within individual websites. The price comparison research was published earlier this year in the *Journal of IT and Tourism*. The research is supported by the Fonds National de la Recherche, Luxembourg (7842603).

A SAMPLE OF RECENT PUBLICATIONS FROM THE UNIVERSITY OF MANCHESTER ERCIS RESEARCH GROUP

Diaz, J. E., Handl, J., & Xu, D. (2016). Evolutionary Robust Optimization in Production Planning – Interactions between Number of Objectives, Sample Size and Choice of Robustness Measure. Computers and Operations Research. DOI: 10.1016/j.cor.2016.06.020. Publication link: f7f88580-485a-42be-a94f-2ecf055a8d21

Holland, Christopher P., Julia A. Jacobs, and Stefan Klein. “The role and impact of comparison websites on the consumer search process in the US and German airline markets.” Information Technology & Tourism 16.1 (2016): 127–148.

G. L. Kong, D. L. Xu, J. B. Yang, X. F. Yin, T. B. Wang, B. G. Jiang and Y. H. Hu, “Belief rule-based inference to predict trauma outcome”, Knowledge-based systems, Vol.95, pp.35–44, 2016.

Y.Z. Li, Q.H. Wu, L. Jiang, J. B. Yang and D. L. Xu, “Optimal power system dispatch with wind power integrated using nonlinear interval optimization and evidential reasoning approach”, IEEE Transactions on Power Systems, Vol.31, No.3, pp.2246–2254, 2016.

C. Fu, J. B. Yang, S. L. Yang, “A group evidential reasoning approach based on expert reliability”, European Journal of Operational Research, 246, pp.886–893, 2015.



University of Maribor

Faculty of Organizational Sciences

ABOUT THE INSTITUTION

The Faculty of Organizational Sciences is a founding member of the University of Maribor. It has been involved in research and education about the organisational 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. The research area of the Faculty of Organizational Sciences covers complex dynamic management systems, including aspects from human resources, information systems, business processes and general management. Our research is organised in many laboratories and the eCenter. All are involved in research projects, prototyping, consulting, education and training at national and international level. Their activities have been organized and are run following the LivingLab approach, with a strong involvement of business and government organisations, users, IT providers and universities. The resulting eLivingLab is the Slovenian founding member of the European Network of Living Labs (ENoLL). The Faculty has a wide range of experiences from many EU, national and industry projects and has established connections with numerous institutes, faculties and universities around

the world and strives to enhance its internationally renowned reputation. Bilateral cooperation has occurred in several forms, including the exchange of higher education professors, participation in various research projects, and student exchange.

RESEARCH TOPICS

The Research area of the Faculty of Organizational Sciences is focused on investigation of complex dynamic management systems, covering various aspects from human resources, information systems, business processes and general management. The significant focus is in the implementation of newest ICT and their impact on new business model development, increasing effectiveness and efficiency of business and government organisations, ICT industry, universities and society as a whole. The Majority of our research and development activities are carried out within the following research topics:

- Business Models
- Management of Information Systems
- Business Processes Management
- ERP Systems
- eCommerce
- eCollaboration
- Social Media
- Cloud Computing
- Internet of Things
- Decision Support Systems

- Simulation Systems and Models
- Knowledge Management
- Organisational Learning
- Business Intelligence
- Data Mining
- Big Data
- Quality Management
- Asset Management
- Corporate Sustainability
- Open Innovation
- Living Labs

CURRENT RESEARCH PROJECTS

EU projects:

ENVISION – Empowering SME business model innovation, Horizon 2020

MASTIS – Establishing Modern Master-level Studies in Information Systems, Erasmus+ KA2

National research programme: Decision support systems in the global e-business, Research programme, P5-0018.

Impact of management, organisational learning and knowledge management in modern organisations, Research programme, P5-0364-0586

Bilateral projects:

Evolutionary and Bio-Inspired Algorithms Based Efficient Control of Cyber-physical Systems & Internet of Things, Bilateral project SI-RU

Development of Wheelchair for Disabled Persons as a Speech Controlled CyberPhysical System, Bilateral project SI-MNE

EVENTS

29th Bled eConference
Digital Economy
June 19–22, 2016, Bled Slovenia
<http://BledConference.org>

35th International Conference on Organizational Science Development
March 16–18, 2016, Portorož, Slovenia
<http://fov.uni-mb.si/conference>

SELECTED PUBLICATIONS

MAROLT, Marjeta, LENART, Gregor, MALETIČ, Damjan, KLJAJIČ BORŠTNAR, Mirjana, PUCIHAR, Andreja. Business model innovation: insights from a multiple case study of Slovenian SMEs. *Organizacija*, ISSN 1318-5454, aug. 2016, vol. 49, no. 3, str. 161–171, ilustr. <http://organizacija.fov.uni-mb.si/index.php/organizacija/article/view/695/1119>, doi: 10.1515/orga-2016-0015.

MALETIČ, Matjaž, MALETIČ, Damjan, GOMIŠČEK, Boštjan. The impact of sustainability exploration and sustainability exploitation practices on the organisational performance: a cross-country comparison. *Journal of cleaner production*, ISSN 0959-6526. [Print ed.], 2016, vol. 138, part 2, str. 158–169, tabele. <http://www.sciencedirect.com/science/article/pii/S0959652616300452>, doi: 10.1016/j.jclepro.2016.02.132.

OGRIS, Vid, KRISTAN, Tomaž, ŠKRABA, Andrej, URH, Marko, KOFJAČ, Davorin. iUrnik: timetabling for primary educational institutions in Slovenia. *Interfaces*, ISSN 0092-2102, 2016, vol. 46, no. 3, str. 231–244. <http://pubsonline.informs.org/doi/10.1287/inte.2016.0846>, doi: 10.1287/inte.2016.0846.

BOHANEK, Marko, KLJAJIČ BORŠTNAR, Mirjana, ROBNIK ŠIKONJA, Marko. Integration of machine learning insights into organizational learning: a case of B2B sales forecasting. V: D'ASCENZO, Fabrizio (ur.), et al. *Blurring the boundaries through digital innovation: individual, organizational, and societal challenges*, (Lecture notes in information systems and organisation, ISSN 2195-4968, volume 19). Cham: Springer, 2016, str. 71–85, ilustr., doi: 10.1007/978-3-319-28974-5_7.

DISSERTATIONS/HABILITATIONS

Dissertations in progress: *Marjeta Marolt: Social CRM adoption and its influence on customer relationship performance – SMEs perspective – Supervisor:*

Andreja Pucihar, Associate professor – Co-supervisor: Hans-Dieter Zimmermann, Associate professor

Katarina Galof: Developing a model of health care management of the elderly in performance of daily activities in home environment – Supervisor: Zvonko Balantič, Professor – co – supervisor: Anja Žnidaršič, Assistant professor

Marija Milavec Kapun: Model of the patient's self-care process – Supervisor: Vladislav Rajkovič, Professor emeritus – co – supervisor: Olga Šušteršič, Associate professor

Viktor Lovrenčič: The impact of live working as a maintenance method for electrical installations – Supervisor: Boštjan Gomišček, Professor

Tatjana Kitič Jaklič: Key factors in the design of effective and efficient organizational model of emergency medical services in Slovenia – Supervisor: Jurij Kovač, Professor – co – supervisor: Ksenija Tušek Bunc, Assistant professor

Marjan Breljih: A Model of Quantitative and Qualitative Decision Knowledge Modelling Integration supervisor: Uroš Rajkovič, Associate professor

Marko Bohanec: Decreasing sales forecast error by leveraging machine learning techniques for B2B opportunity-based forecasting – Supervisor: Mirjana Kljajič Borštnar, Assistant professor

Matjaž Kragelj: Development of methodology for automatic classification of electronic publications in Universal Decimal Classification – UDK – Supervisor: Mirjana Kljajič Borštnar, Assistant professor

Anka Mohorič Kenda: The continuous improvement of model of health care quality indicators with feedback information from e-complaints system – Supervisor: Robert Leskovar, Professor



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KEY FACTS

INSTITUTION:

- Employees: 61
- Students: 571





NATIONAL RESEARCH
UNIVERSITY

ABOUT THE INSTITUTION

Consistently ranked as one of Russia's top universities, the Higher School of Economics (HSE) is recognised as one of the leading Higher Education Institutions in Russia, and one of the preeminent economics and social sciences universities in Eastern Europe. Having rapidly grown into a well-renowned research university over two decades, HSE sets itself apart with its international presence and cooperation.

Our faculty, researchers, and students represent over 50 countries, and are dedicated to maintaining the highest academic standards. Our newly-adopted structural reforms support HSE's drive to internationalize. This leads to a groundbreaking research at our faculty that is performed by our researchers and students.

With its four campuses, HSE is a leader in combining Russian education traditions with the best international teaching and research practices. HSE offers outstanding educational programmes from secondary school to doctoral studies, with top departments and research centers in a number of international fields. The HSE has 4 campuses, 2,500 faculty members, 25,000 students and 35,000 alumni. Founded in 2002, the HSE's School of Business Informatics was created with the active participation of leading Russian and multi-national companies and is a pioneer in the new educational discipline of Business Informatics, which combines information technology (IT), informatics and management concepts. The faculty aims to attract talented and motivated young people to form Russia's future entrepreneurial and administrative professionals in business informatics.

RESEARCH TOPICS

- Business value of enterprise IS
- Industry 4.0
- PLM and production processes
- IoT and IoS
- Big Data Analytics
- Big Data BPM
- S-BPM
- IT outsourcing
- E-Business. Smart Commerce. Web 3.0
- Semantic technologies

CURRENT RESEARCH PROJECTS

BPM for Domodedovo Airport
Improving business process management at one of the largest airports in Russia.

BPM at the Russian Post

The project has already significantly improved the process efficiency.

World IT project

The project's main research idea is to understand the major IS issues in the world in the context of their unique cultural, economic, political, religious and societal environments.

AWARDS

Students from the School of Business Informatics won the largest Russian Hackathon together with one of the largest Russian mobile telecommunications providers – Vimpelcom.

Students from School of Business Informatics won SAP Innojam for a banking application that was developed with the support of a Russian bank (Sberbank).

EVENTS

Lecturers from the School of Business Informatics participated in the Winter school for University professors of SAP CIS, Moscow, Russia, February 2016.

Lecturers from School of Business Informatics participated at the ME310 EXPO at Stanford & SAP University Alliances Innovation Day, USA, May-June 2016.

<http://events.sap.com/sap-university-alliances-digital-transformation-incubator-2016/en/>

Workshop on Web 3.0 and Smart commerce within the 18th IEEE Conference on Business Informatics 2017, Paris, France, August 2016.

<https://bi.hse.ru/announcements/178228423.html>

Annual meeting and a workshop of SIG on Big Data Application organized by the Special Interest Group (SIG) on Big Data Analytics within the International Conference on Information Systems (ICIS 2016), Dublin, Ireland, December 2016.

<https://bm.hse.ru/bigdataapplication/>

Workshop on Quality online content for empowerment at the Internet Governance Forum (United Nations) 2016, Guadalajara, Mexico, December 2016.

https://www.intgovforum.org/cms/igf2016/index.php/proposal/view_public/108

SELECTED PUBLICATIONS

Dr. Dr. Victor Taratoukhine, Dr. Yury Kupriyanov of School of Business Informatics of HSE, Moscow and Anastasia Baryshnikov, MSc Student of N.Novgorod, branch co-authored Prof. Dr. Dr. h.c. Dr. h.c. Jörg Becker, Prof. h.c. (HSE-NRU) in the paper Digital Business Framework: Shaping Engineering Education for the Next-Gen in the Era of Digital Economy for 2016 American Society for Engineering Education Annual Conference & Exposition in New Orleans, LA.

Beklaryan A. L., Akopov A. S. Simulation of Agent-rescuer Behaviour in Emergency Based on Modified Fuzzy Clustering, in: AAMAS'16: Proceedings of the 2016 International Conference on Autonomous Agents & Multiagent Systems. International Foundation for Autonomous Agents and Multiagent Systems, 2016. P. 1275–1276.

Komarov M. M., Avdeeva Z. Customer Experience Management for Smart Commerce Based on Cognitive Maps. In: Annals of Data Science. 2016.

Egorova, E., Lavrentiev A., Chepovskiy A. A Structural Pattern Based Method for Automated Morphological Analysis of Word Forms in Natural Language. In: Journal of Mathematical Sciences. 2016. Vol. 214. No. 6. P. 802–813.

DISSERTATIONS/HABILITATIONS

Beklaryan, A. L.: "Agent behavior model in Emergency Based on Modified Fuzzy Clustering".



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KEY FACTS

INSTITUTION – SCHOOL OF BUSINESS INFORMATICS:

- 5 educational programs
- 4 double-degree programs
- 870 students
(510 undergrad./260 grad.)
- 60 staff members
- 5 core departments
- 8 industrial departments



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 3,500 graduate (master's and PhD) students and 2,800 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 School of Engineering and Science, the School of Business, the School of Systems and Enterprises, as well as the College of Arts and Letters.

Stevens is regularly listed 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 manager's toolkits, and Alfred Fielding, the inventor of the Bubble Wrap.

The School of Business has 46 full-time faculty and 430 undergraduates, 900 MS students, 150 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

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

The Center for Decision Technologies (CDT), directed by Prof. Jeffrey Nickerson, performs funded research on topics related to decision making, combining perspectives from information systems, management science, organization science, cognitive science, social network analysis, and other computational sciences.

The Center focuses on bringing needed techniques to several areas. In the area of crowdsourcing and collective intelligence, it is now possible to quickly mobilize a crowd in minutes to address large-scale social problems. One example is ongoing research related to the open source sharing of designs for use with 3D printers. Researchers at the CDT are interested in the role that crowds can play in sustainability – finding local solutions to energy needs that fulfill communities' objectives. In the area of social networks and Big Data, research at the Center focuses on the intersection of transportation and communication networks. In many recent large-scale natural disasters, social media infrastructure has proven more resilient than traditional news outlets. At the same time, rumors propagate, and inaccurate ones impede rescue and recovery, which has led to a research interest in designing social media processes that will be useful during emergencies. The Center received funding in excess of \$4 Million during the last 4 years, from the National Science Foundation and other sources.

The Center for Business Process Innovation (CEBPI) studies the interplay between business processes and the organization. Under the direction of Prof. Michael zur Muehlen, the Center's research activities have been organized around several key issues. The Center's research on Business Process Analytics is examining how to advance the family of methods and tools that can be applied to event streams in order to support decision making in organizations. Research is also being conducted in the area of enterprise architecture, which contains analytical or prescriptive models of organizations, in order to efficiently identify organizational and technical interfaces, streamline cross-functional operations, and assert compliance to rules and regulations. Researchers at the CEBPI are also interested in understanding the dynamics of digitalized design processes and the impact of digital technology on business process innovation.

Research at the CEBPI focuses on how organizations evolve in their ability to govern and change operational work and decision-making processes. Some organizations begin by creating technical infrastructure and working out organizational adaptations, while others try to work out organizational details first before choosing appropriate technology. In either approach, the roles and responsibilities of a process support and management organization evolve over time, and little guidance exists as to how organization can pursue operational efficiency in a repeatable and effective fashion.

CURRENT RESEARCH PROJECTS

Recent research at the CDT focuses on the relationship between routines and innovation in design contexts, such as those with "open source-like" characteristics, to better understand the variables and phenomena such as routine variation, sequential structuring, structural evolution, and temporal modes as well as their impacts on design outcomes such as effective coordination, digital artifact innovation, and requirements computation.

Recent research at the CEBPI aims to understand the skills, positions, and organization structures of change management professionals in industries under different regulatory intensities. Additional research projects focus on the opportunities of digital technologies such as Robotic Process Automation, Cognitive Computing, and Blockchain on the design of business processes, and the changing skills of workforces to survive in the age of smart business processes.

SELECTED PUBLICATIONS

Cremer, G. G., Ren, Y., Sakamoto, Y., and Nickerson, J. V. "A Textual Analysis Algorithm for the Equity Market: The European Case," *The Journal of Investing* (25:3), pp. 105–116, 2016.

Kyriakou, H., Nickerson, J. V., and Sabnis, G. "Knowledge Reuse for Customization: Metamodels in an Open Design Community for 3D Printing," *MIS Quarterly*, forthcoming.

Lindberg, A., Berente, N., Gaskin, J., and Lyytinen, K. "Coordinating Interdependencies in Online Communities: A Study of an Open Source Software Project," *Information Systems Research*, forthcoming.

Gopal, D., Lindberg, A., Lyytinen, K. "Attributes of Open Source Software Requirements: The Effect of the External Environment and Internal Social Structure," 49th Hawaii International Conference on System Sciences, 2016.

Quin F., Mai, F., Fry, M. J., and Raturi, A. S. "Supply-Chain Performance Anomalies: Fairness Concerns under Private Cost Information," *European Journal of Operational Research* (252:1), pp. 170–182, 2016.

DISSERTATIONS/HABILITATIONS

Harris Kyriakou: Collective Innovation: Novelty, Reuse and their Interplay



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KEY FACTS

INSTITUTION

- 46 full-time faculty
- 430 undergraduate students
- 1,130 graduate students
- 25 Ph.D. students

RESEARCH TOPICS

- Semantic enterprise architecture
- Standardization development
- Information systems design
- Social network dynamics
- Business intelligence and analytics
- Process innovation



NATIONAL RESEARCH
UNIVERSITY

ABOUT THE INSTITUTION

The Higher School of Economics in Nizhny Novgorod (HSE NN) was founded in 1996. The main educational activities of the Faculty of Informatics, Mathematics and Computer Science (IMCS) of the HSE NN are related to modern enterprise organization, enterprise architecture, business mathematical and computer modelling. Two laboratories TAPRADESS (Theory and Practice of Decision Support Systems) and LATNA (Laboratory of Algorithms and Technologies for Networks Analysis) are the research units of the Faculty IMCS. In 2014 the Department of Fundamental Mathematics was opened.

RESEARCH TOPICS

The research of the Faculty IMCS focuses on following directions:

- **Cognitive science** – the development of methods and techniques of receiving, processing, storage, use and management of professional knowledge
- **Situational Modelling** – multidimensional modelling of the behavior and decision making processes of individual and collective agents in complex distributed systems.

- 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 project is conducted in co-operation with INSA-Rouen (France).

Russian Foundation for Human Research grant “Application of robust statistical methods to network structures of stock market”

The grant RFFI 16-06-00184-A (2016–2018) “Development and research of online II discussion’s models based on the political news discussing”.

This research project aims at developing new scientific knowledge about communication processes, which emerge during internet discussions. Main results of the research will include analytical and simulation models of “online” internet political discussions. These models will map categorical matrices and conceptual models

detected in the discussion texts to the multi-dimensional space of agents’ opinions.

AWARDS

The leading researcher of LATNA Dmitry Malyshev was awarded the medal of the Russian Academy of Sciences in the field of mathematics for the series of works “Critical hereditary graph classes”.

Junior Research Fellow of LATNA Alexander Ponomarenko has been awarded a scholarship of the President of the Russian Federation and got the IBM PhD Fellowship.

Professor Eduard Babkin has been nominated a position of Tenure HSE Professor.

EVENTS

The 6th International Conference on Network Analysis, May 26–28, 2016

The purpose of this conference is to bring together scientists and engineers from industry, government, and universities to exchange knowledge and results in a broad range of topics relevant to the theory and practice of network analysis. Topics of the Conference also include algorithms on graphs, networks, discrete optimization and applications.

Workshop “Organizations Engineering Days”, September 7–9, 2016

The Summer School on Operational Research and Applications, May 22–26, 2016

The target groups of the school are students and young researchers interested in modern trends in data analytics, including big data processing and new machine learning and data mining techniques.

Participating in Program Committees of the following conferences:

- BIR-2016, E. Babkin (PC Member)
- EOMAS-2016, E. Babkin (Co-chair), P. Malyzhenkov (PC Member)
- CBI-2016, E. Babkin (PC Member)
- EEWC-2016, E. Babkin (PC Member)
- BIS-2016, E. Babkin (PC Member)

SELECTED PUBLICATIONS

Kalyagin V.A., Koldanov A.P., Koldanov P.A. Robust identification in random variables networks. Journal of Statistical Planning and Inference, on line first, <http://dx.doi.org/10.1016/j.jspi.2016.08.008>

Koldanov P.A., Kalyagin V.A., Bautin G.A. On some statistical procedures for stock selection problem, Annals of Mathematics and Artificial Intelligence (2016), v.76, pp. 47–57. DOI 10.1007/s10472-014-9447-1

Komosko L., Batsyn M., Segundo P. S., Pardalos P. M. A fast greedy sequential heuristic for the vertex colouring problem based on bitwise operations // Journal of Combinatorial Optimization. 2016. Vol. 31. Issue 4. pp 1665–1677. DOI: 10.1007/s10878-015-9862-1

R. Pergl et al. (Eds.), Babkin E., Malyzhenkov P. Assessment of Brand Competences in a Family Business: A Methodological Proposal, EOMAS 2016, LNBI, Springer International Publishing AG, 2016.

J. Stanek, E. Babkin, M. Zubov. A new approach to configurable primary data collection. Computer Methods and Programs in Biomedicine. 2016, Vol. 133, p169–181.

DISSERTATIONS/HABILITATIONS

Savchenko Andrey, defense of the doctoral thesis “Methods of classification of audio-visual information based on segment by segment analysis of homogeneity”

University of Muenster, PhD Committee for defense of Mrs. M. Neumann “Application of usability methods to the development of a business process modeling tool” – Prof. Eduard Babkin

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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 1 September 1952. Now, it comprises three schools: School of Physics, School of Mathematics, and School of Computer Science.

The School of Computer Science at the Faculty of Mathematics and Physics includes eight prestigious teaching and scientific workplaces. The quality of their graduates is widely recognized. Among them are a number of top experts working as computer program developers and technological innovators. Many graduates are also successful as entrepreneurs. Members of the School of Computer Science achieve outstanding scientific results in discrete mathematics, especially in graph theory and its application in intelligent systems, optimization, programming methods, semantics and building large software systems, processing natural language, and many others.

The Department of Software Engineering is focused on research and teaching in the areas of database systems, semantic web, similarity search, XML technologies, parallel computing, Big Data, and e-Science.



RESEARCH TOPICS

There are three research groups in the department:

Similarity RETrieval Research Group (SiRet)
<http://siret.ms.mff.cuni.cz/>

The Similarity Retrieval Research Group (SiRet) is interested in three areas: general methods of indexing similarity (metric and nonmetric spaces), biological applications of the similarity search, and indexing image databases for content-based retrieval. In general, it deals with database methods for efficient and effective similarity search in databases of complex unstructured objects.

XML and Web Engineering Research Group (XRG)

<http://www.ksi.mff.cuni.cz/xrg/>

The XML and Web Technologies Research Group (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. Recently, the Big data and Linked data research is currently at the forefront of the group.

Parallel Architectures/Algorithms/Applications Research Group (PARG)

<http://www.ksi.mff.cuni.cz/parg/>

The Parallel Architectures/Algorithms/Applications Research Group focuses on multi-core CPUs and NUMA servers programming, many-core GPUs and GPGPU computing, utilization of emerging parallel architectures (Intel MIC, Parallela/Epiphany), distributed computing on tightly coupled clusters, parallel data processing, concurrency in database systems, and languages (and compilers) for parallel processing.

CURRENT RESEARCH PROJECTS

The department members are involved in a number of research projects funded by the Czech Science Foundation and the Technology Agency of the Czech Republic. The projects are the following: Efficient subgraph discovery for petabyte-scale web analysis, novel methods for computational prediction and visualization of secondary structures of ribosomal ribonucleic acids – an integrated solution, Adaptive virtual screening, Using metric indexes for efficient content-based multimedia exploration, Efficient Exploration of Linked Data Cloud.

PUBLICATIONS

M. Krulis, J. Lokoc, T. Skopal: Efficient Extraction of Clustering-based Feature Signatures Using GPU Architectures. *Multimedia Tools Appl.* 75(13): 8071–8103, 2016.

A. Baqasah, E. Pardede, I. Holubová, W. Rahayu: XS-Diff: XML Schema Change Detection Algorithm. *Int. J. of Web and Grid Services*, 2015 Vol.11, No.2, pp.160–192.

J. Klímek, P. Koda, M. Nečask: Requirements on Linked Data Consumption Platform. In: *proc. of WWW2016 Workshop: Linked Data on the Web (LDOW2016)*.

P. Čech, J. Kohout, J. Lokoc, T. Komárek, J. Marousek, T. Pevn: Feature Extraction and Malware Detection on Large HTTPS Data Using MapReduce. *SISAP 2016*: 311–324.

D. Bednárek, J. Yaghob, F. Zavoral: MetroNG: Computer-Aided Scheduling and Collision Detection. *Computing and Informatics* 34(2): 277–304 (2015).

D. Bednárek, M. Brabec, M. Kruli: Improving Matrix-based Dynamic Programming on Massively Parallel Accelerators. *Information Systems*, 2016, in press.

J. Pokorny: Conceptual and Database Modelling of Graph Databases. *Proc. of IDEAS 2016*, ACM, pp. 370–377.

J. Pokorny, V. Snášel: Big Graph Storage, Processing and Visualization. Chapter 12 in: *Graph-Based Social Media Analysis*. Chapman and Hall/CRC, I. Pitas (Ed.), 2016, pp. 391–416.

DISSERTATIONS

Ladislav Peška, Recommender systems – models, methods, experiments, 2016

Juraj Moško, Exploration of Multimedia Collections, 2016

EVENTS

ADBIS 2016: 20th East-European Conference on Advances in Databases and Information Systems, August 28–31, Prague, 2016

DATESO 2016: 15th Annual International Workshop on Databases, Texts, Specifications, and Objects April 13–15, Tábor, 2016.



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KEY FACTS

INSTITUTION

- University founded in 1348.
- Faculty founded in 1952.
- Department founded in 1993.
- 2 full professors
- 3 associate professors
- 5 assistant professors
- 2 researchers
- 3 lecturers
- 17 PhD students

RESEARCH TOPICS

- Database systems
- Semantic web
- Similarity search
- XML
- Parallel computing
- Big Data
- Linked data

LUISS GUIDO CARLI UNIVERSITY – RESEARCH CENTER ON INFORMATION SYSTEMS

› LUISS Guido Carli University – CeRSI – Research Center on Information Systems www.luiss.edu

 LUISS BUSINESS SCHOOL



ABOUT THE INSTITUTION

Founded in 1966, LUISS is a private Italian university specialised in the social sciences and strongly committed to conduct academic research and educate talented individuals. The affiliation with Confindustria offers unique research opportunities for LUISS researchers and business practitioners as well as provides LUISS students with solid career opportunities. Located in the heart of Rome, the eternal city, LUISS holds partnering relationships for training as well as research purposes with universities around the globe. LUISS is composed of four departments and four schools covering the areas of economics and finance, management, law, and political science. In October 2015, the Business School and the Department of Business and Management received the prestigious EQUIS international accreditation for all programmes delivered from the BA to the PhD.

The faculty is actively engaged in both theoretical and applied research in a variety of areas of business and management, including information systems (IS). Since 1998, LUISS researchers have achieved international standing in IS education – including teaching and research – through its Research Centre on Information Systems (CeRSI). The LUISS IS group represents Italy in the ERCIS network and has contributed to the birth and to the growth of the

ItAIS (www.itaais.org), the Italian Chapter of the AIS (www.aisnet.org). ItAIS plays an important role in the promotion and coordination of the Italian IS academic and scientific community. Teaching and research activities in the IS field at LUISS are also run in connection with the Organization and Innovation group and with the Digital Skills Lab, whose members have published in international top journals including JIT, JSIS, I&M and CAIS.

In 2016, LUISS hosted visiting professors and scholars from more than 150 partners universities for seminars. Amongst others, the following guests have interacted with the LUISS IS group: John Baptista (U. of Warwick), Panos Constantinides (U. of Warwick), Antonios Kaniadakis (Queen Mary U. of London), Ole Hanseth (U. Oslo), Gwanhoo Lee (American U.), Gerardo Patriotta (U. Nottingham), Marlei Pozzebon (U. of Montreal), Øystein Sæbø (University Agder), Jan van den Ende (Erasmus U.), Robert Winter (U. St. Gallen). Members of the LUISS IS group joined the following foreign universities as visiting scholars in 2016: the University of Agder (NO), the University of Oslo (NO), Paris Dauphine (FR) and the University of Warwick (UK).

RESEARCH TOPICS

Research on IS at LUISS is done in con-

junction with project activities, in which members of the IS group iteratively design and evaluate sociotechnical interventions. A multidisciplinary team of IS and organization scholars with backgrounds in computer science, engineering, economics, management, cognitive and political sciences collaborate in both project and research activities by combining a multiplicity of methods for planning interventions and analysing phenomena from different perspectives. This approach allows to address relevant problems and to engage in national and international cooperations with other universities and research institutions.

IS research at LUISS focuses on three subject areas. The first is related to architecture and governance of digital products and platforms. The second is related to digital transformation in private and public sectors. The third refers to IT governance and cybersecurity. Among the more recent application domains there are Telcos, e-Health and social services, FinTech and the deep web.

CURRENT RESEARCH PROJECTS

The Erasmus+ project MASTIS (Establishing Modern Master-level Studies in Information Systems) project started in February 2016. The project involves 6 ERCIS members in the

consortium, is led by the University Lyon 2, and aims at designing and implementing IS master programmes in Ukraine and Montenegro. Moreover, a new project on dark nets and cybercrime has been started in collaboration with a leading corporation operating in the financial and logistic sectors. Finally, a COST action led by the University of Oslo and named “European Network for eHealth Infrastructures for Patient-centred Care”, has been resubmitted and is now under evaluation.

In addition to these new initiatives, the IS group has been engaged in disseminating the results of projects successfully completed in the e-health (i.e., “help and social interaction for elderly on a multimedia platform with e-social best practices”) and cybersecurity domains. Dissemination activities include the preparation of teaching cases and practitioners oriented studies. Joint research projects are running in collaboration with ERCIS members, such as University of St. Gallen and University of Agder.

PUBLICATIONS

Spagnoletti P., Cesaroni F. and Pozzebon M. (2016) A path for infrastructural ambidexterity: balancing reliability and flexibility in digital ecosystems. EGOS Colloquium, Naples 3–5 July

Spagnoletti P., Hanseth O. and Prencipe A. (2016) Infrastructural ambidexterity. The adoption of agile methods in the telecom industry, 10th Ratio Colloquium of Young Social Scientists “Organizing Digitalization” Stockholm August 26–27

Carillo K., Scornavacca E. and Za S. (2016) The role of media dependency in predicting continuance intention to use ubiquitous media systems, Information & Management, <http://doi:10.1016/j.im.2016.09.002>

Rocchi P. (2016) Informatics and Electronics: Some Educational Remarks – IEEE Transactions on Education, Volume: 59 Issue: 3, pp. 233–239

Torre, T., Braccini, A. M., & Spinelli, R. (Eds.). (2016). Empowering Organizations: Enabling Platforms and Artefacts (Vol. 11). Springer International Publishing. <http://doi.org/10.1007/978-3-319-23784-8>

Braccini, A.M., Federici, T. & Sæbø, Ø. (2016) Exploring Collective Action Dynamics in Online Communities from a Critical Realism Perspective. In F. D’Ascenzo, M. Magni, A. Lazazzara, S. Za (eds.) Blurring the boundaries through digital innovation. Individual, organizational, and societal challenges, LNISO (V), Springer International Publishing, Berlin, Germany, ISBN 978-3-319-38974-5, p. 271–282.

Depaoli, P. (2016). Organizing e-Services Co-production in Multiple Contexts: Implications for Designers and Policymakers. In Blurring the Boundaries Through Digital Innovation (pp. 231–245). Springer International Publishing.

Depaoli, P., & Za, S. (2016). The Possible Evolution of the Co-operative Form in a Digitized World: An Effective Contribution to the Shared Governance of Digitization?. In International Conference on Exploring Services Science (pp. 213–220). Springer International Publishing.

Depaoli, P., Resca, A., De Marco, M., & Rosignoli, C. (2016). The IS Heritage and the Legacy of Ciborra. In Organizational Innovation and Change (pp. 89–102). Springer International Publishing.

AWARDS

The paper entitled “Design for social media engagement: Insights from elderly care assistance” by Paolo Spagnoletti, Andrea Resca and Øystein Sæbø was awarded as the 2015 Best JSIS Paper.

EVENTS

XIII edition of the ItAIS conference, Verona, 7th–8th October 2016

1st MASTIS Workshop, Roma, 8th–11th June, 2016



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KEY FACTS

INSTITUTION

- One of the most relevant IS research institutions in Italy
- Connected with the Organization and Innovation group and the Digital Skills Lab at LUISS
- 8 research fellows
- Numerous external national and international co-workers

RESEARCH TOPICS

- Digital platforms
- Digital transformation
- IT governance



Institute of Information Management



ABOUT THE INSTITUTION

The Institute of Information Management of the University of St. Gallen (IWI-HSG), founded in 1989, pursues a mixed funding approach from both public and private sources. Privately funded research at IWI-HSG is usually organized in the form of research consortia (“competence centers”, CC). In addition to its research activities, IWI-HSG is engaged in executive education, offering degree and non-degree programs in Business Engineering, IT Business Management, Banking Operations, and Smart Sourcing. The overall focus is on Business Innovation through engineered artifacts, such as methods or reference models, or through innovative prototypes.

IWI-HSG is comprised of five research groups, each headed by a full professor (as of fall 2016): Andrea Back, Walter Brenner, Reinhard Jung, Jan Marco Leimeister, and Robert Winter. Seven assistant professors, six project managers, two postdocs, 37 employed research assistants (PhD students), approx. 10 student assistants, and approx. 10 support staff contribute to IWI-HSG’s mission.

SELECTED RESEARCH PROJECTS

The complete list of competence centers and current projects can be found at: <http://www.iwi.unisg.ch/?id=1202>

Crowdsourcing: The research goals of CC Crowdsourcing include the development of models and instruments for the systematic design, introduction as well as usage of crowdsourcing approaches, and IT-based innovations. Further information: <http://crowdsourcing.iwi.unisg.ch>

Design Thinking: The Design Thinking group is focused on embedding human-centric innovation tools into corporate structures. The research team continuously strives to improve the capability of corporate IT and to reduce costs and risks in innovation projects. Recent research findings have proven that a combination of verified tools with new agile processes and methods in organizations initiate the transformation towards customer-oriented IT. Further information: <http://dthsg.com/>

Dynamics of Institutional Mechanisms in Enterprise-wide Information Systems Architecture: This research project, funded by the Swiss National Science Foundation (SNSF), aims at a distinctive theorization of enterprise-wide IS architectures that goes beyond the existing, merely centralized approaches to enterprise architecture management (EAM). Further information: <http://p3.snf.ch/project-165607>

Independent Living: The CC Independent Living is engaged in research topics related to quality of life enhancement with a spe-

cial focus on elderly citizens. Besides working on innovative service solutions (e.g., outdoor and safety assistants on mobile devices), service marketplaces, and corresponding business models, which facilitate local service provider networks to serve consumers with personalized well-coordinated service bundles, are developed and tested. Further information: <http://il.iwi.unisg.ch>

Mobile Business: The CC Mobile Business is focused on the use, application, and management of mobile technologies in organizations. It particularly aims at investigating the innovative design of work processes and corporate services with mobile technologies and “Connected Things”. Further information: <https://aback.iwi.unisg.ch/kompetenz/cc-mobile-business/>

Project Leadership: The CC Key focuses on improving the leadership of large IT projects together with companies from different industries. The latest development was a project assessment tool that provides fast and objective evaluations as well as an automated analysis of multiple different problem areas. Further information: <https://key.iwi.unisg.ch>

Sourcing in Financial Services: The CC Sourcing (in cooperation with the University of Leipzig) develops concepts, instruments, and prototypes for managing

financial networks. Research activities concentrate on customer- and service-oriented innovations in networked banks. Further information: <http://sourcing.iwi.unisg.ch>

Value Co-creation Language: The research project value co-creation language, funded by the Swiss National Science Foundation (SNSF), seeks to develop a reference modelling language. The main focus is on facilitating the understanding of value co-creation across different disciplines and on illustrating the implications of service-dominant logic for the development of a new generation of information systems. Further information: <http://p3.snf.ch/project-164204>

PUBLICATIONS

The following list is a very limited extract of the IWI-HSG publication list in 2016. A complete list of publications, as well as full texts of many papers, is available at: <http://www.iwi.unisg.ch/publikationen>

Berghaus, S.; Back, A.: Gestaltungsbereiche der Digitalen Transformation von Unternehmen: Entwicklung eines Reifegradmodells. In: Die Unternehmung, 70, 2, 2016, pp. 98–123.

Blohm, I.; Riedl, C.; Füller, J.; Leimeister, J. M.: Rate or Trade? Identifying Winning Ideas in Open Idea Sourcing. In: Information Systems Research, 27, 1, 2016, pp. 27–48.

Durward, D.; Blohm, I.; Leimeister, J. M.: Crowd Work. In: Business & Information Systems Engineering, 58, 4, 2016, pp. 281–286.

Haki, K.; Aier, S.; Winter, R.: A Stakeholder Perspective to Study Enterprise-wide IS Initiatives. In: European Conference on Information Systems, Istanbul, Turkey.

Mettler, T.; Winter, R.: Are Business Users Social? A Design Experiment Exploring Information Sharing in Enterprise Social Systems. In: Journal of Information Technology, 31, 2, 2016, pp. 101–114.

Rosenberger, M.; Lehrer, C.; Jung, R.: Integrating data from user activities of social networks into public administrations. In: Information Systems Frontiers, 2016, forthcoming.

Silic, M.; Back, A.: The Influence of Risk Factors in Decision-Making Process for Open Source Software Adoption. In: International Journal of Information Technology and Decision Making, 15, 1, 2016, pp. 151–185.

Sprenger, M.; Mettler, T.; Winter, R.: A Viability Theory for Digital Businesses: Exploring the Evolutionary Changes of Revenue Mechanisms to Support Managerial Decisions. In: Information Systems Frontiers, 2016, forthcoming.

Söllner, M.; Hoffmann, A.; Leimeister, J. M.: Why Different Trust Relationships Matter for Information Systems Users. In: European Journal of Information Systems, 25, 3, 2016, pp. 274–287.

Vetterli, C.; Uebernickel, F.; Brenner, W.; Petrie, C.; Stermann, D.: How Deutsche Bank’s IT Division Used Design Thinking to Achieve Customer Proximity. In: MIS Quarterly Executive, 15, 1, 2016, pp. 37–53.

Wieneke, A.; Lehrer, C.: Generating and exploiting customer insights from social media data. In: Electronic Markets, 2016, forthcoming.

EVENTS

In November 2015, the 43rd edition of the St. Galler Anwenderforum took place, focusing on project leadership. Other one- or two-day practitioner events, organized by IWI-HSG, are the Business Engineering Forum, the DW Conference, and the Mobile Business Forum. Upcoming in February 2017 is the 13th International Conference on Wirtschaftsinformatik (WI 2017) in St. Gallen.



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KEY FACTS

INSTITUTION

- Founded in 1989
- 5 chairs
- Approx. 60 Researchers
- Executive Education Degree Programs: Executive Master in Business Engineering, Diploma in IT Business Management

RESEARCH TOPICS

- Crowdsourcing
- Design Thinking
- Dynamics of Institutional Mechanisms in Enterprise-wide Information Systems Architecture
- Independent Living
- Mobile Business
- Project Leadership
- Sourcing in Financial Services
- Value Co-creation Language



UNIVERSITY OF TURKU – TURKU SCHOOL OF ECONOMICS – INSTITUTE OF INFORMATION SYSTEMS SCIENCE

› University of Turku – Turku School of Economics – Institute of Information Systems Science www.utu.fi



ABOUT THE INSTITUTION

The roots of the Institute of Information Systems Science were established in 1971. Nowadays the institute is a part of the Department of Management and Entrepreneurship at the University of Turku. The mission of the Institute is to educate professionals who master both general management as well as Information Systems skills. In research, the institute focuses on supporting companies in their Information Systems management. Issues at individual, industry, national and international level are not neglected. The Institute has been a pioneer in English-speaking education, even at the whole university level.

RESEARCH TOPICS

Information System Science completes the sphere of Information Sciences at the University of Turku by contributing to the more technically/natural science-oriented work at the Department of Information Technology. Research covers widely the topic spectrum of Information Systems Science, with a gravity point in information and network management in information economy. Topics such as management of information resources, health care information systems and network-based services (e-services) – including social media – belong to the core areas of research, as well as topics on work informatics, ICT ethics, usability issues, and management of ICT in small and medium-sized businesses.

CURRENT RESEARCH PROJECTS

The institution runs a rich portfolio of projects in different areas. Current openings contain issues such as IT services for elderly people, information system continuity management, management of data centers, big data usage in municipal democracy and decision making, management of waste flows, ethical issues within IT, Digital Divide, networks and business models and hospitality management.

EVENTS

In 2016 the University of Turku continued hosting the Kilpisjärvi Information Systems Seminar. The 6th edition of the biannual conference series Well-being in the Information Society (WIS 2016) was held in Tampere 16–18.9.2016.

PUBLICATIONS

Hartemo, M., Suomi, R., & Hakala, U. (2016). Towards Improved Performance: A Model for Testing Email Newsletter Design. *Journal of Electronic Commerce in Organizations (JECO)*, 14(3), 1–16.

He, W., Xu, G., Zhang, X., Yu, Y., Li, H., & Lin, Z. (2016). Sentimental interplay between structured and unstructured user-generated contents: An empirical study on online hotel reviews. *Online Information Review*, 40(1), 119–145.

Heikkilä, M., Sajasalo, P., Heikkilä, J., & Pohjola, M. (2016). Management dilemmas

in innovative supplier networks. *International Journal of Procurement Management*, 9(5), 616–635.

Kini, R. B., & Suomi, R. (2016). Changing Attitudes toward Location-Based Advertising in the USA and Finland. *Journal of Computer Information Systems*, 1–13. doi:10.1080/08874417.2016.1192519

Koskinen, J. S. S., Kainu, V. M. A., & Kimppa, K. K. (2016). The concept of Datenherrschaft of patient information from a Lockean perspective. *Journal of Information, Communication and Ethics in Society*, 14(1), 70–86.

Li, H., & Suomi, R. (2016). Understanding the WOM behaviour of e-service users: an empirical study in online travel services. *International Journal of Networking and Virtual Organisations*, 16(3), 221–235.

Liu, Y., Li, H., Goncalves, J., Kostakos, V., & Xiao, B. (2016). Fragmentation or cohesion? Visualizing the process and consequences of information system diversity, 1993–2012. *European Journal of Information Systems*.

Liu, Y., Li, H., Xu, X., Kostakos, V., & Heikkilä, J. (2016). Modeling consumer switching behavior in social network games by exploring consumer cognitive dissonance and change experience. *Industrial Management & Data Systems*, 116(4), 801–820.

Liu, Y., Teichert, T., Hu, F., & Li, H. (2016).

How do tourists evaluate Chinese hotels at different cities? Mining online tourist reviewers for new insights.

Mäntymäki, M., & Islam, A. N. (2016). The Janus face of Facebook: positive and negative sides of social networking site use. *Computers in Human Behavior*, 61, 14–26.

Mäntymäki, M., & Riemer, K. (2016). Enterprise social networking: A knowledge management perspective. *International Journal of Information Management*, 36(6), 1042–1052.

Whitehouse, D., Duquenoy, P., Kimppa, K. K., Burmeister, O. K., Gotterbarn, D., Kreps, D., & Patrignani, N. (2016). Twenty-five years of ICT and society: codes of ethics and cloud computing. *ACM SIGCAS Computers and Society*, 45(3), 18–24.

DISSERTATIONS

Jani Koskinen; Datenherrschaft – An ethically justified solution to the problem of ownership of patient information

Jari Lehtonen; Tietohallinnon haasteet kasvavassa ja kehittyvässä toimintaympäristössä – Toimintatutkimus suomalaisen PK-yrityksen kasvusta globaaliksi toimijaksi

Tingting Lin; Deviations of governance in IT multi-sourcing – A case study

Olli Sjöblom; Data mining in promoting flight safety

Jussi Nissilä; Promoting scalability and sustainability of ICT4D projects using open source software

INSTITUTION AT A GLANCE

The University of Turku is a multidisciplinary scientific university located on the Southwest coast of Finland, in the vibrant 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 has three full professors and a total staff of about 25 and approximately 20 active doc-

toral level students. The yearly admission for students to the bachelor level, having information systems science as their major subject, is around 15 of the annual admission of 250 of the whole Business School. In addition, yearly there are approximately 40 master level students in the two international master's 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 focus of the research activities within the institute lies within understanding the utilisation of information and communication technology in enterprises and other organisations. 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 also runs a rich research tradition on public sector and third sector organisations. 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 organisational stakeholders: organisation's top management, information systems management, as well as individuals such as customers or workers. Recent developments put emphasis on the management and organisational aspects of data security and privacy, as well as IT governance issues.



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KEY FACTS

INSTITUTION

- International environment
- Approximately 23 000 students
- Circa 3 500 staff members

THE UNIVERSITY

- Yearly master's level admission around 30
- 3 professors, 25 staff members, 20 active doctoral students

IS MASTER'S PROGRAMMES

- Global IT Management (GITM)
- International Master's in Management of IT (IMMIT)

RESEARCH TOPICS

- Management of IS and business IS
- Networks and business models
- Work informatics
- Well-being and healthcare IS



ULSAN NATIONAL INSTITUTE OF SCIENCE AND TECHNOLOGY (UNIST) – SCHOOL OF BUSINESS ADMINISTRATION

BUSINESS ADMINISTRATION
THE NEW PARADIGM OF
MANAGEMENT AND TECHNOLOGY

UNIST
ULSAN NATIONAL INSTITUTE OF
SCIENCE AND TECHNOLOGY

ABOUT THE INSTITUTION

The School of Business Administration at UNIST is aiming to cultivate students who have the key talents needed for management positions and who will be able to lead the global economy era by combining science and technology principles with management skills. As such, our students will cultivate the basic knowledge needed to be outstanding managers in a variety of positions through the undergraduate curriculum, which includes the following majors: technology management, management information systems, financing, accounting, marketing and international management. The School of Business Administration has about thirty faculty members, and they make important research contributions and actively publish their research.

BUSINESS ANALYTICS PROGRAMME

To meet the demands set by world trends and features of local industries, our school develops the graduate programme in “Business Analytics (BA)”. Students in the Business Analytics programme will be trained for careers in a variety of business

fields. By acquiring the latest analytical techniques as well as business knowledge in the programme, students will become analytic experts equipped with the right skills to analyze and interpret business phenomena. The programme consists of business knowledge courses, analytical technique training, and an analytic project. The programme will help students to gain insight into business complexity in the big data era.

RESEARCH TOPICS

In the School of Business Administration, we have five research groups such as Digital Business Strategy, Risk Management, Behavioral Decision Making, Energy Commodity Trading & Financial Engineering, and Financial Mathematics. Furthermore, Centre for A2 (Advanced Analytics) has been launched in 2014. The centre focuses on the development of innovative analysis methods and the cultivation of analytic professionals in Big data era. Our strategic focuses are analytics for manufacturing and healthcare. The centre emphasizes on active collaborations with industries and aims to contribute enhancement of industrial competitiveness in the country.

Some of the research topics are as follows:

Dr. Boreum Choi’s research topic is mainly about management information system. Specifically, she concentrates on human interaction with new technology involved in social media, IoT, and mobile.

Dr. Changyoung Lee focuses mainly on: 1) future-oriented technology analysis, 2) systematic technology intelligence, 3) robust technology planning, 4) intellectual property management, and 5) service science.

Dr. Marco Comuzzi’s research topics are summarized as follows: 1) tools and methods for business process operational support, 2) advanced data mining for process knowledge extraction, and 3) impact analysis of post-implementation changes in enterprise systems.

Dr. Sungil Kim focuses on big data analysis and business analytics. Specifically, he is interested in machine learning, data mining, demand sensing/forecasting, and predictive analytics.

CURRENT RESEARCH PROJECTS

An integrated holistic model of a complex process (funded by the Ministry of Science, ICT & Future Planning, 2015–2016)

This project is a collaboration among KAI-ST, UNIST, Guangxi University, and Georgia Institute of Technology. Conducting experiments to understand and model a complex process or system is usually costly and time-consuming due to multistages, multivariables, and multidisciplinary issues involved in the complex process. To reduce the complexity, this project has proposed a method for building a holistic model of a complex process using multiple partial models that are learned from multiple sub-experiments that focus on different variables or the same variables but with different variable ranges. Using the proposed holistic model, it should be possible to provide an initial understanding of the complex process involving all variables. The effectiveness of the proposed method is demonstrated using a real example from a buckypaper process. Through cooperation, it is expected that experiments for a multivariable system can be substituted by a couple of experiments of less factors, which reduces the complexity and cost of experiments.

EVENTS

6th International Trading Conference, October 25, 2016



2016 Future Industry Innovation Forum, October 13, 2016



UNIST – Korea Workers’ Compensation & Welfare Service Joint Seminar (Big Data Analysis & Application), July 12, 2016



2016 UNIST Big Data Symposium, April 28, 2016

SELECTED PUBLICATIONS

Choi, B., Jung, Y. “The effects of second-screen viewing and the goal congruency of supplementary content on user perceptions.” *Computers in Human Behavior*, 64: 347–354, 2016.

Comuzzi, M., Angelov, S. “Patterns and Tools for Business Process Monitoring Customization.” *Service Oriented Computing and Applications*, 10(3): 253–271, 2016.

Comuzzi, M., Patel, A. “How organisations leverage Big Data: a maturity model.” *Industrial Management & Data Systems* 116(8): 1468–1492, 2016.

Jung, Y., Kim, S., Choi, B. “Consumer valuation of the wearables: The case of smart-watches.” *Computers in Human Behavior*, 63: 899–905, 2016.

Kim, M., Choi, U., Choi, B. “Empirical Research on Types and Service Attributes of Mobile Donation Applications.” *Information Systems Review (Korean)*, 18(2): 107–125, 2016.

Kim, S., Kim, H. “A new metric of absolute percentage error for intermittent demand forecasts.” *International Journal of Forecasting*, 32(3): 669–679, 2016.

Kim, S., Kim, H., Namkoong, Y. “Ordinal Classification of Imbalanced Data with Application in Emergency and Disaster Information Services.” *IEEE Intelligent Systems*, 31(5): 50–56, 2016.

Luftenegger, E., Comuzzi, M., Grefen, P. “Designing a Tool for Service-Dominant Business Strategies Using Action Design Research.” *Service Business*, 1–29, 2016. (Accepted)



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KEY FACTS

INSTITUTION

- Founded in 2009
- 4,000 students
- School of Business Administration with 30 faculty members

RESEARCH TOPICS

- Digital Business Strategy: IT-enabled organizational innovation, IT governance & security, IT economics, Economics in the digital age, business process mining/Data mining, E-commerce/E-education, Social media, Big data analysis
- Behavioral Decision Making
- Risk Management
- Energy Commodity Trading & Financial Engineering

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

› University of Liechtenstein – Institute of Information Systems – Hilti Chair of Business Process Management www.uni.li/is



UNIVERSITÄT
LIECHTENSTEIN

ABOUT THE INSTITUTION

The Institute of Information Systems at the University of Liechtenstein (uni.li/iwi) was founded in the early 1990s and has been continuously growing since then. It is represented by the Hilti Chair of Business Process Management, directed by Prof. Dr. Jan vom Brocke. Members of the institute have published in leading IS journals, including MIS Quarterly, Journal of the AIS, Journal of MIS, and Journal of Information Technology. The institute offers a Master's in Information Systems with majors in Business Process Management and Data Science, a PhD program in Information and Process Management, and a major in Information Management & IT within the Bachelor's program in Business Administration. Internationally well-recognized researchers have been awarded Liechtenstein Research Fellows and visit the institute on a regular basis. The institute is a co-founder of the Hilti Fellowship Program that provides highly motivated and committed Master's students with the well-funded opportunity to do an internship at the Hilti Corporation in Liechtenstein while, at the same time, studying in the Master's program in Information Systems at the University of Liechtenstein (uni.li/hilti-fellowship). The institute represents the Association for Information Systems (AIS) in Liechtenstein through the Liechtenstein Chapter of the AIS (LCAIS).

RESEARCH TOPICS

Our research focuses on the transformative power of digital technologies and their social, economic, and environmental impacts. In particular, our research focuses on the following areas:

Process management takes an innovation-driven and value-oriented perspective on process management and identifies and evaluates the business potential of modern information and communication technology in process management.

Green IS and sustainable development research investigates how information and communication technology can help reduce the human impact on the natural environment and increase social well-being.

Enterprise content management research designs and evaluates methods and models that can help companies to develop corporate content-management strategies.

Big data analytics explores methods, particularly, text-mining algorithms and sentiment analyses, that can help make the unprecedented availability of large amounts of data useful for private and public organisations, and for society at large.

Culture in BPM is mainly concerned with understanding the constituent elements of

a cultural setting supportive of process-management objectives.

Digital nudging investigates how small modifications to websites (i.e., nudges like setting defaults) impact on people's decision-making in digital environments.

CURRENT RESEARCH PROJECTS

Online Choice Architecture

The aim of this research project is to learn to understand user behavior in online settings, in particular mechanisms associated with the presentation of choices in online contexts (referred to as "choice architecture"). The goal of the project is to test design modifications of online forms – for example, setting defaults on rating scales of reviews – to reduce common sources of biases (such as availability or anchoring and adjustment).

Game-based Skill Assessment and Development

Considerable research in the academic discipline of Information Systems has been dedicated to the "gamification" of Information Technology - the use of game-design elements like badges and leaderboards to increase user engagement - and to serious games, that is, educational games that do not have entertainment as a primary purpose. However, only a few researchers have considered "conventional" video games in their studies. While recent studies have confirmed that being adept at video games can be an indicator of skills and abilities beyond those required for gaming, our understanding of whether and how video games can be used for skill assessment and development remains incomplete. To contribute to filling this gap, this research project seeks to identify the managerial skills and abilities that can be measured and developed with the help of video games; to understand the game mechanisms that facilitate skill assessment and development; and to develop theory on how to design video games that can support personnel selection and training.

AWARDS

Best Paper Award at ICIS

Sanja Tumbas, Prof. Dr. Stefan Seidel, and Prof. Dr. Jan vom Brocke (University of Liechtenstein) together with Prof. Dr. Nicholas Berente (University of Georgia, USA) won the Best Paper Award at ICIS 2015 in Texas for their paper "The 'Digital Façade' of Rapidly Growing Entrepreneurial Organizations".

Emerald Literati Network Award for Excellence

Emerald Group Publishing selected "Emotions and ERP Information Sourcing: The Moderating Role of Expertise" written by Pierre-Majorique Léger (HEC Montréal), René Riedl (Johannes Kepler University Linz) and Jan vom Brocke (University of Liechtenstein) as highly recommended paper in the journal *Industrial Management & Data Systems*.

Liechtenstein IS Students win international Accenture Campus Challenge

Students of the Master's program in Information Systems have won the international final of the Accenture Campus Innovation Challenge 2016 with their project "Smart Waste Management".

Liechtenstein Young Research Awards

Three IS researchers of the University of Liechtenstein received the Liechtenstein Young Research Award 2016: Dr. Nadine Székely for her dissertation, Dr. Markus Weinmann for a publication, and Sarah Zelt for a project work.

PUBLICATIONS

Müller, O., Junglas, I., vom Brocke, J., & Debortoli, S. (2016). Utilizing Big Data Analytics for Information Systems Research: Challenges, Promises and Guidelines. *European Journal of Information Systems*, 25 (4), 289–302. (ABDC: A*; ABS: 3; ISI: 3.01; VHB: A).

Abrell, T., Pihlajamaa, M., Kanto, L., vom Brocke, J., & Uebernickel, F. (2016). The role of users and customers in digital innovation: Insights from B2B manufacturing firms. *Information & Management*, 53 (3), 324–335. (ABDC: A*; ABS: 3; ISI: 3.175; VHB: B).

Löser, F., Recker, J., vom Brocke, J., Molla, A., Zarnekow, R. (2016). Organizational Benefits of Green IS Strategies and Practices: IT Executives' Perspective. *Information Systems Journal (ISJ)*, accepted for publication. (ABDC: A*; ABS: 3; ISI: 1.766; VHB: A).

Schmiedel, T., Spiegel, M., vom Brocke, J. (2016). Cultural Fitness for Management Methods: Are You Ready to Perform or Do You Need to Transform? *MIT Sloan Management Review*, forthcoming. (ABDC: A; ABS: 3; ISI: 3.104; VHB: C).

Hibbeln, M., Jenkins, J. L., Schneider, C., Valacich, J. S., & Weinmann, M. (2016). Inferring Negative Emotion From Mouse Cursor Movements. *MIS Quarterly*. (ABDC: A*; ABS: 4*; ISI: 9.51; VHB: A+).

vom Brocke, J., Zelt, S., Schmiedel, T. (2016). On the Role of Context in Business Process Management. *International Journal of Information Management (IJIM)*, in press. (ABDC: A; ABS: 2; ISI: 3.241; VHB: C).

vom Brocke, J. (2016). Interview with Martin Petry on "Digital Innovation for the Networked Society". *Business and Information Systems Engineering (BISE)*, 58. (ABDC: A; ABS: 2; ISI: 2.219; VHB: B).

Müller, O., Junglas, I., Debortoli, S., vom Brocke, J. (2016). Using Text analytics to Derive Customer Service Management Benefits from Unstructured Data, in: *Management Information Systems Quarterly Executive (MISQe)*, forthcoming.

DISSERTATIONS/HABILITATIONS

PhD graduations with summa cum laude
Stefan Debortoli: "Big Data Analytics as a Strategy of Inquiry in Information Systems Research".

Nadine Székely: "The Role of Information Systems in Environmental Sustainability Transformations".



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KEY FACTS

INSTITUTION

- Founded in 1991
- 30 researchers

RESEARCH TOPICS

- Process Management
- Sustainably Digital
- Big Data Analytics
- Enterprise Resource Planning
- Culture Assessment
- Digital Nudging

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



ABOUT THE INSTITUTION

Vienna University of Economics and Business (WU Vienna) is reportedly the biggest business school campus in Europe. The Department of Information Systems and Operations Management at WU Vienna was founded in the course of WU's organisational 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 is recognized as Austria's leading degree programs in this field (according to Format Uni-Ranking, 2009).

The established Master's program in Information Systems (launched in winter semester 2013/14) ambitiously attempts to follow in these successful steps. It provides students with IT-related knowledge and skills with a particular emphasis on management and research topics. It is a well-balanced mix of theory and practice, and the inclusion of state-of-the-art research findings give graduates the tools they need to question standard practices and develop innovative solutions.

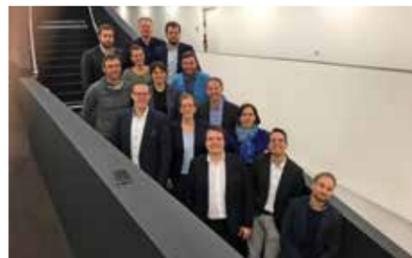
RESEARCH TOPICS

The Department of Information Systems & Operations Management consists of five institutes. Some of the topics researched, among many others, are process management, data management, information & technology management and supply-chain management.

CURRENT RESEARCH PROJECTS

The Department of Information Systems and Operations Management is currently involved in numerous research projects, some of which started recently, many are still ongoing and some have finished successfully.

Jan Mendling and Monika Malinova are involved in a BPM-related project concerned with "Online Learning Modules for Business Process Management (BPM) Advanced Higher Education" – BPM_Online in collaboration with Uni Liechtenstein, WWU Münster, CBS Copenhagen, VU Amsterdam and Signavio Berlin.



A directly funded project with the federal chancellery of Austria titled "BKA: Alternative Texterstellung E-Recht" is on alternative document formats for electronic legislation (E-Recht).

"CommuniData" is a new FFG funded research project starting in November 2016 on enabling local communities through Open Data.

"DALICC" is a new project funded by FFG starting in November 2016 on automatic assessment of licenses.

The PROPEL project, a one year pre-study funded by FFG to investigate the potential of Enterprise Linked Data in Austria, is coming to an end in November 2016, with new insights and plans to file a follow-up proposal beginning of next year. The project resulted in an invited talk by Prof. Axel Polleres at KESW 2016 in Prag in September, and a workshop on "Linked Startups" at ISWC2016 in Kobe, Japan.

AWARDS

The Institute for Information Business is happy to announce two awards received this year:

- The paper "A Novel Framework for Visualizing Declarative Process Models" by Michael Hanser, Claudio Di Ciccio and Jan Mendling won the Best Presentation Award at ZEUS 2016.

- Sebastian Neumaier's Diploma thesis at TU Vienna, which was co-supervised by Axel Polleres and Jürgen Umbrich, won the prestigious Austrian OCG-Förderpreis for outstanding master theses in the area of Computer Science.

Best Conference Paper Award during the 2016 International Conference on Information Resources Management in Cape Town (South Africa) awarded to Edward Bernroider (together with co-authors G. Harindranath and S. Kamel) for the contribution titled "A Comparative Analysis of Social Media Platforms and the Effects of the Internet Cut-Off for Egypt's Social Transformation Movements".

EVENTS

EMISA 2016 is the 7th international workshop on enterprise modeling and the design of IS architectures. The workshop is organised by the GI Special Interest Group on Design Methods for Information Systems (GI-SIG EMISA www.emisa.org). EMISA took place in Vienna on the new campus of WU. We enjoyed 24 talks by distinguished researchers and two keynotes by Jan vom

Brocke (Uni Liechtenstein) and Hajo A. Reijers (VU Amsterdam). Proceedings of the talks are published at <http://ceur-ws.org/Vol-1701/>.



The Institute for Information Business started a new, interdisciplinary specialisation in winter term 2016/17 on "Data Science" (<https://www.wu.ac.at/en/infobiz/teaching/sbwl-data-science/>).

SELECTED PUBLICATIONS

Claudio Di Ciccio, Han van der Aa, Cristina Cabanillas, Jan Mendling, Johannes Prescher: Detecting flight trajectory anomalies and predicting diversions in freight transportation. *Decision Support Systems* 88: 1–17 (2016).

Claudio Di Ciccio, Fabrizio Maria Maggi, Jan Mendling: Efficient discovery of Target-Branched Declare constraints. *Inf. Syst.* 56: 258–283 (2016).

Stefan Schönig, Claudio Di Ciccio, Fabrizio Maria Maggi, Jan Mendling: Discovery of Multi-perspective Declarative Process Models. *ICSOC* 2016: 87–103.

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Sebastian Neumaier, Jürgen Umbrich, and Axel Polleres. Automated quality assessment of metadata across open data portals. *ACM Journal of Data and Information Quality (JDIQ)*, (2016).

Limaj, Everist, Bernroider, Edward, Choudrie, Jyoti. 2016. The Impact of Social Information System Governance, Utilization and Capabilities on Absorptive Capacity and Innovation: A Case of Austrian SMEs. *Information & Management* 53 (3), 380–397.

DISSERTATIONS/HABILITATIONS

Dr. Gerhard Wohlgenannt finished his habilitation and started a collaboration with the Higher School of Economics (HSE) Moscow, School of Data Analysis and Artificial Intelligence (<https://cs.hse.ru/en/ai/>), doing a research project in the area of social network extraction from literary fiction using state-of-the-art word embedding tools.



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KEY FACTS

INSTITUTION

- Founded in 2005
- More than 70 researchers

RESEARCH TOPICS

- Business Process Management
- Process Mining
- Supply Chain Operations Planning
- Social Aspects of IS
- Business Programming
- Knowledge Management
- Data Management
- Semantic Web Technologies
- Operations Research
- Decision Support Systems
- Computer Integrated Manufacturing
- Online Algorithms & Decision Theory
- New Product Development
- Data Modeling & eLearning
- Relation Theory
- eGovernment & eVoting
- eMarketing & Software Agents
- Secure Business Systems



PERSONAL MEMBERS

This year there is a novelty related to possibilities to become or be a member of the ERCIS network.

Apart from associated partner institutions, advisory board members, and competence centers, the ERCIS network occasionally also welcomes personal members. Those dedicated researchers are experts in their field of research and have strong personal connections within the network.

To receive a membership of a personal member, you should already have worked with partners from the network in the context of research projects, joint courses, or publications. Furthermore, you should plan or already have your career in the academic world, beyond your PhD studies. Finally,



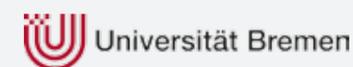
Jörg Becker and the new personal members after signing the official Certificates of Membership

a recommendation from someone inside the network might strengthen your motivation to become a personal member.

The new personal members who signed their official Certificate of Membership dur-

ing the ERCIS Annual Workshop in Kristiansand are introduced on the next pages.

Welcome to our new members!



About Me:

Since January 2016, I have been an assistant professor (“junior professor”) in digital media in the public sector at the University of Bremen. My research focuses on the adoption of e-government both by government employees and by citizens. Furthermore, I analyse how governments interact with their various stakeholders via different communication channels. In my research, which deals with e-government on a national and international level, I combine my Information Systems background with insights from other disciplines such as communication and media science. A current research project analyses the skills government employees need to successfully cope with digitisation. In addition, I am working on a study in which I analyse

citizens’ channel choice for contacting governments as well as governments’ multi-channel management strategies.

SELECTED PUBLICATIONS

Hofmann, S. (2016). Becoming friends with the government – A qualitative analysis of citizens’ decision to ‘like’ government profiles on Facebook. In Proceedings of the European Conference on Information Systems (ECIS 2016), Istanbul.

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IT UNIVERSITY OF COPENHAGEN

About Me:

I am an Associate Professor in the Information Management section at the IT University of Copenhagen. I hold a BSc and MSc in Information Systems and a Ph.D. from the University of Münster’s School of Business and Economics. In my research I study how organisations can create value with (big) data and analytics. At this, I primarily focus on the application of methods and tools for extracting knowledge from unstructured data, from both the (social) web and enterprise-internal data sources. I am also co-founder of *MineMyText.com*.

SELECTED PUBLICATIONS

Müller, O., Junglas, I., vom Brocke, J., & Debortoli, S. (2016). Utilizing big data analytics for information systems research: challenges, promises and guidelines. *European Journal of Information Systems (EJIS)*, 25(4), pp 289–302.

Müller, O., Junglas, I., Debortoli, S., & vom Brocke, J. (2016). Using text analytics to derive customer service management benefits from unstructured data, *Management Information Systems Quarterly Executive (MISQE)*, 15(4), online version.

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UNIVERSITÄT DUISBURG ESSEN

Open-Minded

About Me:

I am head of the research group „Professional Communication in Electronic Media/Social Media“ and principal investigator of the research training group “User-Centred Social Media” (DFG-Graduiertenkolleg) at University of Duisburg-Essen. My research is focused on the topics of “Enterprise Collaboration” and “Social Media Analytics”. Currently, we are working in several funded projects. Two selected projects are:

“Design Thinking for Industrial Services” is funded by the German Federal Ministry of Education and Research until 2019. It is the goal of the project to design and evaluate instruments for virtual collaboration in order to increase SME’s ability to innovate.

Funded by the DFG (German Research Foundation) we cooperate with the LMU Munich to investigate public communication on Twitter. The project is focused on spill-over effects of information between different types of media.

SELECTED PUBLICATIONS

Stieglitz S., Lattemann, C., Robra-Bissantz, S., Zarnekow, R., Brockmann T. (2016) (eds.), *Gamification – Using game elements in serious contexts*, Berlin: Springer.

Stieglitz, S. & Hassannia, S. (2016). Idea Generation by Employees and External Participants in Innovation Competitions. Proceedings of the 49th Hawaii International Conference on System Sciences (HICSS), 4272–4281.

CONTACT DETAILS

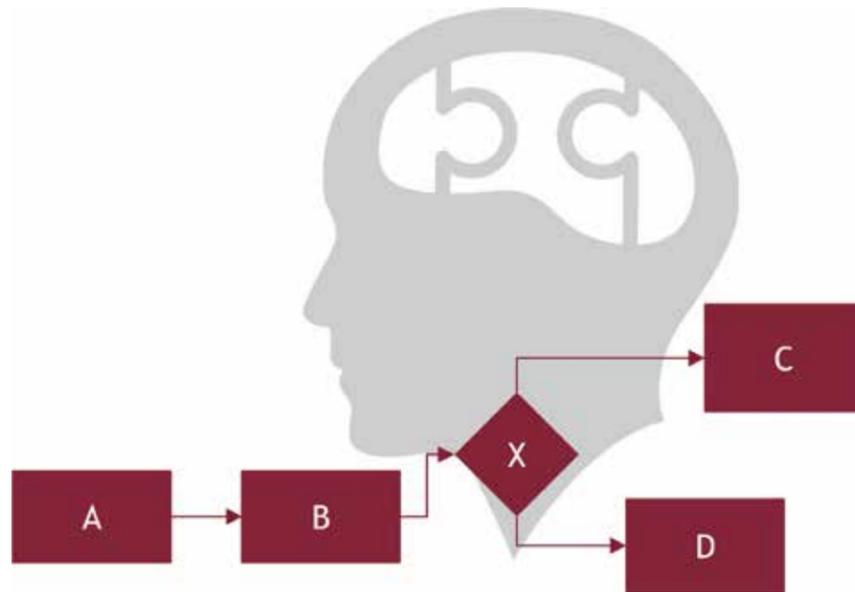
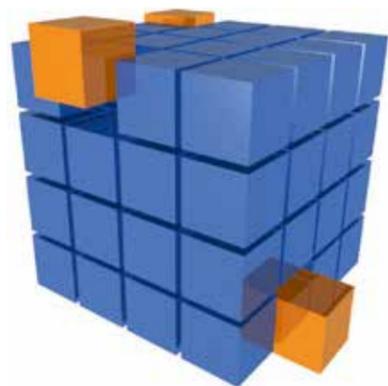


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CONCEPTUAL MODELING

Nowadays, conceptual modeling supports a variety of business tasks aimed to improve the productivity of companies among different industries. Conceptual models capture various aspects of a company's structure and behavior, such as business processes, business data, and organisation. By documenting these aspects through diagrammatic representations provided by conceptual models, business analysts can gain a quick overview of how the company works in detail. Hence, conceptual models serve not only to document but also to analyse specific aspects of corporate reality to support economic decision-making. For instance, the use of conceptual models supports Business Process Improvement, Benchmarking, Software Customising, Workflow Management, and Compliance Management. Due to their considerable potential to support decision-making, many companies have created large collections of conceptual models. This makes it difficult for analysts to analyse conceptual models in order to support their business tasks. Hence, the Competence Center for Conceptual Modeling focuses on the development of novel methodologies, providing automatic support for the design and analysis of conceptual modeling in different business domains. In particular, we worked on the following topics:



Model Query Languages: With query languages, analysts can search for sections in conceptual models that match a specific structure with specific contents. Such model query languages serve to, for instance, identifying inefficiencies in business processes, searching for legal violations of information systems, or generating database tables automatically from a data model. Particular query languages that we developed at the Competence Center for Conceptual Modeling are the Generic Model Query Language (GMQL) and the Diagrammed Model Query Language (DMQL). This year, we developed a new version of the latter including extended analysis capabilities.

Process Mining: Process Mining is used to learn a process model automatically from log files of business software. The advantage of creating process models this way is that they actually represent the process reality of the company and are not biased by human perception. This year, we applied the novel process mining approach we developed last year to different business domains. Besides classic examination areas such as process compliance, we also applied the approach in the areas of Computer Supported Cooperative Work (CSCW) and Internet of Things (IoT). In particular, we examined user behavior in collabora-

tion software and behavior of skiers in large ski areas to support ski resort extension and capacity planning.

Standardisation: In 2016, we continued the founded research project on EPC standardisation that we work on together with our colleagues from the University of Osnabrück. The project is funded by the German Federal Ministry of Economic Affairs and Energy (BMWi).



Bundesministerium für Wirtschaft und Energie

We are happy that we could publish our research results in renowned, high-ranked outlets (such as ISF and MISQ).

SELECTED PUBLICATIONS

Becker, J.; Delfmann, P.; Dietrich, H.-A.; Eggert, M.; Steinhorst, M.: Model-based Business Process Compliance Checking in Financial Industries – Conceptualization, Implementation, and Evaluation. *Information Systems Frontiers* 18 (2016) 2, S. 359–405.

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Scholta, H.: Semi-Automatic Inductive Derivation of Reference Process Models that Represent Best Practices in Public Administrations. In: *Proceedings of the 24th European Conference on Information Systems (ECIS 2016)*. Istanbul 2016.

Scholta, H.: Similarity of Activities in Process Models: Towards a Metric for Domain-Specific Business Process Modeling Languages. In: *Proceedings of the 24th European Conference on Information Systems (ECIS 2016)*, Istanbul 2016.

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C³M Team

› CRISIS MANAGEMENT

The Competence Center for Crisis Management (C³M) integrates research efforts of the ERCIS network in the domain of crisis management and humanitarian logistics. Our main objective is to identify relevant challenges in practitioner realities and to design appropriate socio-technical solutions. Herein C³M examines the role of Information and Communication Technologies (ICT) concerning logistics and supply chain management in this outstanding domain. C³M integrates a collaborating network of different practitioner and research groups from the crisis management and humanitarian logistics domains. C³M concentrates on six research topics with the application domain, starting at visualisation of processes up to coordination of humanitarian relief chains.



Research Fields of the C³M

NEWS FROM PROJECTS AND OTHER ACTIVITIES

Within the FP7 project DRIVER (DRiving InnoVation in Crisis Management for European Resilience, EC FP7, www.driver-project.eu), C³M contributed in two major experiments. In March, we have executed a rather big logistics simulation experiment together with the German Aerospace Centre at the facilities of the Federal Agency for Technical Relief. In April, we contributed to an experiment on interaction with citizens at the Safety Region of The Hague with more than 200 participants. We made very insightful experiences and gathered valuable feedback. First results were presented at three conferences within and outside Europe.

In the last year of the EU-funded Marie Curie Initial Training Network "NITIMesr" (EC FP7, www.nitim.eu), two new fellows joined us: Robin Mays from the University of Washington and Roberto Rocha from the University of São Paulo. We have organised and participated in a couple of events and



ERCIS Afterwork Panel Discussion on Humanitarian Information Systems

projects, including a joint project seminar with the Human Centered Design and Engineering Department and the Global Disaster Preparedness Center of the Red Cross, as well as several guest lectures or the visit of the medical service of the Red Cross at the Four Day Marches of Nijmegen. One of the highlights was the first ERCIS after-work panel discussion on humanitarian information systems, which has also shown the strong interest of ERCIS students in the C³M research activities. With the NITIM Winter School in September in The Hague, "NITIMesr" came to an end. However, the feedback of both the faculty and the students was very positive and we are looking forward for further collaborations. One of the last "official" C³M duties was to organize an employment event for which we were very pleased to attract recognised experts in the crisis management domain, for example coaches and speakers from the NITIM early stage researchers.



Part of the C³M team employment event at the NITIM Winter School 2016 in The Hague

Besides those project-driven activities, C³M was involved in a plenty of other exciting activities. We have moderated the Crisis Management Session at Symposium Oeconomicum in Münster and again cochaired the practitioner centered research track at ISCRAM in Rio de Janeiro. The C³M team has participated at several conferences



DRIVER Experiment Logistics and Traffic Management

along the globe, as the World Conference on Humanitarian Studies (Ethiopia) or the European Transportation Conference (Spain). We have also continued our close collaboration with the NGO Humedica e.V. by facilitating a logistics strategy workshop at the ERCIS Headquarters. We are grateful for all the exchanges and collaborations with our partners and we are looking forward for their continuation as well as some promising new initiatives in the next year.

SELECTED PUBLICATIONS

Detzer, S., Gruczik, G., Widera, A., Nitschke, A. (2016) Assessment of Logistics and Traffic Management Tool Suites for Crisis Management. ETC.

Havlik, D., Pielorz, J., Widera, A. (2016) Interaction with Citizens Experiments: From Context-aware Alerting to Crowdtasking. ISCRAM.

Horita, F., Link, D., Porto, d. A. J. & Hellingrath, B. (2016). oDMN: An Integrated Model to Connect Decision-Making Needs to Emerging Data Sources in Disaster Management. HICCS.

Link, D., & Hellingrath, B. (2016). GDACSmobile — An IT Tool Supporting Assessments for Humanitarian Logistics. In Haavisto, et al. (Eds.), Supply Chain Management for Humanitarians. Tools for Practice (pp. 285–297).

Link, D., Hellingrath, B. & Ling, J. (2016). A Human-is-the-Loop Approach for Semi-Automated Content Moderation. ISCRAM.

Middelhoff, M., Widera, A., van den Berg, R., Hellingrath, B., Auferbauer, D. Pielorz, J., Havlik, D. (2016) Crowdsourcing and Crowdtasking in Crisis Management: Lessons Learned From a Field Experiment Simulating a Flooding in City of the Hague. ICT-DM.

Rocha, R., Widera, A., van den Berg, R., Hellingrath, B. (2016) Improving the Involvement of Digital Volunteers in Disaster Management. ITDRR.

van den, B. R., Widera, A., Lechtenberg, S., Middelhoff, M., & Hellingrath, B. (2016). Pictograms and Assessment Categories as Crisis Communication Language: Lessons From a Field Exercise with GDACSmobile. ICT-DM.

Widera, A., Hellingrath, B., (2016) Making Performance Measurement Work in Humanitarian Logistics – The Case of an IT-supported Balanced Scorecard. In Haavisto, et al. (Eds.), Supply Chain Management for Humanitarians. Tools for Practice (pp. 339–352).



Prof. Dr.-Ing. Bernd Hellingrath bidding a last farewell to Robin Mays and Roberto Rocha

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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 other organizations. Our research focuses on how individuals use e-government technology.

New Juniorprofessorship at the University of Bremen

In January 2016, Sara Hofmann, who was a post-doc at the ERCIS headquarters in Münster, has moved to the University of Bremen to work as an assistant professor in digital media in the public sector. Her research focus lies on e-government adoption processes and the interaction between government and citizens.

Joint Seminar EGOV2030

In a cooperation of Muenster together with Sara Hofmann from the University of Bremen, a joint master seminar on “E-Government 2030” takes place in the winter term 2016/17. On October 26th 2016, the first constituent meeting with a total of 18 students (eight students from Bremen and ten from Münster) was conducted. In six teams, which consist of members from both universities, the students work on a roadmap for one of the six topics of Smart Government, Communication Channels, Demographic Change, Participation, Education and Federalism. The roadmap finally shall give an idea, how E-Government Solutions in 2030 can look like. The seminar is set up in a very creative manner, in which not only new knowledge in the field of e-government is gathered, but also practical experience that has been previously

acquired can be applied practically by the students. While developing the roadmaps for the future of the respective areas the students are using Design Thinking as basic methodology.



Members of the Competence Center visiting National IT-Summit 2016 in Saarbrücken

E-Government Competence



E-Government is not only something, the individual uses and has to adapt to, public administrations equally have to cope with new systems and technologies in order to keep serving their customers satisfactorily. The project “E-Government Competence” aims at identifying the future personnel requirements in the public sector and to develop teaching methods that help employees to better adjust to the changed environment and customer needs.

In a study, funded by the IT Planning council, 19 reference roles of the public administration with IT focus were identified and categorized. The roles were subsequently documented in the form of profiles, in which their tasks, responsibilities and competences were described. Above all, the role of the user shows that digitalisation invariably affects all areas of administration, and it is therefore important to look at the administration as a whole, that is, with all existing roles. In a second step, the identified roles were concretised by deducing competencies currently and in the future in the use of information technology (IT). It has been shown that the “central” competencies such as process or project management are of a more basic nature and are therefore not limited to “pure” IT use. The final third step dealt with the development of a guide for the selection of appropriate methods for imparting competencies.

On the basis of the project results and expert discussions, various suggestions for action were elaborated. Furthermore, two hands-on brochures for practitioners in the field of Human Resource Management in public bodies were developed.

PUBLICATIONS

Distel, B., & Ogonek, N. (2016). To Adopt or Not To Adopt: A Literature Review on Barriers to Citizens’ Adoption of E-Government Services. In Proceedings of the 24th European Conference on Information Systems (ECIS) 2016, Istanbul.

Folmer, E., Matzner, M., Räckers, M., Scholta, H., & Becker, J. (2016). Standardized but flexible information exchange for networked public administrations: A method. Transforming Government: People, Process and Policy, 10(2), 239–255.

Hofmann, S. (2016). Becoming friends with the government – A qualitative analysis of citizens’ decision to ‘like’ government profiles on Facebook. In Proceedings of the European Conference on Information Systems (ECIS 2016), Istanbul.

Ogonek, N., Gorbacheva, E., Räckers, M., Becker, J., Krimmer, R., Broucker, B., & Crompvoets, J. (2016). Towards Efficient EGovernment: Identifying Important Competencies for EGovernment in European Public Administrations. In Scholl, H. J., Glassey, O., Janssen, M., Klievink, B., Lindgren, I., Parycek, P., Tambouris, E., Wimmer, M. A., Janowski, T., & Sá, S. D. (Eds.), Electronic Government and Electronic Participation. Joint Proceedings of Ongoing Research, PhD Papers, Posters and Workshops of IFIP EGOV and ePart 2016 (pp. 155–162). Innovation and the Public Sector: Vol. 23. Amsterdam: IOS Press.

Scholta, H. (2016). Semi-Automatic Inductive Derivation of Reference Process Models that Represent Best Practices in Public Administrations. In Proceedings of the European Conference on Information Systems (ECIS 2016), Istanbul.

Scholta, H. (2016). Similarity of Activities in Process Models: Towards a Metric for Domain-Specific Business Process Modeling Languages. In Proceedings of the European Conference on Information Systems (ECIS 2016), Istanbul.

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Service Science at the European Research Center for Information Systems

› SERVICE SCIENCE

The Service Science Competence Center is ERCIS' major organizational unit for conducting research and industry projects in the area of service management and service engineering. With a team of two professors and 9 research assistants, the Service Science Competence Center is currently the largest third party-funded research group in the ERCIS network.

SERVICE SCIENCE MANAGEMENT AND ENGINEERING

The emergence and proliferation of the Service Economy has changed the way in which the creation of value is perceived throughout various industry sectors and societies. Some current manifestations are integrating industrial machinery with customized service offerings (customer solutions, product-service systems), offering aircraft turbines (power by-the-hour) or software applications (as-a-service) without selling physical goods, or providing content on mobile platforms. Theories and artifacts related to service are reflected in the emerging academic discipline of Service Science, Management and Engineering (SSME). Research in SSME is focused on understanding and facilitating the creation of value in service systems, involving interactions of service providers and service customers.

MISSION OF THE SERVICE SCIENCE COMPETENCE CENTER



The mission of the ERCIS Service Science Competence Center is twofold. On the one hand, we strive to understand the nature and impact of service orientation on commercial businesses, on the public sector, and on society in general. On the other hand, we contribute to further shaping the course of the service economy by designing new business solutions and software artifacts. One focal point of our research is facilitating service-orientation in close cooperation with high-tech manufacturing companies. We have also been in frequent contact with banks, retail companies, and facility management service providers.

Our research is equally dedicated to research excellence and to providing results that companies can utilize to further shape their businesses in the service society. We achieve this goal based on a network of excellent researchers in the global ERCIS network.

CURRENT RESEARCH PROJECTS

EOL-IS



Electric vehicles have the potential to represent a more sustainable means of transportation. To date, the customer adoption of electric vehicles in Germany remains low. A major barrier to customer adoption is an immature battery technology that limits the range of electric vehicles. Moreover, electric vehicle batteries have high initial costs, which cause electric cars to be significantly more expensive than vehicles with a combustion engine. Therefore, a reduction of the Total Cost of Ownership (TCO) of the battery would be beneficial for the diffusion of electric mobility. Currently it is assumed that an electric car battery still has about 80% of its original capacity left when it reaches its End-of-(First-) Life (EOL) in the automotive application. Thus, to reduce the TCO the battery can be reused in a different, less demanding scenario. For instance, it could be used to propel smaller vehicles, to store green energy in stationary applications such as in smart homes, or to power small electronic devices such as technical equipment used on construction sites.

The EOL-IS project's goal is to develop service innovations for the phase after the electric vehicle batteries' EOL, based on the chemical and technical features of the batteries. Moreover, we implement a decision support system to help a decision maker find the best Second-Life application for each single battery. In this process, the

physical and chemical features and the battery's history of usage, its condition and further economic, ecological and judicial information are considered. Once an appropriate scenario has been identified, services can be configured and bundled with the battery as an integrated customer solution. This solution is designed to fit the unique requirements of the second-life scenario and must be acceptable for customers.

In order to extend the knowledge on the bundling of products and services into product service systems, consumers' willingness to pay for used EVBs as a residential battery energy storage system as well as for the related services are surveyed. The developed decision support system will undergo a rigorous evaluation with experts from practice regarding its functionalities.

More information is available at: <http://www.eol-is.de>.

CrowdStrom



Another viable path to overcome a major barrier to customer adoption of electric vehicles is to solve the "range anxiety" problem. This anxiety originates from the limited range of electric vehicles and the lack of a well-developed public charging infrastructure, which makes electric vehicles seemingly incompatible with the everyday

lives of consumers. At the same time, developing a public charging infrastructure is uneconomical for investors, due to the limited demand for charging services. A circular pattern emerges, in which the one party waits on the other party to make the first step. At the same time, private charging infrastructures grows since drivers of electric vehicles usually install a charging station at their homes with the purchase of the vehicle.

The main goal of the CrowdStrom project is to support the expansion of the electric vehicle charging infrastructure by making formerly private charging stations available to the public, using a crowd-sourcing approach. CrowdStrom develops a business model, similar to Sharing Economy platforms like Airbnb and Uber, where individuals become service providers. Conceptual challenges to develop new, standardized processes covering the entire range of requirements for setting up and operating a charging infrastructure for electric vehicles arise. The project's analysis on customers' willingness to pay and on the intentions of individuals to become providers enable the creation of incentive systems. Additionally, the CrowdStrom project includes a detailed analysis of legal difficulties, occurring as customers become suppliers. We implement the concept in a software system that manages the service processes and the flows of information between participating parties. A prototype of the CrowdStrom platform can be accessed at <http://portal.crowdstrom.de>.

To evaluate our prototype and the underlying design, we conduct a comprehensive field test in which thirty participants in Münster take the roles of providers and users of private charging stations. The participants are provided with charging stations and electric vehicles. Surveying and monitoring their behavior with the prototype supports us in finalizing the CrowdStrom solution.

More information is available at: <http://www.crowdstrom.de>.

smart market²



Caused by the value chain's digitization in retail, novel business models in the online sector have been established. Online retailers now draw a constantly growing amount of retail's entire turnover. Further, the digitization influences current retail business models: Customers of local businesses use mobile devices as source for price comparison, experience reports, and product information. By now, digitalization potentials in downtown retailing are almost exclusively utilized by large retail chains. Rising sales figures in online retailing go at the expense of traditional independent shops. Consequently, the number of small and medium-sized retailers is declining in many city centers. In Smart Market² we adapt successful strategies from online retailing to downtown retailing with the goal to create interactive customer experiences. Our research sets out to develop data-driven value-added services, as well as apps that allow a co-production resp. co-creation of customer experience in downtown areas. Based on their current location, visitors receive information on e.g., the latest retailer promotions and campaigns. Customers act both as consumer of retailer-provided information on products and campaigns, and as information providers by writing and publishing product-related information, such as ratings and reviews. Retailer- and customer-generated information set the foundation for location-based services and business models for downtown retailers.

The Smart Market² project starts at the beginning of 2017 and will be conducted in a joint industry-academia consortium. The Service Science Competence Center is represented by Martin Matzner at the University of Münster and by Daniel Beverungen at the University of Paderborn.

ACADEMIC ACTIVITIES

CeBIT



The Service Science Competence Center was part of CeBIT 2016 and exhibited the intermediate results of the EOL-IS and CrowdStrom research projects. For the first time, we presented the CrowdStrom prototype, consisting of a state-of-the-art charging station, a demonstrative electric vehicle, and the web-based P2P sharing platform. Svenja Schulze, Minister for Innovation, Science and Research in North Rhine-Westphalia visited our booth and got a great impression of our work.

Personal Changes

Daniel Beverungen, former head of the Service Science Competence Center, has been appointed as Full Professor at the Chair of Business Information Systems at Paderborn University, Germany. He currently acts as consultant and active consortium member in the EOL-IS and Smart Market² research projects.

More Information:
<http://www.upb.de/bis>

Rise BPM



In context of the RISE BPM project, we frequently visited partnering universities to conduct research together. Members of our team have visited Ulsan National Institute of Science and Technology in South Korea, Queensland University of Technology in Brisbane, Australia, and Universidade Federal do Estado do Rio de Janeiro in Brazil. More information on the RISE BPM project on page 100.

Conference Activities

As part of the Association for Information Systems (AIS), the Service Science Competence Center has again hosted and supported major academic initiatives related to service research. In April, we hosted a workshop on e-mobility and smart grids in context of the conference of the German Gesellschaft für Informatik (GI) MMB & DFT 2016 in Münster. This year, we have again organized and conducted a workshop on IT and Services for Green Energy and Electric Mobility (IDEE) in cooperation with researchers from the KIT at the conference of the GI in Klagenfurt, Austria. Daniel Beverungen, recently elected president of the Special Interest Group Services in the AIS (AIS SIGSVC), organized and conducted pre-conference workshops on service science at ECIS 2016 in Istanbul and at ICIS 2016 in Dublin. We also supported service science conference tracks at ECIS, MKWI and Wirtschaftsinformatik as track chairs, associate editors, and reviewers.

More Information:
<https://service.ercis.org/academic-activities/2016>

We continued our engagement in the DFG Research Network on Service Engineering (FOKUS:SE) with meetings in Nuremberg and Dresden. In order to further establish the research area of smart service systems, we invited submissions for a Special Issue on "Smart Service Systems: An Interdisciplinary Perspective" that is to be published in the Information Systems Journal (ISJ), one of the six top journals in the IS discipline. Furthermore, we organized and published a special issue on Smart Service in the Springer Journal Information Systems and e-Business Management.

SELECTED PUBLICATIONS

Beverungen, D., Bräuer, S., Plenter, F., Klör, B., & Monhof, M. (2016). Context and Form of Information Systems for Repurposing Electric Vehicle Batteries — An Exploratory Study. Computer Science — Research and Development, 31.

Bräuer, S., Monhof, M., Klör, B., Plenter, F., Siemen, C., & Beverungen, D. (2016). Residential Energy Storage from Repurposed Electric Vehicle Batteries — Market Overview and Development of a Service-Centered Business Model. In Proceedings of the IEEE Conference on Business Informatics (CBI 2016), Paris.

Breuker, D., Matzner, M., Delfmann, P., & Becker, J. (2016). Comprehensible Predictive Models for Business Processes. MIS Quarterly, forthcoming.

Klör, B., Chasin, F., & Becker, J. (2016). Integrating a Method for Achieving Activity-Oriented Sustainability into the Design Science Research Methodology. In Proceedings of the Twenty-Second Americas Conference on Information Systems (AMCIS 2016), San Diego, USA.

Matzner, M., Chasin, F., von Hoffen, M., Plenter, F., & Becker, J. (2016). Designing a Peer-to-Peer Sharing Service as Fuel for the Development of the Electric Vehicle Charging Infrastructure. In Proceedings of the 49th Annual Hawaii International Conference on System Sciences (HICSS-49), Kauai, Hawaii, USA, 1587–1595.

The full record of current publications is available at:
<http://service.ercis.org/publications>

Find us at:
<http://service.ercis.org>

CONTACT US

Please contact us for more information on our projects or for starting exciting new initiatives in the area of service science.



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› SMARTER WORK

The Competence Center for Smarter Work studies new ways of working, virtual modes of organizing and organizational transformation based on communication and collaboration technologies.

It provides research and transformation support in the area of Unified Communication & Collaboration (UCC) and Social Media, which facilitate extended and richer modes of interaction among stakeholders. Customer as well as partner relations 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. The integration of these technologies and related concepts into the workplace provides profound challenges and opportunities for organizational development and innovation. We engage in detailed multi-method workplace studies in order to gain deep insights into existing work practices. Based on the information and communication patterns and the relationship network of different stakeholders, we suggest scenarios for new work practices and transformation paths. In our scenarios for smarter work we also reflect issues of corporate social responsibilities and employee well-being.

Developing marketing strategies as design of socio-material infrastructures



The emergence of new forms of bottom-up, self-organising and mobilising customer communities through social media platforms reveals a paradigmatic shift away from the role of organisations as one of control and main source of information. Adapting to this new context and identifying new strategies for attracting and retaining customers, however, has proven to be not an easy task for many organisations. As part of a master thesis project in collaboration with the Global Digital Social Media Division of Hilti, we developed an 'infrastructural' approach to social media that builds on some of the recent advances in Information Systems. By drawing upon insights from persuasive technology and nudge theory, we synthesised a perspective, which opened a new vista for understanding how social media ecologies shape customer behaviours and decisions in fundamental ways. Understanding the development of marketing strategies as design of socio-material infrastructures enlarges the scope of influence and participation, and offers a richer perspective on digital marketing engagements. (PI: Dr. Simeon Vidolov)

Collaborative overload

The ubiquity of communication and collaboration technologies has coincided with a significant increase of time spent on collaborative tasks, which has raised concerns about collaborative overload (e.g. Cross, R., Rebele, R., & Grant, A. (2016). Collaborative Overload. Harvard Business Review, 94(1), 74–79). In our research we aim at classifying different modes and characteristics of collaboration in order to identify structural, team-based and individual conditions, which may lead to and indeed explain phenomena of overload. (PI: Simon Lansmann)

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BPM ONLINE ERASMUS+ PROJECT

In February 2016, the Erasmus+ Project BPM Online was kicked off. The project is led by the University of Liechtenstein and among others, the ERCIS partners University of Münster, WU Vienna, and Copenhagen Business School are project members. Combining leading research institutions in business process management (BPM), the project aims to develop a reference curriculum for BPM executive education making use of blended learning opportunities. www.bpm-online.uni.li

WORLD IT PROJECT

In the World IT Project, research institutions from 45 countries from all continents, work on the research topic of IT occupational culture (ITOC). Within the project, there are video conferences on IS/IT research given by professors from South Korea, Slovenia, and Latvia.

ONE OUT OF 10 BPMJ'S MOST EXCEPTIONAL PAPERS

The publication "Ten principles of good business process management" by Prof. Dr. Jan vom Brocke, Dr. Theresa Schmiedel (both University of Liechtenstein, Liechtenstein), Jan Recker (Queensland University of Technology, Australia), Prof. Dr. Peter Trkman (University of Ljubljana, Slovenia), Dr. Willem Mertens (University of Leuven, Belgium) und Prof. Dr. Stin Viane (Vlerick Business School, Belgium) was awarded as one of the ten most exceptional papers of the Business Process Management Journal (BPMJ). The paper presents principles for a good management of business processes and received high international attention.

RESEARCHER EXCHANGE BETWEEN ROME AND KRISTIANSAND

LUISS University and the University of Agder have continued their strong collaboration activities also for the last year, resulting in four researchers from LUISS visiting UiA, while two researchers from UiA have visited LUISS. Several journal articles and conference papers have been co-authored with members from these two partners, and more papers and projects are currently being developed. A major achievement from this collaboration has been the award of the Best Paper of 2015 by the Senior Editors of the Journal of Strategic Information Systems. The award has been communicated to Paolo Spagnoletti, Andrea Resca and Øystein Sæbø during ICIS 2016 in Dublin.

NEWS FROM THE UNIVERSITY OF TWENTE

The earlier visit of Dr. Erwin Folmer of University of Twente to Münster resulted in a joint publication:

Folmer, E., Matzner, M., Räckers, M., Scholta, H., & Becker, J. (2016). Standardized, Flexible Information Exchange for Networked Public Administrations—A Method. Transforming Government: People, Process and Policy, 10(2).

Prof. Dr. Bart Baesens of KU Leuven gave a seminar on using data mining for fraud detection in financial and health care services. The talk was followed by a presentation by Dr. Chintan Amrit on The role of domain analysis in prediction instrument development.

Dr. Jonas Hedman of Copenhagen Business School visited in November 2016 to jointly work on a research project on global sourcing. The resulting study is planned to be presented at the global sourcing conference in La Thule, 2017

JOINT RESEARCH ON MULTI-OBJECTIVE OPTIMIZATION TOGETHER WITH THE LIACS INSTITUTE, UNIVERSITY OF LEIDEN, THE NETHERLANDS

Multiobjective Optimization aims at optimizing several quality criteria of a problem or process simultaneously based on finding the best levels of process influencing factors. Evolutionary Optimization Techniques based on the darwinian principle of natural evolution are state-of-the-art techniques in this field resulting in optimal trade-off solutions balancing the different criteria.

One research focus is on integrating experts' or decision makers' preferences prior to or interactively during optimization in order to focus on practically relevant solutions, e.g. resulting in decision support systems.

Moreover, problem characteristics extremely influence the hardness of the optimization problem. Especially, multimodality of the multiobjective landscape, is a severe challenge in that optimization algorithms might get stuck in only locally optimal solutions. A thorough theoretical analysis of the multimodality issue as well as the extraction of numerical features which will be helpful for efficient automated algorithm selection on unseen problems are investigated.

References to joint papers:

Kerschke, P., Wang, H., Preuss, M., Grimme, C., Deutz, A., Trautmann, H., & Emmerich, M. (2016). Towards Analyzing Multimodality of Multiobjective Landscapes. In Proceedings of the 14th International Conference on Parallel Problem Solving from Nature (PPSN XIV), Edinburgh, Scotland, 962–972 (BEST PAPER AWARD).

Li, L., Yevseyeva, I., Basto-Fernandes, V., Trautmann, H., Jing, N. & Emmerich, M. (2016). An Ontology of Preference-Based Multiobjective Evolutionary Algorithms. eprint arXiv:1609.08082, submitted to IEEE Transactions on Evolutionary Computation

FIRST IDEAS FOR A JOINT ERCIS DOCTORAL PROGRAM

Together with University of Agder, Norway, UMinho is leading an initiative that aims at creating an ERCIS offer of advanced courses for doctoral programs. The proposed concept addresses the creation of courses that cover the state of the art in specific areas and address emerging and challenging topics that constitute research opportunities in IS. Courses are collaboratively taught within the ERCIS network, using distance learning technologies, including tele-conferencing facilities, thus enabling active, distributed participation in the courses.

The motivation for this initiative is that doctoral courses are a practical way of engaging students in critical appreciation and debate of IS themes, thus providing them with a wide perspective of the domain. For one single university it is often difficult to have enough doctoral students to justify the existence of advanced courses on a wide range of subjects. A way of enlarging the audience for such courses is to share them within a thematic network of universities.

Erasmus+ project Jobs for Work 4.0

UMINHO is also just starting the ERASMUS+ project, Jobs for Work 4.0 – The Future of Employment. UMINHO is the scientific coordinator of this project that aims at raising awareness about the developments in the labor market brought about by the digital economy, first and foremost among those professionals who are working in the employment services but also in vocational orientation and education about the challenges they will face, to understand the pace at which digitization and the "Internet of Things" will lead to changes and create entirely new job families while others will become obsolete. In this way it is expected to provide support in planning suitable qualification pathways. This project has the duration of 24 months and it is planned to start in November 2016.

RESEARCHER EXCHANGE BETWEEN ROME AND ST. GALLEN

The joint project on "Simulation studies in IS research" started in 2013 by LUISS and IWI-HSG will continue in 2017 with further exchanges of faculty members from the two ERCIS institutions. The preliminary results of this project have been presented at ICIS 2013 in Milan and the team is working on a journal publication.

NETWORK RESEARCH ACTIVITIES



› GENDER EQUALITY IN INFORMATION SCIENCES AND TECHNOLOGY RESEARCH INSTITUTIONS WITH THE EQUAL-IST PROJECT

EQUAL-IST (“Gender Equality Plans for Information Sciences and Technology Research Institutions”) is an international project funded by the EU (European Union) Horizon 2020 Framework Programme. The project goal is to introduce structural changes to enhance gender equality and diversity in Information Sciences and Technology (IST) research institutions. It has been demonstrated that IST is among the research sectors most affected by gender inequalities at all levels. The project aims at supporting eight Research Performing Organisations (RPOs) from Northern, Southern, Central, and Eastern European countries in designing and implementing tailored Gender Equality Plans (GEPs). All RPOs forming the EQUAL-IST project consortium are at a starting stage in setting up of GEPs and they have also ensured the support in GEP implementation from the respective highest management levels.

The project combines gender mainstreaming and positive actions at three main levels:

1. HR practices and management processes
2. Student services and institutional communication with (potential) students
3. Research design and delivery

Within the EQUAL-IST project the issues of horizontal and vertical segregation in research and administrative careers, work-life balance, gender imbalance among bachelor, master, and doctoral students, as well as gender neutral/blind approach to IST research, will be addressed. This will be done by influencing organisational structures, discourse, and behaviour. In addition, the EQUAL-IST project will promote a participatory approach towards creation of gender equality policies, ensuring at the same time the active dialogue with and involvement of decision makers at the participating RPOs. In order to facilitate participatory co-design of tailored GEPs, a dedicated idea crowdsourcing platform will be implemented. The platform will collect ideas and trigger discussions about promising initiatives for promoting gender equality and diversity at each RPO. These ideas will address specific challenges identified at each RPO and fuel the design of tailored GEPs. The toolkits, guidelines,

and methodologies developed during the EQUAL-IST project, as well as lessons learned, will be disseminated both inside and outside the EU.

The project consortium is formed by such ERCIS member institutions as the University of Münster (Münster, Germany), the University of Liechtenstein (Vaduz, Liechtenstein), the University of Turku (Turku, Finland), Kaunas University of Technology (Kaunas, Lithuania), the University of Minho (Guimarães, Portugal), and Simon Kuznets Kharkiv National University of Economics (Kharkiv, Ukraine). Two further RPOs include Ca’ Foscari University of Venice (Venice, Italy) and the University of Modena and Reggio Emilia (Modena, Italy). The project is coordinated by the ViLabs company (Thessaloniki, Greece).

The project lasts from June 2016 until May 2019. For further information please visit <http://equal-ist.eu>

ERASMUS MUNDUS MASTER OF SCIENCE IN PUBLIC SECTOR INNOVATION AND EGOVERNANCE (PIONEER)

Digitization has penetrated people’s everyday life, privately as well as professionally and has become a simple matter of course. Also the public sector has undergone this development of digitization and eGovernance, thus the delivery of e-government services by means of information and communication technology (ICT). However, this development has to be carefully prepared and implemented to become successful. That is why the public sector of the future needs experts who combine knowledge in public administration and public management on the one hand, and information systems and eGovernance on the other hand. For this reason, the University of Leuven, the Tallinn University of Technology and the University of Münster have jointly developed PIONEER, a Master of Science in Public Sector Innovation and eGovernance. The 120 ECTS comprising master program is co-funded by the European Union and is a new and unique approach to delivering the needed experts for the public sector. After a preparation phase of one year, the Master program will officially start in October 2017. A special focus will be placed on the use of case studies and how new problems in the field of public administration and public policy can be solved through the use of (technological) innovations. International experience and interdisciplinary expertise are two more characteristics, PIONEER builds on:

1. The students will study in all involved countries, starting in Leuven, continuing in Münster, then moving to Tallinn, where they will learn about the country-specific public sector peculiarities as well as the University’s respective expertise, being Public Administration, Public Management, Information Systems and eGovernance. The students can then choose where to finish their study and write their Master Thesis, according to their desired field of specialization.

KU LEUVEN

TALLINN UNIVERSITY OF TECHNOLOGY

WESTFÄLISCHE WILHELMS-UNIVERSITÄT MÜNSTER

2. The interdisciplinary nature of the program is not only guaranteed in terms of content foci but also concerning the composition of students, since PIONEER wants to attract Bachelor students from all over the world and various disciplines like information systems, social and political science, informatics, engineering, criminology and business or law; students from other disciplines will undergo a specific selection procedure.

Once having completed the program, the students will be equipped with an advanced understanding of and insights into the disciplinary knowledge, specific to public management, public administration, information systems and eGovernance as well as the necessary knowledge and tools to apply and implement methods and techniques for the good of a changing public sector environment. Moreover, they will gain excellent communication and project management skills so that they will be able to work in different fields of the public sector in terms of culture and work context. Prospective students can also apply for scholarships to finance their participation in the program.

This project is funded by the ERASMUS+ program of the European Union.



ERASMUS+ PROJECT MASTIS



Based on ideas that were discussed during the ERCIS Annual Workshop in Rome in 2014, Iryna Zolotaryova from our partner university Kharkiv National University of Economics and Jean-Hugues Chauchat from the University Lyon 2, set up a project consortium with several ERCIS partner universities for a project called “Establishing modern master-level studies in Information Systems (MASTIS)”. The cross-regional project will review and improve a Masters program in line with market needs. The project is funded by the ERASMUS+ programme of the European Union and has a duration of 36 months.

The official kick-off of the project took place in Lyon in February 2016, where we discussed organisational and administrative issues and got to know the different Master study programmes of each of the sixteen partner universities.

During the second project meeting in Rome in June 2016, we talked about different innovative teaching methods as well as competences and skills that the graduates of the new Master program should have. A third meeting took place in Kaunas in October 2016, where we had a deeper look existing IS curricula and discussed the results of a first employers survey.

Further information: www.mastis.pro



BPM KEYNOTE AT EMISA

Prof. Dr. Jan vom Brocke from the University of Liechtenstein was invited by Prof. Jan Mendling from the WU Vienna to hold the keynote at the 7th International Workshop on Enterprise Modeling and Information Systems Architectures (EMISA). He talked about the Ten Principles of Good Business Process Management, which were developed together with several other researchers, including researchers from ERCIS partners such as Jan Recker from the Queensland University of Technology.

PUBLISHING REAL-WORLD CASES ON BUSINESS PROCESS MANAGEMENT

Prof. Dr. Jan vom Brocke (University of Liechtenstein) and Prof. Dr. Jan Mendling (WU Vienna) are editors of the Springer book “Business Process Management. Cases”, which provides a rich selection of real-world cases on Business Process Management and which is expected to be published end of 2016. The cases are written by practitioners as well as researchers, including for instance researchers of the University of Münster.



BPM RISE EXCHANGE

As part of the RISE BPM project, funded by the HORIZON 2010 schema of the EU, members of the University of Liechtenstein visited certain ERCIS partners. Dr. Markus Weinmann, Dr. Alexander Simons, and Isabell Wohlgenannt visited the University of Münster, Dr. Bernd Schenk visited the WU Vienna and Alexander Schmid joined the research team at the Queensland University of Technology, Brisbane, Australia. At the same time, researchers from other ERCIS partner universities (PD. Mag. Dr. Gerhard Wohlgenannt from WU Vienna and Markus Monhof from University of Münster), visited the University of Liechtenstein. The project aims at increasing network activities of the worldwide leading research institutions for business process management.

SPECIAL ISSUE ON THE NETWORKED SOCIETY IN BISE

Prof. Dr. Jan vom Brocke, Prof. Dr. Jörg Becker, and Prof. Dr. Marco de Marco published a special issue at the Business & Information Systems Engineering (BISE) Journal on the Networked Society. The topic reflects the theme of the 23rd European Conference on Information Systems (ECIS) 2015 in Münster, Germany and consists of a selection of the best papers presented at this conference:

vom Brocke, J., Becker, J., & de Marco, M. (2016). Editorial. *The Networked Society. Business and Information Systems Engineering*, 58(online first). (ABDC: A; ABS: 2; ISI: 2.219; VHB: B)

SUCCESSFUL RESEARCH COOPERATION BETWEEN MÜNSTER AND LIECHTENSTEIN

Prof. Dr. Jan vom Brocke from the University of Liechtenstein served as co-supervisor for the PhD of Elena Gorbacheva (University of Münster). The cooperation between Liechtenstein and Münster resulted in several publications:

Müller, O., Schmiedel, T., Gorbacheva, E., & vom Brocke, J. (2014). Toward a Typology of Business Process Management Professionals: Identifying Patterns of Competence through Latent Semantic Analysis. *Enterprise Information Systems*, 10(1), 50–80. (ISI: 3.043)

Gorbacheva, E., Stein, A., Schmiedel, T., & Müller, O. (2015). A gender perspective on business process management competences offered on professional online social networks. Paper presented at the 23rd European Conference on Information Systems (ECIS 2015), 26–29 May 2015, Münster, Germany. (VHB: B)

Gorbacheva, E., Stein, A., Schmiedel, T., & Müller, O. (2016). The role of gender in business process management competence supply. *Business & Information Systems Engineering*, 58(3), 213–231.

vom Brocke, J., & Gorbacheva, E. (2016). The Competence Gap—an Empirical Investigation of the Demand and Supply Side. *Notes. BPTrends*(1–7).

TEACHING COOPERATION BETWEEN UNIVERSITY OF LIECHTENSTEIN AND SEVERAL ERCIS PARTNERS

As part of the newly designed Master’s course in Information Systems with the majors in Business Process Management and Data Science, Prof. Dr. Gottfried Vossen, Dr. Armin Stein (both University of Münster), and Prof. Dr. Jan Mendling (WU Vienna) were visiting the University of Liechtenstein to provide lectures to the students.

THE ERCIS OMNI-CHANNEL LAB

Arvato CRM Solutions (Arvato), the global customer relationship management company, has partnered with the European Research Center for Information Systems (ERCIS) at the University of Münster, to create the ERCIS Omni-Channel Lab.

The new Lab combines ERCIS’s established academic research network and teaching facilities with Arvato’s practical expertise of handling 1.7 million Omni-Channel interactions every day for many of the world’s best-known brands. This means that it’s perfectly placed to research innovative solutions and new concepts for Omni-Channel communication challenges.

The Lab’s investigations focus around ‘Processes’, ‘Data’ and ‘Analytics’, combining three key areas of expertise:

- The chair for Information Systems and Information Management (Prof. Dr. Dr. h.c. Dr. h.c. Jörg Becker)
- The Databases and Information Systems Group (Prof. Dr. Gottfried Vossen)
- The chair for Information Systems and Statistics (Prof. Dr. Heike Trautmann)

The team is completed by experienced practitioners from Arvato CRM solutions, headed by Karsten Kraume, Chief Strategy Officer – Arvato CRM Solutions, Board of Advisors RISE_BPM, and ERCIS Omni-Channel Lab Practice Leader.

Teaching and research is already underway to explore Market Segmentation, establish an Omni-Channel Reference Model, evaluate the business value of Omni-Channel CRM, establish a Regulation Framework, and to design a Data Architecture for Omni-Channel CRM strategies.



Prof. Dr. Gottfried Vossen, Prof. Dr. Heike Trautmann, Karsten Kraume, Prof. Dr. Jörg Becker

TEACHING ROLE

One of the key aspects of the Omni-Channel Lab is its active teaching role at the University of Münster. In the winter semester 2016/17, the Lab will offer seminars as part of the Bachelors and Masters programs, allowing students to engage with topics related to Omni-Channel CRM.

Bachelor Project Seminar: Tech-enabled Omni-Channel CRM

This project seminar, in the Bachelor program, will enable eight students to assess different contact center software solutions.

Master Seminar: Stream Clustering

This seminar, in the Master program, comprises six students focusing on stream clustering algorithms, which find patterns in a constant stream of new examples.

RESEARCH PROGRAMS

Market segmentation – evaluating market segmentation from a conceptual and methodological perspective.

Reference model for Omni-Channel CRM – develop a reference model/framework that captures its core management, support and operational delivery activities.

Business value of Omni-Channel CRM – have both a research and a practice-oriented scope by answering questions like: What are the business drivers of Omni-Channel CRM?

Regulation framework for Omni-Channel CRM analytics – design a regulation framework for analytics that can be used as a benchmark in the area of service centers and Omni-Channel customer relationship management.

Data Architecture for Omni-Channel CRM – consisting of all data and management tools needed to enable Omni-Channel related services and underpinning the regulation framework for analytics (above).

About us
For more information, including publications, please go to <https://omni-channel.ercis.org/>

As Arvato is a member of the ERCIS advisory board, a more detailed company introduction is included at the end of this Annual Report.



Since the “P” in Project Management is as much about the “People” as it is about the “Project”, thus representing a crucial success factor, here are some testimonials of researchers who already have completed a secondment in the course of RISE_BPM, telling about their experiences:

Adela del Río Ortega from the University of Sevilla (Spain) who went to Brazil:

“This summer, I did a one-month secondment in Rio de Janeiro working at UNIRIO. It was a great opportunity to broaden my research interests and apply my previous results to other contexts while collaborating with really committed and hard-working people. Being physically there shortened distances (professionally, personally and time constraints due to different time zones) and reinforced our commitment to obtain results, not only in the short term. As a result, we opened several research collaborations, with some clear milestones, that will last for the following years. However, the personal links built during this stay constitute, from my point of view, the key part of this stay. They ease the professional collaboration, which would probably be punctual, less fruitful and also less enjoyable, in other case. The downside, in my case, is twofold: my family charges that make it difficult for me to extend my secondments, and the backlog of work I find when returning. As a conclusion, I consider my participation in this project, and in particular in this secondment, a great experience that widened the researcher network which I work with, helped me to disseminate my results and enriched me personally, intellectually and culturally.”



Since 2016, a second South Korean partner, the Pohang University of Science and Technology (POSTECH) has joined the project consortium. RISE_BPM lasts for four years and had its official start on May, 1st 2015. In the meantime, 56 secondments have already been realized including at total of 45 researchers from all involved countries. A secondment is an at least one month or several months lasting (research) stay. By means of these secondments a total number of ten joint publications in international conferences and in important BPM journals could be accomplished. Those publications, most, probably, would have not been possible without the support of this program, because the researchers would not have had the opportunity to (physically) meet each other and spend the time together that is needed to advance such a publication project.

Bas van Zelst from the University of Eindhoven (The Netherlands) who went to South Korea:



“In April 2016, I visited POSTECH University of technology located in Pohang, South Korea. I enjoyed the visit intensively, both from a research and a social perspective! During my visit I worked on novel techniques for discovering networks of cooperating resources, based on real time streams of business process data. This turned out to be a great success as the work was later accepted at an A-ranked conference on Cooperative Information Systems. During my stay I met several researchers working in the same field. Additionally I’ve attended a national conference on Industrial Engineering, hosted on a beautiful Korean island called “Jeju”. This visit gave me a good overview of the research being conducted in the field, as well as the island itself. During my stay I learned that the Korean, and most presumably Asian, culture is very different from the Western culture. This changed my view on collaboration with (foreign) colleagues in a positive way, i.e., I feel I am now more open and acceptive towards different views on work, and, doing research. I enjoyed participating in the RISE_BPM project as it has enriched me in a variety of ways!”

Markus Monhof from the University of Muenster (Germany) who went to Liechtenstein:



“Currently, I’m at a four month secondment to the Institute of Information Systems of the University of Liechtenstein. Here, I’m following up on a previous secondment in 2015 doing research on customer experience and service quality. Going abroad in the RISE_BPM project is a great opportunity to work on interesting and relevant research topics with experienced and well known researchers all over the world. Especially for early stage researchers, like me, it is a chance to get to know and network with many different researchers. Furthermore, due to the joint research you can learn a lot and get different perspectives on research and the researched topics as well as different working cultures. Despite the cultural differences between Liechtenstein (resp. Austria and Switzerland) and Germany being comparatively small, the international environment (researchers, student assistance, and staff from over ten different nations) at the Institute of Information Systems offers insights on different cultures. The people I met here are all great guys who know their stuff and I enjoy staying here. Additionally, working abroad offers a little relief of day-to-day work. Therefore, it should be possible to focus on the joint research with the partner university and reflect on your research. Apart from work, Liechtenstein and the region is a great place to live. The beautiful alpine landscape offers many opportunities for outdoor activities all over the year. Personally, I learned a lot and I’m still having a great time and great experiences. Therefore, I would encourage everyone, who has the chance, to participate in RISE_BPM in general and visiting the University of Liechtenstein in particular.”



Minseok Song from the Pohang University of Science and Technology (South Korea) who went to the Netherlands:

“In August, I visited TU/e for a month. The purpose of the visit was to continue the collaboration with the researchers in Eindhoven. The topic is resource network analysis in data intensive environments. Specifically, our interest is to show the change of network over time. We focus on discovering, visualizing analyzing useful information about resource network generated from stream data. I really enjoyed the staying. The meetings with the researchers at TU/e were always great and we were able to come up with some exciting ideas. Furthermore, the weather was enjoyable! However, one month was too short to produce a concrete output. I wanted to stay longer, but it was impossible because of my teaching duties. Fortunately, one of our Ph.D. students is visiting TU/e for 6 months and the research is ongoing.

The RISE project gives us great opportunities to broaden our collaboration network. The collaboration with researchers in diverse backgrounds is always interesting. Sometimes innovative ideas pop into our head. To get a fresh idea, I am looking forward to my next secondment in Seville!”

RISE_BPM is funded by the European Union’s Horizon 2020 research and innovation program.



PROPELLING BUSINESS PROCESS MANAGEMENT BY RESEARCH AND INNOVATION STAFF EXCHANGE (RISE_BPM)

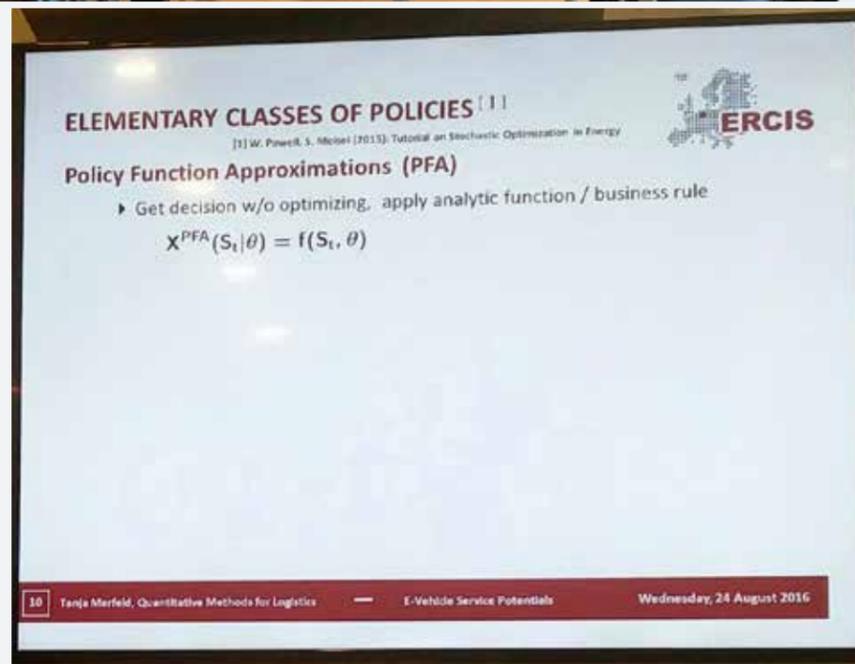
RISE_BPM is the first favourably evaluated project proposal within the Horizon 2020 EU funding programme submitted by the University of Münster as coordinator in cooperation with ERCIS partners. It belongs to the specific funding program: Marie Skłodowska-Curie Actions: Research and Innovation Staff Exchange, which targets supporting individual researcher’s research efforts. The project is aimed at networking world-leading research institutions and corporate innovators to develop new horizons for Business Process Management (BPM). The project consortium, besides the University of Münster as coordinator, includes academic partners from Australia (QUT), South Korea (UNIST), Brazil (UNIRIO), Austria (WU), Spain (USe), the Netherlands (TU/e), and Liechtenstein (UNI-LI) as well as practice partners from the Netherlands (CUPENYA) and Germany (PICTURE).



3RD ERCIS DOCTORAL CONSORTIUM IN KRISTIANSAND, NORWAY

Following the Annual Workshop in Kristiansand, Norway, 8 PhD students from ERCIS partner institutions presented their research endeavours to faculty from Kristiansand (Maung Sein, Devinder Thapa), Guimarães (João Alvaro Carvalho), Copenhagen (Oliver Müller), Bremen (Sara Hofmann), and Münster (Jörg Becker). The PhD candidates had to hand in an abstract of their thesis, present it, and provide reviews for two fellow colleagues.

Aleksandra Lazareva from the University of Agder reported about “Designing Engaging Computer-supported Collaborative Learning (CSCL) Environments”, Tanja Merfeld from Münster talked about “Dynamic Decision Making Models and Methods for Realising E-Vehicle Service Potentials”. In a similar context, Moritz von Hoffen (Münster) presented his research on the “Design of IT-enabled Services for Electric Mobility: Development of Charging Infrastructure and Added Value Through Charging Transaction Analytics”. An eGovernment-oriented perspective was taken by Peter André Busch from the University of Agder (“The Influence of E-Government on Street-Level



Discretion”) and from Hendrik Scholta, University of Münster: “Forms in Government: Coordinating Complexity through Modeling and Standardization”. Zhiwei Yang from the University of Leiden presented his almost finished thesis topic about “Metaheuristics for Vehicle Routing and Inventory Routing Problems”. Carlos Costa from the University of Minho discussed his topic

“A Methodology to Design and Implement Big Data Warehouses: Models, Methods and Instantiations”, while Geir Inge Hausvik from Kristiansand presented his paper on “Conceptual Integration of Information Quality into Healthcare Quality Improvement Processes”.

PROJECT SEMINAR WITH ARVATO: SMART VISUALIZATION OF AUTOMOTIVE DATA ON MOBILE DEVICES, SUMMER TERM 2016

This project seminar established a versatile adaptable visualization tool for 3D model data by partly relying on gaming technology. The primary difficulty was to enable the non-expert user to easily select (and visualize) only the part of the model that is needed for a specific use case, e.g., for the salesroom, individual customer information, car repair, or car construction.

PROJECT SEMINAR WITH ARVATO CRM SOLUTIONS: TECH-ENABLED OMNI-CHANNEL CUSTOMER RELATIONSHIP MANAGEMENT (CRM); WINTER TERM 2016

A major challenge in customer service is the integration of data from a variety of sources to obtain a holistic view on the customer. In the project seminar, students design and implement a framework which allows to integrate data into existing customer service tools. The goal is to present relevant information from different channels to the service agent when handling customer enquiries.

JOINT VIRTUAL TEACHING OF TURKU AND MARIBOR

Professors Reima Suomi, University of Turku and Joze Zupancic, University of Maribor gave the series of videoconferences for the students of new specialization Informatic Applications in Business.

The Department is planning to extend the activities regarding Teaching@ERCIS activity.



Bachelor Winter School 2016

5TH BACHELOR WINTER SCHOOL ON BUSINESS PROCESS MANAGEMENT

For the fifth time, the University of Liechtenstein organized the Bachelor Winter School for Business Process Management (BPM). 18 students from six countries, including students of the University of Münster, learnt about BPM through input sessions by lectures of the University of Liechtenstein and Maric Boudreau from the University of Georgia, USA, and by working on case studies and practical exercises. Further highlights were company visits at Hilti AG and Swarovski AG and sledge riding in the mountains of Liechtenstein.

ERCIS VIRTUAL SEMINAR

After pausing for one year, the ERCIS Virtual Seminar is back with a new concept and a smaller group: Six teams consisting of three students each, hailing from three partner universities (University of Twente, University of Bremen, University of Münster), have to develop a postgraduate course for the topic “Smart Cities”. Each team has been assigned to one lecture, spanning topics like Smart Home, Smart Commerce, Smart Health, or Smart Urban Development. The focus of the groups is on developing lectures that incorporate innovative teaching methods and traditional forms of education. Furthermore, they have to develop the lecture material and to “non-virtually” give the lecture to the other groups during a final presentation in Münster. The results will be made available to the network and interested parties.

PHD SEMINAR IN FLUMSERBERG

In February 2016, Prof Dr. Stefan Seidel from the University of Liechtenstein, Prof. Dr. Jan Mendling from the ERCIS partner Vienna University of Economics and Business as well as professors from the University of Georgia, the University of Cologne and the Goethe University Frankfurt organized a PhD seminar with the topic “Quality in Information Systems Research” in Flumserberg, Switzerland. The 13 participating PhD students had the chance to present their research, discuss current topics in information systems and enjoy the Swiss mountains in winter.



Study trip to vienna 2016

STUDY TRIP TO VIENNA 2016

In March 2016, the students of the Master's programme Information Systems from the University of Liechtenstein travelled to Vienna, where lectures by Prof. Dr. Jan Mendling at the University of Economics and Business (WU), company visits and cultural tours were on the agenda. For the students with over 15 nationalities the excursion was a unique experience to get to know the Austrian capital and the newly opened campus of the WU Vienna in order to gain, next to many new impressions, also important competencies for their further studies.

1ST MASTIS WORKSHOP

Rome, June 8–11, 2016
<http://www.mastis.pro>

UMINHO ORGANIZED SAITE 2016

Stakeholders and Information Technology in Education, an IFIP TC3 joint conference Guimarães, July 6–8, 2016

XIII EDITION OF THE ITAIS CONFERENCE

Verona, October 7–8, 2016
<http://www.itaais.org>

UMINHO ORGANIZED THE 15TH EGOV AND THE 8TH EPART CONFERENCE 2016

September 5–8, 2016, Guimarães
<http://www.egov-conference.org/egov-2016>

UMINHO successfully organized in Guimarães the Dual EGOV 2016 and ePart 2016 conference – 15th IFIP Electronic Government (EGOV) and 8th Electronic Participation (ePart) Conference 2016, the working conference of the IFIP Working Group 8.5. These conferences provide a successful forum for the presentation of research results obtained by academics and researchers who develop activity in the field of e-Government, e-Governance and related fields of study. The conference was organized in collaboration with the Operating Unit in Electronic Government of the United Nations University (UNU-EGOV <http://egov.unu.edu/>) hosted by UMINHO in a smaller campus in Guimarães, Campus de Couros.

29TH BLED E-CONFERENCE DIGITAL ECONOMY

June 19–22, 2016, Bled, Slovenia
<http://BledConference.org>

Bled eConference attracts speakers and delegates from universities, business, information technology providers and government and is the major venue for researchers working in all aspects of “e”.

The 29th Bled eConference was about the Digital Economy. The digital transformation is accelerated by exponentially growing technologies and is visible in all sectors, from Education (through MOOCs) and Finance (FinTech) to Electronics and Automotive. Therefore, the main focus was on many aspects pertaining to the dawn of the Digital Economy as well as how to seize the numerous new opportunities it brings.

10TH ANNIVERSARY

EUROSYMPOSIUM CONFERENCE

In 2017 Department of Business Informatics will organize the 10th anniversary Eurosymposium conference. More information will be available on eurosymposium.eu.

13TH INTERNATIONAL CONFERENCE ON INFORMATION MANAGEMENT

On May 17–19, 2017 the 13th International Conference on Information Management will take place in Gdansk, organized by the Department of Business Informatics

35TH INTERNATIONAL CONFERENCE ON ORGANIZATIONAL SCIENCE DEVELOPMENT

March 16–18, 2016, Portorož, Slovenia
<http://fov.uni-mb.si/conference>

The International Conference on Organizational Science Development is the conference with the longest tradition at the University of Maribor. Every year in March it persuades a lot of people who approach “organization” & “organizing” in a great variety of ways to leave their working environments or projects for a few days and come to Portorož.

The 35th International Conference on Organizational Science Development was called “Sustainable Organization”. Sustainability is becoming part of society’s mainstream values. Therefore, falling behind on sustainability will represent an increasing risk for organizations, which could affect the overall organizational performance and might also affect their ability to create long-term stakeholder value.

EVENTS IN 2017

In 2017 again several events will be organized connected to ongoing research projects and PhD defenses. Monitor our website www.utwente.nl, www.ctit.nl and IEBIS and SCS departments to stay tuned



Jury of ERCIS Launch Pad 2015

ERCIS LAUNCH PAD 2015

ERCIS Launch Pad – the annual IT business ideas competition of ERCIS – will be held for the 9th time on 7th December 2016. Keeping up the tradition of past Launch Pads, it serves as platform for founders and potential founders from all over Germany to present their ideas to a top-class jury of founders, funders, and academics. As in previous years, participants of the 9th Launch Pad can win cash and attractive prizes worth more than 10.000 euro. Besides the finalists’ pitches, this year’s program will feature a keynote by André Henning, coach of Rot-Weiss Köln’s hockey team, and an experience report by previous year’s winner Markus Sudhoff (tapdo).

The 8th edition, which took place in 2015, saw another record number of submissions, out of which nine finalists were invited to pitch their ideas to the jury. Eventually, Skillconomy won the award for best overall concept (sponsored by Fiducia & GAD IT AG); tapdo (renamed from moboo) won the innovation award (sponsored by noventum consulting GmbH), the PayPal start-up support, as well the audience award; OXY4 won the awards for best commercial potential (sponsored by NRW Bank) as well as best scientific grounding (sponsored by ERCIS). Extra prizes went out to stressfrei and ecoligo.

<http://www.ercis-launchpad.de/>

EVENTS IN THE ERCIS NETWORK

› Events in the ERCIS Network www.ercis.org

EDUCATION IN INFORMATION SOCIETY
September 18, 2016, Kranj, Slovenia
<http://vivid.fov.uni-mb.si/>

Modern life can no longer be imagined without information and communication technologies (ICT). In pedagogic terms, ICT increases both the level of motivation among learners as well as their creativity; it allows teachers to present complex knowledge and skills in a much clearer manner and illustrate intricate issues through play, practical examples and interactive learning. This conference presents both the modern teaching methods as well as the use of modern ICT at the primary, secondary and tertiary level of education. It also analyses the situation in Slovenia and inform us of developments elsewhere in Europe.



ERCIS@ICIS AND ERCIS@ECIS

Already a tradition, ERCIS members met at the International Conference on Information Systems (ICIS) in Fort Worth, Texas, USA, end of 2015, as well as at the European Conference on Information Systems (ECIS) in Istanbul, Turkey, in June 2016.

With about 20 people attending the meetings, they have become a nice opportunity to have a chat with fellow colleagues between the Annual Workshops. This year's meeting at ICIS in Dublin will take place on Monday evening (December 12th). Next year's ECIS meeting will be, again after ECIS in Münster, be an ERCIS@ECIS@ERCIS meeting, as ECIS 2017 will take place at our network partner, the University of Minho in Guimarães, Portugal!

ERCIS ADVISORY BOARD MEETINGS 2016 IN MÜNSTER

Since the decision was made to have an Advisory Board Meeting every 9 months, we had two meetings this year, the first in January the 25th and the second in September the 26th.

Researchers from the ERCIS headquarters and representatives of the member companies arvato Bertelsmann, Deloitte, IQ Optimize Software AG, Johannes Räckers GmbH & Co. KG, ownCloud GmbH, and SAP SE, saracus, and zeb well as invited guests from anaptis GmbH, AT Kearney, Eucan GmbH, Informationsfabrik GmbH and Zweitag GmbH met on the Leonardo-Campus for inspiring talks and discussions on various topics.

In January the academic director Jörg Becker gave a short introduction and Armin Stein, the managing director, presented a recap on the ERCIS activities in 2015. Followed by a presentation of one of the ERCIS



competence centers which integrates the research efforts of the ERCIS network in the domain of crisis management and humanitarian logistics. After lunch the main topics that day were IT Security, Information Systems in a digitized world, Propaganda detection in online media and mobile devices in business processes who have been discussed in fishbowl sessions which led to a lively discussion in the plenum.

The meeting in September set a record in the number of participants. Heike Trautmann presented the newly founded ERCIS Omni-Channel lab powered by Arvato and

Martin Matzner talked about "Predictive Process Analytics". After lunch the topics IT Service Management and E-Competencies presented by Christian Remfert and Michael Räckers formed the agenda.

All in all, the ERCIS Advisory Board Meetings 2016 were a further step towards an active network and a fruitful dialogue between research and practice. Like every time, the day passed by too soon and we were left with a lot of interesting ideas for future collaborations. We are looking forward to our next meeting in May 2017!

ADVISORY BOARD

› Advisory Board www.ercis.org

arvato BERTELSMANN

OUR COMPANY

Arvato is one of the world's leading international service providers. For over 50 years, we have helped organizations to succeed, whether that is about engaging customers, streamlining operations or expanding into new markets.

We deliver services ranging from customer relationship management and digital marketing to financial services, supply chain management and IT services.

Wholly owned by Bertelsmann, Arvato employs over 70,000 people in more than 40 countries. The sheer scale and diversity of our services helped us to achieve revenues of €4.7bn in 2015.

OUR APPROACH

We put our clients' customers first. At Arvato our ambitions go far beyond making our clients' customers happy. We aim to turn them into ambassadors. People whose actions and recommendations boost our clients' balance sheet, reputation or growth; helping organizations to be successful however they measure it.

We are built for good business. We believe in creating sleek business processes built on smart technology that are efficient, save our clients' money and – most importantly – exceed their customers' expectations. We take the administrative and logistical pressure off organizations so they can get on with what they do best.

We collaborate with leading institutions in business and academia to operate, manage and transform CRM. Our partnership with ERCIS is proven and growing.



OUR AREAS OF INTEREST

- Customer experience management
- Omni-channel customer relationship management
- Big data and advanced CRM analytics

OUR PEOPLE

Our approach to our people is shaped by our culture of partnership, entrepreneurship and creativity.

We train our employees to the highest degree and trust them to do a good job. It is only by giving people the support they need to develop and the responsibility they need to prove themselves that we can genuinely transform our clients' businesses.

Arvato offers a wealth of career opportunities to bring out your best. Are you engaged, ambitious and effective? Are you smart and dedicated? If the answer is yes, the chances are that Arvato is the right place for you, so get to know us at:

careers.arvato.com

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P +49 5241 80-1460

www.arvato.com

THE OMNI-CHANNEL LAB – POWERED BY ARVATO

The Omni-Channel Lab combines ERCIS's established academic research network and teaching facilities with Arvato's practical expertise of handling 1.7 million Omni-Channel interactions every day for many of the world's best-known brands. This means that it's perfectly placed to research innovative solutions and new concepts for Omni-Channel communication challenges.

For more information please go to <https://omni-channel.ercis.org/> or check out the introduction in the NETWORK RESEARCH ACTIVITIES section of this annual report (page 99).



ABOUT THE COMPANY

A unique combination of professional and technological knowledge

avantum consult is a specialist for Corporate Performance Management and Business Intelligence. We offer our customers a wide range of services, from business consulting (e.g. the development of business concepts for business analytics, predictive analytics, planning, management reporting, process improvement and transformation – especially in times of digitalization) to technical implementation. This combination of business and technological competence gives avantum consult the edge over other consulting firms.

Long-standing client relationships based on trust

We form long-standing relationships to clients from the upper mid-sized market and to large corporations that are based on trust. With more than 1.000 national and international consulting projects and more than 100 salaried employees, avantum consult is one of the leading service providers in this market.

Targeted exchange and know-how transfer

With each of our projects, we help boost corporate success in a targeted manner. We rely on a comprehensive and time-tested project and change management approach for a variety of projects. We allow our clients to securely achieve their objectives with creative, innovative solutions, independent consultants and an integrated value chain. Project complexity is significantly reduced through close and cooperative collaboration, which simultaneously allows intensive exchange. When a project ends, you are guaranteed to be in the position of operating your systems independently, in line with your specific requirements.

A wide range of products and customised solutions

- Data Warehouse and ETL (development and enhancements to modern Big-Data-Technologies)
- Master-Data-Management-Solutions
- Business-Analytics-Solutions (esp. based on IBM Cognos TM1 and SAP BW/HANA)
- Predictive Analytics & cognitive systems (e.g. IBM Watson Analytics)
- Cloud Planning and Reporting (SaaS Integrated Planning and Forecasting Solutions)
- BA-Strategy (check, development and implementation)
- Corporate Controlling Solutions
- Change & Transformation Management

IT implementation with software solutions of leading manufacturers

- IBM
- SAP
- All for One Steeb AG
- Bissantz



TOPICS OF INTEREST

- Data Warehouse and ETL
- Big Data and Information Management
- Business Analytics and Predictive Analytics
- Integrated Planning, Forecasting and Simulation
- Management Reporting and Dashboarding
- (Digital) Transformation Management
- Performance Diagnostics and Performance Improvement
- Process Optimisation
- Project Management
- Controlling Concepts



JOB OPPORTUNITIES

As a consultant at avantum consult you work closely with our customers in all industries and together with your colleagues. Within our projects you will quickly take on responsibility and assume a variety of tasks.

We are always looking for talented and motivated employees for our locations in Düsseldorf, Filderstadt, Munich, Hamburg and Zurich. Our hierarchy model allows for the following levels and positions:

- Assistant Consultant
- Consultant
- Senior Consultant
- Manager / Solution Expert
- Senior Manager / Senior Solution Expert

Current vacancies can be found at: www.avantum.de/karriere

Follow us on Xing, twitter, facebook, LinkedIn.



ABOUT THE COMPANY

As a leading supplier of merchandise management systems, Bison offers complete solutions for retail. Bison has its headquarters in Sursee, employs approximately 600 staff and generates a turnover of over EUR 80 million. With over 30 years of market experience, Bison makes a reliable, secure contribution to the success of its customers. Each customer receives comprehensive and long-term support, with a focus on mutual trust and the protection of customers' IT investments.

Bison Retail Solution was specially developed for the retail sector. This solution covers the core processes for goods management and at the point of sale in full. By integrating a solution for traceability, Bison offers a modern, up-to-date package of solutions. Based on the standard solution and individually tailored to customer preferences, considerable added value is created for the customer.

The Bison Retail expertise hub has comprehensive process knowledge and can provide and implement technical solutions, above all in all areas relating to multi-crosschannel @. Bison Process enables a crosschannel sales approach and process management, including in-store, e-commerce and m-commerce. This industry model provides retail-specific processes. These can be individually configured to meet the company's requirements, without programming and without losing the release capabilities of the software. The open architecture of Bison Process ensures the company a high level of investment

protection; the software is always a step ahead of challenges in the market, both in terms of its technology and its functionality.

The product portfolio is complemented by POS solutions, electronic shelf labelling (ESL), mobile solutions for mobile end devices and digital signage solutions. Bison's modern POS solution can be perfectly integrated into existing system environments thanks to the modular structure and its exceptional flexibility. Thanks to the ESL concept, the headquarters or individual branches can respond quickly to changing market or price situations. The wireless base station simplifies internal processes and creates a direct connection between the shelf and POS. The high quality display is based on leading e-paper technology and guarantees optimum readability and no reflections on the screen. In addition, the electronic shelf labelling at the POS creates new possibilities in terms of information. This is used not only for product identification and price labelling, but also in combination with specially developed apps which provides further useful services for the customer in terms of traceability of the product, product features, contents (allergens) etc. Thanks to the mobile solutions, normal Smartphone devices can be turned into powerful mobile hand-held devices. The scanning solutions include a barcode scanner, a magnetic card reader and an optional Bluetooth component to connect a mobile printer. The new RFID option vastly expands the range of uses. Thanks to standard or individually programmed applications, the devices offer a multitude of application possibilities, e.g. stocktaking, order creation, goods-in process and picking.

Bison offers innovative communication options through digital signage. The solutions can be managed efficiently thanks to the simple user functionality and automatic interfaces. The iBeacon technology means that a range of services are possible in retail, for example targeted display of product information at the POS in real time, guidance of visitors when they en-



ter the shops and display of personalised special offers. In principle, this standard offers comprehensive support for mobile purchasing. It also makes it possible to carry out a detailed analysis of customer purchasing behaviour data. Bison is a general contractor and covers all the processes of a modern retailer using integrated solutions, from the central ERP system to branch management to POS systems and digital signage.

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 iPod, iPhone and iPad in operating procedures
- E-Paper integration options (e.g. Electronic Shelf Labeling)

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

For further information please visit www.bison-group.com





CLAAS

ABOUT THE COMPANY

There are very few companies that have influenced the development of agricultural technology, and also agriculture itself, as much as CLAAS has. What started in 1913 with the manufacture of powerful straw binders has become a leading giant on the global market: CLAAS is one of the world leaders in the production of agricultural technology. The company is the European market leader in combine harvesters and world market leader for self-propelled harvesters. Its tractors, balers and forage harvesting machines also hold top positions in agricultural technology worldwide. This is supported by the most state-of-the-art information technology. Machine-to-machine communication, intelligent networking, the improvement of the harvesting process as a whole – industry 4.0 is already the company's reality and sustainability is its principle.

CLAAS products ensure efficiency in agricultural production and they go easy on natural resources as they continuously reduce energy consumption. More than 11,000 employees are engaged in this task in 140 countries; talented people from all professions, who make their daily contribution towards feeding the world.

TOPICS OF INTEREST

- Connected machines
- Farming 4.0
- Omni-channel customer experience
- Precision Farming
- Data Management

Up until just a few years ago, the trend in agricultural engineering was characterized by increasingly large machines. Today, however, the harvest chain is seeing many innovations coming through, especially in drive technology, machine intelligence and networking. In 2010, CLAAS consolidated its range of electronics expertise and, since then, has placed it under a collective name. "Efficient Agriculture Systems", abbreviated as "EASY", is the CLAAS collective term which encompasses machine control and performance optimization, steering systems, precision farming and monitoring, software solutions and services. However, digital transformation has not only changed the technology of our machines. New product features, different license models and data driven business models require our business unit for sales and service to rethink our traditional way of doing business. At CLAAS we are striving to digitize all traditional customer touchpoints for each and every farmer. Our online and offline world is merging into one Omni-channel customer experience.

CLAAS is investing in its digital future and has now laid the foundations for a new electronics development center in Dissen, near Osnabrück in western Germany. Construction work is taking place on a site of around five hectares and is set to be completed sometime next year.



JOB OPPORTUNITIES

CLAAS is special because it is a family-owned enterprise with a long-term, forward-looking approach which is based on the commitment of its employees. At CLAAS, you won't find 'just another job'. You will instead face the challenging task of continuously improving harvesting performance through innovative technology.

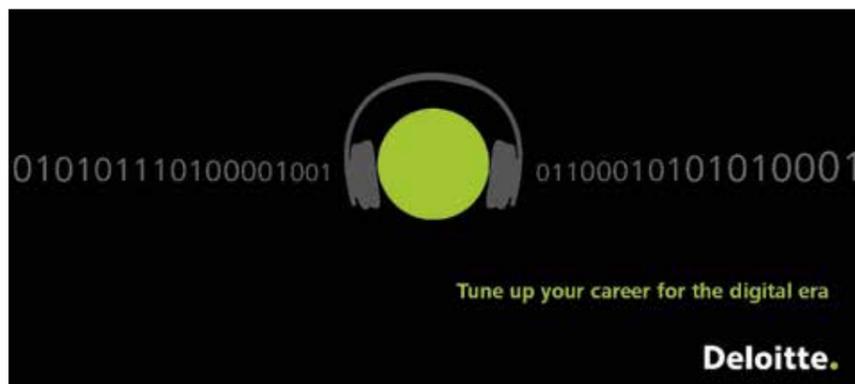
- Selected vacancies in Germany for professionals: Senior software developer for operating systems, Software developer for embedded software, Application developer SAP
- Selected vacancies in Germany for students: Thesis student for SharePoint solutions, Internship digital transformation, Internship online business after sales

If you have any questions about our current international vacancies, our contacts at the respective locations are happy to help.

www.claas.jobs

Instagram: [@claas_careers](https://www.instagram.com/claas_careers)

Deloitte.



ABOUT THE COMPANY

Deloitte is the brand under which over 244,000 professionals in independent firms throughout the world collaborate to provide a broad spectrum of service. These range from audit to tax and legal advice, consulting, and corporate finance. With a globally connected network of member firms in more than 150 countries, Deloitte brings world-class capabilities and high-quality services to our clients. Combining specialized knowledge and in-depth industry expertise within multi-disciplinary teams, we deliver the insights needed to address complex business challenges. Our clients include renowned companies from around the world. 79% of the Fortune Global 500 companies are clients of Deloitte. In 2015, Deloitte grew for the fifth consecutive year and achieved a revenue of \$ 36,8 billion.

Deloitte is one of the world's leading, continuously fast growing global strategy consulting companies. In Germany Deloitte also offers a wide range of consulting services, including Technology, Human Capital, Strategy and Operations related services across all industries. The Technology practice supports the CIO in addressing complex business and IT challenges. The service portfolio encompasses IT Strategy, IT Architecture, IT Governance, IT Sourcing, IT Effectiveness, IT M&A, Information Management, Enterprise Application as well as SAP-related and Digital-related services. Out of sixteen offices in Germany, we are working with clients from various industries in multidisciplinary national and in-

ternational teams to satisfy our customer's needs. Forrester Research Inc. labeled Deloitte a leader and "the gold standard" in IT organization redesigning.

TOPICS OF INTEREST

Deloitte is leading in innovation to help companies to be successful. That requires a clear understanding of what impacts markets – and thus our customers – as well as what will impact them in the future. Seminal studies, monitoring, and trend prognoses are our tools to help our clients and solidify our position as pioneers. As a result, we continuously extend our service offering to account for trends.

With Deloitte Digital a dedicated brand has been established focusing on supporting our clients with the creation of new digital businesses, products and solutions. Deloitte's global digital network consists of 21 studios in 20 countries around the globe and is growing rapidly. To be able to best support clients mastering upcoming digital challenges we developed the garage which acts as a nucleus to breed innovation and create disruptive business models. With big data being relevant like never before, the Deloitte Analytics Institute offers a research, innovation and prototype focused Analytics Think Tank - combining academic, vendor, business and service approaches with market needs. As proof of heading in the right direction AdvertisingAge recently named Deloitte Digital #2 of the world's largest digital agency networks globally and Kennedy has named Deloitte "Global Leader in Digital Strategy Consulting" in 2013.

We are seeking to interact with you as ER-CIS member institutions in order to explore the opportunities for developing efficient and innovative first class IT solutions to fulfill business strategies. We are looking forward to getting in touch with you, being your partner in providing real-life industry insights, and getting your inspiration as a dedicated scientific institution.

JOB OPPORTUNITIES

As an integral part of Deloitte's ambitious growth strategy, we are always looking for graduates, young professionals and professionals having the desire to start their career at Deloitte. We offer workshops to provide insights into what it's like to work as a consultant. We would like to welcome you as a participant in our upcoming ERCIS seminars, working with us on innovative solutions for current and upcoming issues of CIOs. Are you interested? Then follow us on Facebook, pay attention to news on the ERCIS website and visit deloitte.com/careers for open positions.

facebook.com/deloitte.deutschland

xing.com/companies/deloitte

youtube.com/deloittedeutschland

twitter.com/deloittejobsde



COLLABORATION WITH ECWT

The European Centre for Women and Technology provides a European level meeting place for 130+ leading public-private actors, academia and NGOs collaborating for measurably and significantly increasing the number of girls and women in technology in general and ICT in specific. ECWT serves as a European single point of contact for information, collection and analysis of data, research and the development of appropriate methodological tools to attract more girls to Science, Technology, Engineering and Mathematics (STEM), for nurturing and retaining women in the knowledge economy through industry and entrepreneurial careers, for promoting the female talent to provide added value to ICT solutions, for supporting more female ICT business start-ups and consolidating the largest network for closing the Digital Gender Gap in Europe.

The ECWT strategy is implemented through National Point of Contacts established in 21 countries (2013) hosted by key national public actors (CTI, Switzerland, Swedish Agency for Economic and Regional Growth, Malta Information Technology Agency), corporate companies (SAP and SAP Research), universities (Aalto University, Finland; CISRE Formazione Avanzata / Università Ca' Foscari Venezia, Italy; KIT – Germany, NTNU, Norway, Reykjavik Technical University), SMEs (Global Contact, France, PROMIS@Service Luxembourg, Zen Digital, Belgium;), national ICT, telecom and trade associations (DI ITEK, Denmark, Intellect, UK; InfoBalt, Lithuania; PIIT, Poland) and NGOs (ATI, Spain; Bulgarian Centre for Women and Technology, Bulgaria; EWMD Portugal; Femei in Tehnologie, Romania; HEPIIS, Greece; NaTe, Hungary, VHTO, The Netherlands).



Having been founded just before the global financial and economic crisis, sustaining our network was indeed a challenge. Since 2013, we had major breakthroughs for ECWT: involvement in the European Parliamentary Hearing on Women in ICT and in two European level and several national pledges for the Grand Coalition for Digital Jobs:

We are proud to have ERCIS among our Members and believe that with the extended governance structure adopted from 2014 ECWT Alliances and ERCIS Competence Centres should be able to identify joint research priorities for working together within HORIZON2020.

Personally I am also confident that ECWT's Gender Action Plan that has resulted in an increase of female researchers at Simula Research Laboratory from 19% in 2009 to 26% end of 2012 should be of interest to ERCIS Members. I therefore look forward to closer interactivity between our networks!

Eva Fabry
Director of the European Centre for Women and Technology – ECWT

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www.womenandtechnology.eu



ABOUT THE COMPANY

Hilti develops and manufactures systems and services that feature leading-edge technology and provide the construction and energy sectors with outstanding added value. Hilti stands for innovation, quality and direct customer relationships. Some two-thirds of Hilti's more than 23,000 worldwide employees work directly on behalf of customers in Hilti sales organizations and technical service units. They generate more than 200,000 daily interactions with customers, creating the basis for the ongoing development of new products and services.

The Group's strategy is aimed at sustainable value creation through market leadership and differentiation. The overarching goal is to create enthusiastic customers on a daily basis and to build a better long-term future.

As a result, Hilti connects its financial success with a comprehensive responsibility towards society and the environment. A mutual sense of openness, honesty and tolerance applies to team members, partners and suppliers alike.

Guided by the conviction that entrepreneurial growth also generates personal growth, Hilti pursues an employee- and performance-oriented corporate culture. The values of integrity, courage, teamwork and commitment form a solid foundation and are equally supported by all worldwide employees.



Hilti Group headquarters are located in Schaan, Principality of Liechtenstein, where the company was founded in 1941 by brothers Eugen and Martin Hilti. All company shares are held by the Martin Hilti Family Trust, a fact that ensures long-term continuity and the ongoing development of the company. Thus Hilti has a proud heritage, built over 75 years, and a worldwide reputation for pioneering products and exceptional service.

And Hilti is a great place for you to show your worth as you learn, grow and carve-out your career in Information Technology. Within Hilti, Global IT develops together with Business Units and Market Organizations solutions to drive the digital transformation of Hilti. Our three strategic locations – Buchs (CH), Kuala Lumpur (MY) and Plano, Texas (US) – offer a truly global perspective.

So, have a career with the best! Become a valuable member in a highly professional and international team of IT experts and meet the challenges of a global multinational company using latest technologies.

TOPICS OF INTEREST

- Business Process Management
- Customer Relationship Management
- IT Project Management & IT Governance
- Smart Workplace & Client Technology
- Unified Communication & Collaboration
- Digital Customer Collaboration
- Internet of Things
- User Mobility & Mobile Apps

JOB OPPORTUNITIES

- eCommerce Business Developer in Plano (TX), United States
- IT Process Consultant in Kuala Lumpur, Malaysia or Buchs (SG), Switzerland
- Junior IT Solution Engineer – Digital Workplace Collaboration in Switzerland, United States or Malaysia
- Internship on Learning & Training Concept Development and Implementation in Buchs (SG), Switzerland
- Internship on Digital Customer Collaboration in Buchs (SG), Switzerland
- Hilti Fellowship program at University of Liechtenstein
- Project Manager, Sales and Services Applications in Buchs (SG), Switzerland
- Process Expert, Sales and Services Applications in Buchs (SG), Switzerland

Find more open positions on <https://careers.hilti.com>



ABOUT THE COMPANY

The retail company Lidl is one of the leading companies in the food retail sector in Germany and Europe. We place value on an optimal price-performance ratio for our customers. At Lidl, we are convinced of our business model “best quality at the best possible price” – in a pleasant shopping environment. We are a retail chain with a systematic store concept. Simplicity and process orientation determine the daily activities in the stores, the regional distribution centers and the national subsidiaries. Lidl is represented in 30 countries worldwide and operates around 10,000 stores, more than 140 distribution centers in currently 27 European countries and has some 215,000 employees. Dynamism in daily implementation, performance in the results and fairness in dealing with one another characterize working at Lidl across the globe. The headquarter of the company is still based in Neckarsulm. In the 2015 financial year, Lidl generated revenues of 64.4 billion Euros.

Our guiding principle: “If you stop getting better, you stop being good!” Our corporate culture comprises the willingness to develop ourselves further, adapt to new circumstances and continually improve ourselves. We go about this in a dynamic and team-oriented way. Our willingness to do things differently or to adapt existing concepts is what makes us successful.

Efficient processes form the basis for a successful business model that offers customers in Europe the best product quality at the best price. A powerful IT system and



application landscape makes up a significant portion of constant process optimization. The IT landscape at Lidl is in the biggest transitional phase in the company's history.

The strategic alignment places the focus on closely coordinated international collaboration and digitalization. IT at Lidl is tasked with ensuring seamless interconnectivity with a highly available and integrated system landscape and the application of the latest technologies. Lidl's high-performing, motivated and entrepreneurially thinking IT team safeguards its success by means of close collaboration along with intensive and fair interconnectivity and cooperation with the world's leading software companies such as SAP, GK Software, Teradata, Microstrategy and implementation partners such as KPS, Software AG, Ernst & Young and MGM. This is supplemented by projects with research institutes at renowned universities.

TOPICS OF INTEREST

- Digital Transformation and Innovations
- Business Transformation
- Cloud
- SAP HANA
- Big Data & BI
- SAP Retail/EWM/CAR
- Salesforce
- SuccessFactors

- GK Software, Hybris
- Solution Development
- Design Thinking

JOB OPPORTUNITIES

In a wide range of exciting tasks and global projects, employees work in a dedicated, independent and cheerful way towards providing optimal support for the business of Europe's largest retail company with respect to assisting global business processes, and designing, developing and rolling out systems. Further, they ensure a highly available IT system and application landscape as well as ultra-modern high-end technologies. Goals: Using one IT platform and system landscape to reduce the complexity of applications in an agile way and to place emphasis on the user's benefits.

Become part of IT at Lidl – a wide range of exciting tasks await you! We are looking for go-getters who hit the ground running, always think ahead and enable to make things happen.

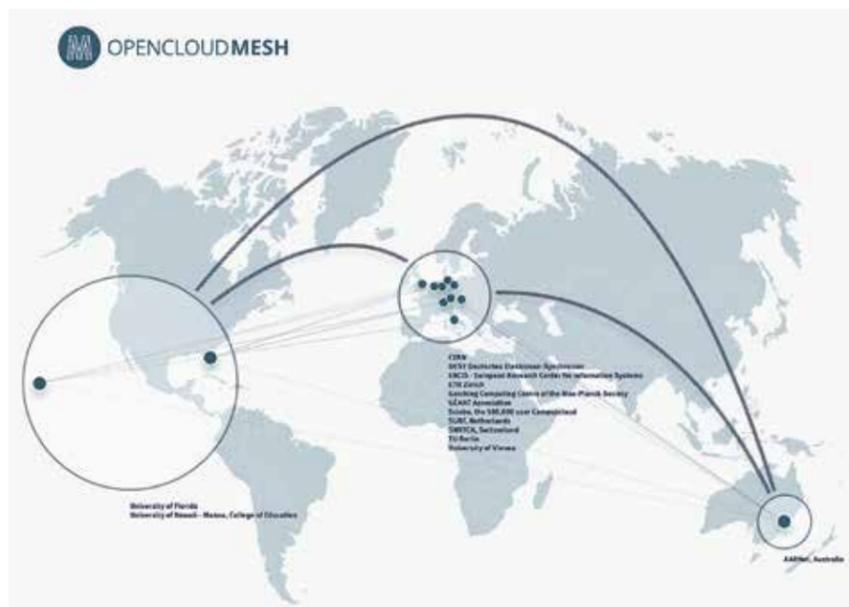
Lidl. More IT than you might think! Find out about our attractive job offers at jobs.lidl.de, xing.com/company/lidl, twitter.com/lidl



ABOUT THE COMPANY

Organizations that must share confidential data internally and externally rely on ownCloud's On-Premises Enterprise Universal File Access Platform. Only ownCloud gives IT the visibility and control required to manage sensitive data, preserve business processes and integrate with existing compliant infrastructures while offering users the modern collaboration experience they demand. This is made possible through ownCloud's open, modular architecture, extreme extensibility and unique federated cloud sharing capabilities.

The business model of ownCloud is very similar to other successful Open Source companies, offering a Community and Enterprise Edition. The Enterprise Edition includes additional functionalities, services and support around ownCloud for the enterprise. The company is dedicated to working entirely in the open, accelerating development in the areas of its customer's needs while enabling a completely open development process where everybody can contribute. For information about our Community Edition visit www.owncloud.org. For further information about the Enterprise Edition for organizations please visit: www.owncloud.com



TOPICS OF INTEREST

In the research and education market, ownCloud has initiated Interconnected Private Clouds for Universities and Researchers worldwide. Leading research organizations in the Americas, Europe and Asia/Pacific joined to create world's largest public private cloud mesh.

OpenCloudMesh, a joint international initiative under the umbrella of the GÉANT Association, is built on ownCloud's open Federated Cloud sharing application programming interface (API) taking Universal File Access beyond the borders of individual Clouds and into a globally interconnected mesh of research clouds — without sacrificing any of the advantages in privacy, control and security an on-premises cloud provides. OpenCloudMesh provides a common file access layer across an organization and across globally interconnected organizations, whether the data resides on internal servers, on object storage, in applications like SharePoint or Jive, other ownClouds, or even external cloud systems such as Dropbox and Google (syncing them to desktops or mobile apps, making them available offline).

Further information and how your organisation can join OpenCloudMesh: <http://oc.owncloud.com/opencloudmesh.html>

For Research and education customers we have negotiated a framework agreement with the GÉANT Association. The GÉANT Association, representative of the European National Research and Education Networks and ownCloud have agreed on a favoured-pricing scheme for GÉANT members and their attached constituents. For further information please contact us sales@owncloud.com

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 90491 Nürnberg
 Germany

sales@owncloud.com
 phone +49 911 14888690

www.owncloud.com

JOB OPPORTUNITIES

ownCloud is hiring.
 Please visit: <https://owncloud.com/jobs/>



ABOUT THE COMPANY

The PICTURE GmbH intends to promote organisations in their modernisation efforts. We combine a methodical approach, technical support and considerable process expertise with a sustainable qualification approach. This integrated approach helps to achieve success in process management. The PICTURE GmbH is a spin-off of the University of Münster, founded in 2007 by Lars Algermissen and Thorsten Falk. Thereby the PICTURE GmbH stays connected with the university and still benefits from a transfer of knowledge. The core business segment of the PICTURE GmbH is process consulting, process analysis and organisational design. The PICTURE GmbH is a consulting firm as well as a software company with consultants and developers specialised on process consulting. The company is well known for the PICTURE method and the PICTURE platform, which in combination allow describing, analysing and optimising business processes within organizations.

THE PICTURE METHOD –

EASY. EFFECTIVE. EFFICIENT.
 On the basis of 24 building blocks the Picture method provides the opportunity of process controlling by gathering and illustrating process data in a plain and transparent manner.

This method of process modelling lays the foundation for an extensive business assessment, as it offers a target-oriented and efficient way to analyse the coherencies of a company's organisational structure and business procedures.



The following illustration furnishes a brief overview about the Picture method:

Self-Explanatory

Simplified process modelling due to easy-to-use an intuitive components.

Standardized Process Description

Increased comparability and analysability due to a formal and contentual standardisation of the description level.

Instruction and Integration of Employees

Due to its simplicity it enables employees to adopt this model quickly and fosters staff acceptance.

Flexibility in Process Description

The PICTURE method can be personalised according to the individual requirements of organisations.

Efficient Process Modelling and Activity Analysis

The 24 building blocks enable to filter essential information for further analysis.

THE PICTURE PLATFORM

The Picture method is embedded in the web-based Picture platform. This platform serves to support process management within organisations as well as inter-site projects. The PICTURE platform is tailored to the special needs of organisations and aims to provide a vivid, precise and generally intelligible methodology to illustrate these needs through customised processes.

Visit our website www.picture-gmbh.de

JOB OPPORTUNITIES

Job Opportunities at the PICTURE GmbH:

- (Junior) Sales Consultant (f/m)
- (Junior) Consultant
- (Senior) Consultant
- Software Developer
- Student Assistant (f/m)

TOPICS OF INTEREST

- Process management and optimisation
- Quality Management and Risk Management
- Organizational review
- Knowledge Management
- Task and Product Review
- Software implementation
- Process Benchmarking
- Change Management
- Process-oriented Budget Consolidation
- Implementation of Document Management Systems Reorganisation Studies Interface Analyses, Implementation of Software



ABOUT THE COMPANY

The firm Räckers is a medium-sized family company based in Germany, in the heart of the Münsterland region. The company's structures and processes are transparent and are aligned with modern requirements of businesses. The product portfolio is composed of standardised modules, as well as system solutions and special custom-made solutions. Customer satisfaction is the major goal of Räckers and it is achieved by providing competent consultation, individual solutions and tailor-made systems.

The Räckers team consists of competent specialists and experts. Since the company's foundation, its personnel has grown from 1 to approximately 200 employees. Structured distribution of areas of responsibility and close cooperation with renowned companies on national and international levels ensure the best outcomes.

Since the inception of Räckers, its product range has been constantly extended. The company started with adhering rubber profiles in 1981. Now the service portfolio spans from raw materials processing to fully assembled end-products. In particular, Räckers offers its customers CNC aluminium processing, CNC sheet metal processing, coating with chemical pre-treatment, assembly works, as well as industrial bonding and foam-moulding technologies. For many years Räckers has employed Just in Sequence production, which increases responsiveness of the whole team.

FIGURES – DATA – FACTS

- 2 Executive directors
- 1 Authorised officer
- approx. 200 Employees
- approx. EUR 24 million 2012 Turnover
- 100000 m² Plant area
- 20000 m² Production area

Our company is particularly interested in implementation of theoretical “university knowledge” in practice. We are very delighted by the project seminar done by the BSc students from the University of Münster who helped us to prepare for quality management certification. The students analysed the current situation and proposed various possible solutions, which can be soon put into practice. E.g. in the future we plan to simplify the Just in Sequence field in order to further increase the responsiveness.

Please visit our website for further information: www.raeckers.de



20 YEARS OF CONSULTING AND SYSTEM INTEGRATION FOR DATA WAREHOUSE, BUSINESS INTELLIGENCE, BIG DATA, CORPORATE PERFORMANCE MANAGEMENT AND ANALYTICAL CUSTOMER RELATIONSHIP MANAGEMENT



ABOUT THE COMPANY

saracus is one of the leading independent consulting companies for big data, data warehouse, business intelligence and customer relationship management in Germany and Switzerland with more than 60 consultants. Over the last 25 years, saracus has amassed a wealth of experience in more than 300 various projects. Our impressive customer list and customer testimonials are the best proof of how successful projects result in satisfied customers.

saracus competence and portfolio of services

It is the stated vision of saracus to increase the analytical competence of companies and non-profit organizations in order to specifically strengthen the competitive position of these customers. The instruments for reaching this goal are pithily summarized with the terms big data, data warehouse, business intelligence and analytical customer relationship management. The services provided by saracus cover all aspects of these topics.

DWtec® and DWinsurance

Data warehouse projects are very complex regarding to requirements of skills, processes, technology and general conditions within the client's corporation. Accordingly the process model has to accommodate this complexity. DWtec® is the process model of saracus for data warehousing projects; it is based on long term experiences and gets updated permanently. Since 2012 DWtec® has been extended by comprehensive sectoral data models – first of all, for

the sector insurance: DWinsurance. Further data models (e.g. for retail, telecommunication, manufacturing) will follow.

Big Data academy

The Big Data academy allows saracus to make its practically orientated expertise available to customers in numerous seminars on a wide range of big data and BI topics. These include training courses such as introduction in big data, big data strategy, Hadoop administration training, Hadoop developer training, dimensional data modelling, data quality and ETL processes. These seminars are also offered inhouse. For information on the latest offers and to subscribe to the newsletter, visit www.saracus.com.

Partnerships

saracus has maintained intensive partnerships with all major software companies in the data warehouse and business intelligence sector for many years. In addition, many of the consultants who work at saracus are also certified on the products of the software partners. To ensure that these partnerships do not cause saracus to lose its neutrality, we never operate as a reseller.

Why saracus consulting?

The following factors demonstrate why saracus is the consulting and integration partner for you:

- Fully focused on Big Data, DWH, BI and aCRM for over 25 years
- In-depth experience with important technologies
- A combination of business and IT know-how
- A large number of trained and experienced consultants for on-time completion of major projects
- Full service – from analysis and concept development to system integration and operation
- A procedural methodology specific to DWH
- Total commitment to the success of the project

JOB OPPORTUNITIES

For students: Diploma/Bachelor theses, internships

For graduates: (Junior) Consultants

Please visit our website for further information: www.saracus.com

ADVISORY BOARD



ABOUT THE COMPANY

The management consultancy zeb was founded in 1992 in Münster by university professors Prof. Dr. Bernd Rolfes and Prof. Dr. Dres. h. c. Henner Schierenbeck to respond to the growing need for consulting services in the banking industry. Their main objective was and still is to combine strategic excellence and practical implementation. zeb quickly evolved into a reputable management consultancy for the financial services sector. Today, more than 900 employees support our clients along the entire value chain of financial services from 17 offices in 12 European countries. With entrepreneurial spirit and strategic thinking zeb offers new perspectives and future-proof solutions for financial services institutions.

From thought to action – this is the philosophy and the service commitment of zeb.

TOPICS OF INTEREST

At zeb we see ourselves as partners for change. With our clients, we develop innovative strategies and implement them for sustainable impact. People at zeb combine comprehensive industry know-how and experience with a neutral and independent point of view. Our three branches Banking, Insurance and Healthcare include the following main areas:

- Finance & Risk
- Information Technology
- Strategy & Business Model
- Restructuring Merger & Operating Model
- Human Resources Management

We have the knowledge and experience to analyze and assess the upcoming challenges and to implement projects in a calculable manner. Our clients include Global and European banks and insurance companies, regional and federal state banks, retail and universal banks as well as specialized financial institutions, such as asset managers and captives.

A sample of current projects and topics you can find at:

<https://www.zeb.eu/about-us/zebreport>

JOB OPPORTUNITIES

Years of experience and profound industry knowledge create an exciting working environment. Vocational trainings, enough scope for personal development and participation are the foundation for your individual and professional career enhancement.

Our vacancies in Management and IT-Consulting include:

- Management Consultants IT
- Senior Consultants IT
- Manager IT
- Consultants SAP-Finance

In the fields of:

- IT-Transformation
- Digitalization
- IT-Strategy

Other career opportunities are posted at:

<https://www.zeb.eu/career>

FURTHER ADVISORY BOARD MEMBERS



CHRIST

Jeweler and watch maker since 1863.

The Christ jewelry stores lead the market in Germany in the mid to upper price range of the jewelry and watches segment.

For more information, visit:

www.christ.de



IQ-OPTIMIZE

The IQ-optimize Software AG is a provider of modern, innovative software technology and offers its customers reliable and customer-oriented IT services. Since 1996 IQ-optimize develops customized applications and advanced software products. The IQ-optimize Software AG is a subsidiary of Drillisch AG. Drillisch AG is a listed public limited company and offers telecommunications services. The portfolio of the IQ-optimize Software AG is broad. The priorities are customer oriented and serve all needs of costumers. IQ Optimize is Advisory Board Member since 2004.

Main competences:

- Software development
- operation and maintenance of workflow and document management systems for business processes automation
- billing and mediation
- ERP and retail for web shops
- stores and indirect sales including sales of subsidized goods.
- Media design for trendsetting websites
- Implementation, hosting and operation of customized IT infrastructures and cloud solutions including service management, maintenance, security and monitoring.

RESEARCH TOPICS

- Optimization
- Innovation; Omnichannel
- Telecommunication
- Workflow Management
- CRM
- Web Sales
- Retail
- Business Intelligence
- Service Management and Security
- Hosting and Cloud Solutions

www.iq-optimize.de



SAP

Helping the World Run Better

As the market leader in enterprise application software, SAP is at the center of today's business and technology revolution. Our innovations enable more than 296,000 customers worldwide to work together more efficiently and use business insight more effectively.

SAP helps organizations of all sizes and industries overcome the complexities that plague our businesses, our jobs, and our lives. With Run Simple as our operating principle, SAP's nearly 75,600 employees focus on a singular purpose that inspires us every day: To help the world run better and improve people's lives.

For more information, visit:

www.sap.com

OUTLOOK FOR 2017

JANUARY 2017

European Data Privacy Day, Vaduz, Principality of Liechtenstein, January 25th, 2017

FEBRUARY 2017

PhD-Skiseinar, Klosters, Switzerland, February 06–11, 2017

Student Track at WI 2017, St. Gallen, Switzerland, February 12–15, 2017, <https://wiz2017.ch/de/track16>

Liechtenstein Winter School, Vaduz, Principality of Liechtenstein, February 19–24, 2017, www.winterschool.li

MARCH 2017

36th International Conference on Organizational Science Development – Responsible organization, Portorož, Slovenia, March 22–24, 2017, <http://fov.uni-mb.si/conference>

9th International Conference on Evolutionary Multi-Criterion Optimization (EMO), University of Münster, Germany, March 19–22, 2017

APRIL 2017

Study trip from Liechtenstein to WU Vienna, Vienna, Austria, April 2017

MAY 2017

1st Workshop on DM-BPM/PAKDD, Jeju island, South Korea, May 23–26, 2017, <http://dmbpm2017.unist.ac.kr>

JUNE 2017

30th Bled eConference – Digital Transformation – From Connecting Things to Transforming Our Lives, Bled, Slovenia, June 18–21, 2017, <http://BledConference.org>

ERCIS@ECIS, 25th European Conference on Information Systems, Guimarães, Portugal, June 5–10, 2017

AUGUST 2017

8th Annual ERCIS Workshop, Leiden University, The Netherlands, August 28–30, 2017, <http://liacs.leidenuniv.nl/~emmerichmtm/ercisworkshop>

OCTOBER 2017

International Workshop on Multicriteria Decision Making & Applications in Enterprise Information Systems, October 2017

CENTERIS 2017 – International Conference on ENTERprise Information Systems, Portugal, October 2017, <http://centeris.scika.org> (Details to be announced)

XIV edition of the ItAIS conference, October 2017

Information Society IS 2017 – Education in Information Society, Kranj, Slovenia, October 2017, <http://vivid.fov.uni-mb.si/>

NOVEMBER 2017

Innovating Information Infrastructure Workshop, Roma, November 2017

DECEMBER 2017

ERCIS@ICIS, International Conference on Information Systems, Seoul, South Korea, December 10–13, 2017

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 and is being supported by Dr. Katrin Bergener, who works part-time for the team and furthermore as Coordinator for the WWU Centre for Europe, and Miriam Epke, who recently joined the ERCIS team.

Besides answering emails, the team helps organising events, maintains the website, organises the network communication, 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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