THE ERCIS NETWORK

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, Personal Members, 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.

PREFACE

In the past year, ERCIS has – again – taken important steps towards being recognized as a (the?) leading European network in Information Systems. ERCIS partner institutions were active on various levels: Event-related, the University of Minho hosted the European Conference of Information Systems (ECIS) and the University of Münster hosted the ERCIS-ECIS joint conference. Project-related, the University of Tallinn together with the University of Leuven and the University of Münster started the new Master’s Programme Public Sector Innovation and E-Governance (PIONEER) in September and the University of Liechtenstein, together with the University of Galway and the University of Münster, was successful with yet another Erasmus+ project, which will kick-off in January next year. I could continue this list with numerous other activities that have taken place this year, i.e. researcher exchanges (within the RISE-BPM project or individually), joint publications etc. It is just amazing to see how we gained momentum over the last years! If you read this report carefully, you may notice that the University of Waikato and the University of Manchester are not presented in detail. This is due to the fact that there have been organizational changes at Waikato and Chris Holland leaves the University of Manchester and joins Loughborough University next year. As you see, a network keeps changing and moving and I look forward to include their developments in our Annual Report next year.

This momentum has also manifested itself in the results of our partner survey that we conducted this year. We wanted to find out how satisfied our partners are within the network and with its services. In addition, we asked for a ranking concerning the importance of different collaboration opportunities within the network, namely research projects, teaching, staff exchange, publications, and funding, and with whom within the network they actually collaborate.

Looking back at 2017, I am proud to see great events and achievements that were possible because of all of us being members and contributing to the ERCIS network. It is truly “ERCIS – it’s what we make of it!”

All the best,

Jörg Becker

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Following Bordeaux (France) in 2011, Kau-
nas (Lithuania) in 2012, Turku (Finland) in 2013, Rome (Italy) in 2014, Guimarães (Por-
tugal) in 2015, Kristiansand (Norway) in 2016, this year’s ERCIS Annual Workshop took
place at the University of Leiden, in Leiden, The Netherlands. Michael Emmer-
ich kindly hosted the workshop in August.

Following the traditional structure, the workshop with its main topic “Data Sci-
ence” started with a welcome reception at the Academy Building in the city center of
Leiden where the scientific director of the Leiden Institute of Advanced Computer Sci-
ence (LIACS), Aske Plaat, held a welcome speech and presented the LIACS and Jaap
van den Herik, director of the Leiden Cen-
ter for Data Science (LCDS), presented the
LCDS. In this year’s workshop we had par-
ticipants from Austria, Belgium, Estonia,
France, Germany, Ireland, Italy, Liechten-
stein, Lithuania, the Netherlands, Norway,
Poland, Portugal, South Korea, Sweden,
Switzerland, and the United Kingdom.

After a warm welcome on the part of
the University of Leiden, the workshop started with Jörg Besker and Armin Stein reporting
on ERCIS activities, ongoing activities and giving an overview about the evaluation of
the network, which we did together with our partners this year.

Following Maribel V. Santos from the Uni-
versity of Minho who talked about “Data
Warehousing Architectures for Big Data”
and how traditional multidimensional
models can be migrated to a Big Data con-
text. Ngoc Thanh Nguyen from the Wrocław
University of Science and Technology pre-
sented their department of Information
Systems, their main research directions
and the organizational structures of their university before he signed the official
Certificate of Membership to the ERCIS
network.

After lunch the session was led by Michael
Emmerich and Thomas Back of LIACS pre-
senting Data Mining, Machine Learning
and Optimization Projects at LIACS. It was
followed by Christopher Holland from Man-
chester Business School who described in
his presentation “Mapping the Online Cus-
tomer Journey as a Markov Chain: A Data
Science Perspective” why Markov chains
are a powerful method for modeling a
search process.

In the afternoon Karsten Kraume, member
of the Board arvato CRM Solutions at ar-
vato AG, one of the ERCIS Advisory Board
Members, and Markus Heuchert from the
University of Münster, talked about “Cu-
tomer service in Social Media and Data Pri-
vacy Issues” in context to the 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.

To the end of the first workshop day Alex-
ander Simons from the University of Liech-
tenstein presented the paper “Beyond
crowd judgments: Data-driven estimation
of market value in association football”
which he published together with Markus
Weinmann and Oliver Müller, one of the
network's personal members.

The day closed with an excursion and
workshop dinner on a boat trip around the
city of Leiden.

The second workshop day started with a
brief statement to the ERCIS Competence
Centers by Armin Stein. Followed by Isabel
Ramos from the University of Minho with
her presentation “Impact of Information on
Organizational Attention” which led to the
question, how to improve organizational
attention.

João Alvaro Carvalho, also belonging to
the University of Minho, talked about “Crisis
Communication and Social Media” that deal with the collective sense-
making process in crisis situations and the
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making process in crisis situations and the
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emergency management.

The workshop closed with an optional ex-
cursion to the coast or alternatively to the
Space Expo Noordwijk, Europe’s first per-
manent space exhibition.

The last session was led by Stefan Stieg-
litz from the University of Duisburg-Essen
who introduced two projects in his presen-
tation “Crisis Communication and Social
Media” that deal with the collective sense-
making process in crisis situations and the
utilization of social media for an integrated
emergency management.
FIRST GRADUATES OF MASTER’S PROGRAMME IN BIG DATA SYSTEMS
On June 28, 2017, the second graduation ceremony for the double-degree Master’s programme in Big Data Systems (HSE, Russia) (www.hse.ru/en/ma/bigdata) and Information Systems Management (UAS Technikum Wien, Austria) was held at the Austrian Residence. Dr. Emil Brix, Ambassador of Austria in Moscow, gave the opening speech. During the reception, he congratulated graduates on successfully completing the programme and stressed the importance of cooperation between the universities for multi-cultural and professional communication.

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 knowledge and understanding of fundamental principles and technological components of Big Data, preparing them for a career within companies or in scientific research.

UNIVERSITY OF LIECHTENSTEIN RELEASES SECOND AIS GLOBAL INFORMATION SYSTEMS EDUCATION REPORT
In his role as Vice President for Education at the Association for Information Systems (AIS), Prof. Dr. Jan vom Brocke has released the second collection of global information systems education in collaboration with Dr. Markus Weinmann (University of Liechtenstein), Prof. Dr. Heikki Topi (Bentley University, Waltham, Massachusetts, USA), and Prof. Dr. Bernhard Tan (National University of Singapore). This report, the most comprehensive collection of curricula in the field of digitalization worldwide, contains more than 3,000 courses offered in more than 800 programs in 73 countries. By editing this report, the University of Liechtenstein takes a leading role in the important field of competencies in the digital economic environment. SpringerNature will publish the report for 2018, currently in preparation, as a book to be presented globally (https://goo.gl/X44P3n).

NEW ERCIS MEMBER
Welcome to our newest ERCIS member: Tilo Matzner, born in December 2016, officially joined the network in 2017 when he received his ERCIS outfit.

10th EUROSYMPOSIUM
On 22nd of September 2017, Department of Business Informatics organized an annual conference, the 10th Eurosymposium 2017, under auspices of the AIS SIGSAND group. The participants, including the keynote speakers, Prof. Frank Land and Prof. Chrsanthi Avgourop, presented 11 papers. The papers were published in the Springer LNBIP series.

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 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.

The Department of Business Informatics applied with a success for a grant regarding cooperation between industry and academia, concerning the student traineeships in IT firms.

UNIVERSITY OF LIECHTENSTEIN PUBLISHES NEW BOOK, BUSINESS PROCESS MANAGEMENT CASES: DIGITAL INNOVATION AND BUSINESS TRANSFORMATION IN PRACTICE (MANAGEMENT FOR PROFESSIONALS)
Prof. Dr. Jan vom Brocke (Hilti Chair for Business Process Management, University of Liechtenstein) and Prof. Dr. Jan Mending (Deputy Head of the Department of Information Systems and Operations, WU Vienna), have collaboratively published the book, BPM – Cases, with Springer-Verlag. Numerous authors and BPM experts, including many ERCIS partners, present real-life cases in the field of BPM. Best-practice examples and insights retrieved from organizations and companies on how to innovate and transform business using innovative technology are presented in the book (http://www.bpm-cases.com).

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This book provides a comprehensive treatment of the rapidly changing world of web-based business technologies and their often-disruptive innovations. The history of the Web is a short one. Indeed many college graduates today were not even born when the Web first emerged. It is therefore an opportune time to view the Web as having reached the point of graduation. The Web has led to new ways in which businesses connect and operate, and how individuals communicate and socialize; related technologies include cloud computing, social commerce, crowd sourcing, and the Internet of Things, to name but a few. These developments, including their technological foundations and business impacts, are at the heart of the book. It contextualizes these topics by providing a broad history of the World Wide Web, both in terms of the technological evolution and its resultant business impacts. The book was written for a broad audience, including technology managers and students in higher education.

**NEW ERCIS MEMBERS**

The University of Ireland, Galway. After seven years, we are happy to welcoming a new Irish partner with Prof. Kieran Conboy. Kieran has tight relations to Jan vom Brocke and the University of Liechtenstein, which is a perfect basis for fruitful future collaborations!

We additionally accepted three new personnel members in our network. Prof. Dr. Dr. Alexander Mädche (Karlsruhe Institute of Technology), and Dr. Peter Fettke (German Research Center for Artificial Intelligence). The leading developer is Michael Gau (University of Liechtenstein). The project was officially released at the DESRIST in Karlsruhe.

**SAP NEXT-GEN LABS**

The first Interconnected Academic Next-Gen Lab, located at the University of Münster, and the Higher School of Economics in Moscow and Nizhny Novgorod – was officially launched on May 16, 2017. The programme is coordinated by SAP Next-Gen, which significantly contributes to its performance.

**SAP NEXT-GEN INNOJAM**

On September 2nd and 3rd, the SAP Next-Gen team from Moscow and Waldorf run the SAP Next-Gen Innojam, “SAP Leonardo Space for Exploration and Earth Observation”, together with the Institute of Medical-Biological Problems of the Russian Academy of Science and International Space University (Strasbourg, France).

Overall 20 participants from eight universities (University of Münster, Higher School of Economics Moscow and Nizhny Novgorod, ITMO University, Russian Oil&Gas University n.a. Gubkin, Belgorod State Technological University, Voronezh State University, MGIMO University), split in 5 teams, were tackling for 30 hours challenges related to using AI/ML, IoT and space observation facilities to fight global disasters such as massive floods and fires.

**THE COOPERATION BETWEEN MÜNSTER AND ERCIS PARTNER WAIKATO MANAGEMENT SCHOOL, NEW ZEALAND, HAS BROUGHT ALONG THE FOLLOWING BOOK PUBLICATION:**

G. Vossen, F. Schönthaler, S. Dillon: The Web at Graduation and Beyond – Business Impacts and Developments; Springer International Publishing, Cham, Switzerland, 2017
The first ERCIS member survey, conducted in January 2017, was intended to better understand the expectations and wishes of our academic members, to better understand the ties between our members, and to better understand the various means of collaboration among them.

All in all, we received 44 complete responses from our partners, which covers the complete network. The most important question addressed the overall satisfaction with the network, which was evaluated using a four point Likert scale question: “How satisfied are you with your ERCIS membership?” Results show that all our members are satisfied or very satisfied with their membership in the network.

We also asked our members for ways to improve the network performance. One of the most often stated remarks was the request to stimulate the more silent partners to show a more active participation. Furthermore, joint PhD education became an important aspect, which we are working on. Our partners also stressed that applying for funding by the European Commission is one of the core concepts. Here again, we are gaining momentum and become more successful, as our track record shows.

We plan to repeat the survey biennially, to monitor the progress of the network.

**Testimonials on the network**

Oihab Allal-Chérif, KEDGE Business School, France: “It’s [an] active [network], with high value researchers sharing their projects and inviting others or participate if interested [...]. ERCIS is a community where people share their concerns and help each other despite being in different institutions.”

Jan Mendling, Vienna University of Economics and Business, Austria: “ERCIS is an excellent way to make personal research ties explicit and externally visible.”

Isabel Ramos, University of Minho, Portugal: “ERCIS means opportunities for internationalization of teaching and research efforts. It means opportunities to collaborate and interact with European colleagues and friends. It means a certification of the quality of work we do.”

Stefan Stieglitz, University of Duisburg-Essen, Germany: “ERCIS offers potential to cooperate with colleagues and it generates a feeling of ‘belonging together’. [...] ERCIS is an active network with people actually working together on projects they care about instead of just framing themselves with the formal membership.”

Bjørn Erik Munkvold, University of Agder, Norway: “ERCIS is an excellent arena for networking with the European IS research community.”

Kęstutis Kapočius, Kaunas University of Technology, Lithuania: “The ERCIS is a very well organized and managed network that is continuously moving forward.”

Eduard Babkin, Higher School of Economics Nizhny Novgorod, Russia: “ERCIS means a distributed environment of IS professionals for seeking mutual beneficial activities and facilitate scientific collaboration.”

Joint ERCIS projects and publications – [http://www.erc.is/go/map]
ABOUT THE INSTITUTION
The Institute of Business-to-Business Marketing (IAS) is part of the ERCIS Headquarters located in Münster and represents the first senior professorship under the roof of the Marketing Center Münster (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 and innovation management. Parts of the research program are realized with the help of research grants from government and industry.

The IAS has recently started to extend scenario analysis techniques in various research projects together with the University Hospital Muenster, the city and the region.

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, including e-learning.

This winter semester the IAS offers a discussion program labeled “Meet the Leader” on various topics, starting with a gender topic – “Women in Management”. The first leader is Prof. Dr. Ann-Christin Achleitner, member of seven advisory boards of DAX-companies.

RESEARCH TOPICS
Our research mainly focuses on topics from Industrial Marketing (B2B Marketing). Besides that we are on the way to develop improved solutions for scenario analysis evaluations.

CURRENT RESEARCH PROJECTS
As the majority of research projects is funded institutionally, the IAS collaborates closely with industrial companies and practice-oriented associations to generate knowledge with a direct impact for the industry. Further research is focused on relevant topics in the international field of Marketing and conducted in the course of dissertation projects.

In addition to that, we use our expertise in a research project to reduce the risk structures of international large scale projects such as Desertec.

Furthermore, the IAS conducts a scenario analysis project in order to further develop the future strategy of the City of Muenster. Although not a core marketing topic, we use our expertise in multivariate methodology to provide a substantial contribution to the goals of the project.

Moreover, the IAS is 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.

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PUBLICATIONS/DISSERTATIONS
Todenhöfer, Lydia: Participation Patterns of Sharing Systems – A Cross Sectoral Comparison of the Drivers of Demand and Supply in the Sharing Economy
Buff, Philipp: Der Effekt der Präsentationsform auf die Prognosefähigkeit frühzeitiger Konzepttests

We continue to deliver relevant insights with focus on negotiations research and the emergence of dominant designs.
Digital Me aims to provide women with a browser-based and target group-specific offer for the STEM (science, technology, engineering, and mathematics) professions. In a virtual world environment, the participants aged 15 to 17 can find information and decision-making aids as well as games. In the end they know the content and career opportunities in selected IT professions so that they can consciously chose their studies and professions. In this way, Digital Me strives for a higher participation of young women in occupations with IT content and their leadership positions.

For further information, please visit: https://www.digital-me.info/

AWARDS
Prof. Dr. h.c. Dr. h.c. Jörg Becker has been nominated for the Professor of the Year 2017 title of the UNICUM foundation.


TDWI Award 2017 (1st Place) of the TDWI Business Intelligence Community, the INFOMOTION GmbH for FORGETTING Confidently, a tandem project of the University of Münster with the disciplines Organisational & Business Psychology (Guido Hertel) and Information Systems (Prof. Dr. Dr. h.c. Dr. h.c. Jörg Becker) has won the TDWI Award 2017 (1st Place) of the TDWI Business Intelligence Community. The project aims to develop a new approach for efficient and effective process decision-making in complex organisational settings. For further information, please visit: https://www.getrost-vergessen.de/


For further reading, please visit: https://wissenskern.de/is/details

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University of Münster – Chair for Information Systems and Information Management

Service Science research addresses different aspects of 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 competitive edge of the service economy.

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 tasks like business process reengineering, software introduction, and compliance management. Conceptual Modeling, when being transferred into practice, supports the 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, stationery retail, and e-commerce. Logical 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.

About the Chair
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 eight post-docs and 10 research assistants. The courses offered by the Chair for ISc and ISc 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). Moreover, the courses Retail and Production Planning and Control cover both Process and Conceptual Modeling in their respective domains. Members of the Chair are involved in research projects funded nationally and internationally. They publish results of their work in journals like BISc and MSc in Information Systems, JSS (Journal of Systems and e-Business Management), Electronic Markets, EMIS (Enterprise Information Systems), ER (International Conference on Information Systems), BISE (Business & Information Systems Engineering), BPM (Business Process Management Journal), Electronic Markets, EMIS (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).

SELECTED CURRENT RESEARCH PROJECTS
Intentional Forgetting in Organizations: Forgetting Confidentially is a tandem project of the University of Münster with the disciplines Organisational & Business Psychology (Guido Hertel) and Information Systems (Jörg Becker) which focuses on studies on motivational factors that can interfere or promote intentional forgetting in organizations. Intentional forgetting is operationalized by the extent of the utilization of information systems. Information systems are considered to be a structural form of intentional forgetting in organizations that provide users with relevant information so that less relevant information can fade into the background (gradual forgetting). In this way, the use of information systems can save resources and increase the quality and speed of decisions by focusing on the essential decision criteria.

For more information, please visit: https://www.getrost-vergessen.de/
The integration of clinical and molecular biology over clinical medicine to a wide scope of applications, ranging from research to therapy using biomarkers from NGS.

In joint projects with Prof. Frank Rosenbauer (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. Birgit Burkhardt (Pediatric Oncology) NGS data from lymphoma patients are being analysed (funded by German Cancer Aid Foundation).

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 a 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.

Biomedical Informatics

MDS-RIGHT, a European project coordinat-ed by Prof. Joop Jansen (Nijmegen Centre for Molecular Life Sciences), is progressing to analyse mutations in Myelodysplastic Syndrome (MDS). MDS-RIGHT assesses approximately 1,000 patient cases with Next-Generation Sequencing (NGS) technology. IMI performs bioinformatics for project partners from the Netherlands, France, Sweden and Spain. About one third of MDS patients develop leukemia – the objective of the project is to improve diagnostics and therapy using biomarkers from NGS.

Institute of Medical Informatics (IMI) in Hangzhou, China. 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.
ABOUT THE INSTITUTION

Today's supply chains (SC) on the one side 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. On the other side, the digitalization of the supply chain opens new possibilities for fast savings and increased flexibility. 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. Special focus lies in understanding current logistics and manufacturing issues, resolving conflicts in approaches and data analytics methods for improved diagnostics and prognostics in predictive maintenance. Moreover, integrated as well as decentralized planning models for spare parts management are developed.

Industrie 4.0: Research regarding Industrie 4.0 aims to keep and enhance the competitive advantage of German manufacturing companies worldwide by increasing the capabilities of producing customer specific goods efficiently and effectively. The group is evaluating and developing new approaches and methods for production planning in this context. Results are not only presented in the German community, but were also discussed in a workshop held in Recife, Brazil.

Spare Part Management: The early identification of machine breakdowns by condition monitoring enables more precise planning and management of spare parts and maintenance services. The group focuses on approaches and data analytics methods for improved diagnostics and prognostics in predictive maintenance. Moreover, integrated as well as decentralized planning models for spare parts management are developed.

RESEARCH TOPICS

Flexible Supply Chains: Planning the worldwide production footprint is a strategically crucial task for every company operating globally to stay competitive. Uncertainties in the business environment and local content regulations influence the optimal sourcing and production locations. Volatile exchange rates and customer demands in conjunction with a political regression to protectionism require appropriate decision support tools. The research group develops planning approaches for the design of production networks in a globalized and volatile world.

Drivers: Research regarding Industrie 4.0 aims to keep and enhance the competitive advantage of German manufacturing companies worldwide by increasing the capabilities of producing customer specific goods efficiently and effectively. The group is evaluating and developing new approaches and methods for production planning in this context. Results are not only presented in the German community, but were also discussed in a workshop held in Recife, Brazil.

Sales & Operations Planning: Sales and Operations Planning addresses cross-functional integration within a company and along the supply chain and is therefore a key factor for business success. The group investigates the state-of-the-art in S&OP and focuses on the development of concepts to facilitate efficient industrial applications. The research in this field is conducted in close collaboration with the Pontifical Catholic University of Rio de Janeiro.

RESEARCH PROJECTS

DRIVER (Driving Innovation in Crisis Management for European Resilience): A project funded under the 7th Framework Programme of the European Commission. Its main aim is to cope with current and future challenges due to increasingly severe consequences of natural disasters and terrorist threats, by the development of innovative solutions that are addressing the operational needs of practitioners dealing with crisis management. The chair is member of the review board and contributes to the development, application and evaluation of the test-bed methodology.

The research on spare parts management and predictive maintenance is embedded into the Brazilian-German project i2MS2C (Integrating Intelligent Maintenance Systems and Spare Parts Supply Chains). The chair focuses on decentralized coordination and data analytics methods (DFG-Leitprojekt) and related projects with ERCIS. Within the same scope, Prof. Scavarda (PUC Rio de Janeiro) visited the chair for an extended period (Dec. 2015 – Feb. 2017) to jointly research on Sales and Operations Planning, inventory (VMI) for Humanitarian Organizations. In Proceedings of the ISCRAM2017 aims at exploring all dimensions of the IS domain to improve and contribute to Crisis and Disaster Management. The chair organized a workshop, presented three papers and hosted a SCM track at the conference.

To strengthen existing collaborations, Prof. Buanque (UPE Recife) extended his Humboldt Fellowship to follow up PhD. co-supervisions, book co-authorship and establish further projects with ERCIS. Within the same scope, Prof. Scavarda (PUC Rio de Janeiro) visited the chair for an extended period (Dec. 2015 – Feb. 2017) to jointly research on Sales and Operations Planning, worldwide to stay competitive. Uncertainties in the business environment and local content regulations influence the optimal sourcing and production locations. Volatile exchange rates and customer demands in conjunction with a political regression to protectionism require appropriate decision support tools. The research group develops planning approaches for the design of production networks in a globalized and volatile world.

The Chair hosts the 4th International Conference on Information and Communication Technologies for Disaster Management. ICT4DM2017 aims to bring together academic and practitioners who are involved in emergency services, ad hoc planning and disaster management and recovery.

Promoted and organized in cooperation with DWHI, BMBF, ERCIS and UPE Recife, the Germany-Brazil Workshop on Information Systems in Logistics and Industrial Engineering brought together the University of Münster and complementary strengths of several researchers from five northeastern Brazilian universities to discuss future collaborative projects, particularly concerning Industrie 4.0, Maintenance Planning, Digital Supply Chains and Energy Systems. On a second workshop, representatives of state government, industry and universities discussed opportunities for closing the gap between industry and academia in the area of Smart Supply Chains and Energy Systems. On a second workshop, representatives of state government, industry and universities discussed opportunities for closing the gap between industry and academia in the area of Smart Supply Chains and Energy Systems.

The 14th International Conference on Information Systems for Crisis Response and Management (ISCRAM2017) aims at exploring all dimensions of the IS domain to improve and contribute to Crisis and Disaster Management. The chair organized a workshop, presented three papers and hosted a SCM track at the conference.

Prof. Hellingrath organized Workshops at the VW Group, in Ingolstadt, Germany and Beijing, China discussing how digitalization is affecting and will influence the automotive supply chain. Of special importance were the resulting consequences for procurement.

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ITM is the leading Institute for Information, Telecommunication and Media Law (ITM) – Civil Law Department. ITM is a professor of civil law at the University of Münster and has 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, 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 ITM since 1997. Due to international projects such as TIMBUS funded and national projects

ABIDA (Assessing Big Data) is an interdisciplinary research cluster funded by the 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 ITM and the Institute for Technology Assessment and System Analysis in Karlsruhe (ITAS). Furthermore, the Humboldt University of Berlin, the Technical University Dortmund, and 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 analysed 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: 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-API (IT-Security Awareness Penetration Testing) is an interdisciplinary project promoted by the German Federal Ministry for Education and Research (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, ITM focuses on aspects of liability law concerning the usage of such scale software. Besides, 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. Increasingly our DFN-members are being faced with issues regarding legal questions on liability, telecommunications and data protection. Therefore ITM acts as a legal consultant in terms of communication and data protection services.

RWTH Foundation Assistant Professorship of IT Law: This professorship promotes young researchers in the field of IT law. In fall of 2016, Prof. Dr. Nikolas Guggenberg-er, LL.M. (Stanford) obtained this position. His research focuses on law and innovation, specifically on the implications of blockchain technology, smart contracts and the automation of law.

Awards

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

DisseRetations/habilitations


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

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

It is our research philosophy that the implications of innovative ICT become visible and understandable in the context of communities of practices. In order to study practices in situ, we advocate 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 interrelated fields of research:

1. The Communication and Collaboration Management group, led by Dr. Simon Vidolov, is broadly concerned with understanding the role of technologies, knowledge and collaborative processes, both within and between organizations 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 organizational and societal changes. A prominent focus in our research is the examination of the material and affective aspects of organizational 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 organizing,
   - Collaborative practices and trust production in complex network arrangements,
   - Role of affectivity and embodiment in process of learning and collaboration,
   - Critical approaches to project management, and its performative aspects,
   - Enterprise social networks and workplace analytics

2. The research group on Strategic Information Management (SG SIM), led by Dr. Alexander Teubner, does research on management challenges that executives with IT/IS strategies and how to align them with business strategies.

3. The Interorganizational Systems group studies the evolution of information infrastructures, such as electronic markets or platforms, over long periods of time. We take a particular interest in the development and transformation of interorganizational 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, the health care sector, the tourism and the academic publishing industry.

**CURRENT RESEARCH PROJECTS**

**Project management and power dynamics**

The growth of on one hand, the distributed forms of collaborating, and the projectification of work, on the other hand, have been also accompanied by increase in conflicts and tensions in projects that involve geographically distributed participants. While, power dynamic is inherent to such processes, it is also manifested and performed in novel ways in such technology-mediated contexts. Gaining insights into how such complex relationships are being balanced can offer important contributions to IT project management. (Pl. Aleksandar Dordević)

**Enterprise Social Networks and workplace analytics**

The emergence and proliferation of new ICTs such as Enterprise Social Networks have brought changes beyond the promises for improved connectivity and team productivity. In particular, while mediating and transforming many organizational processes, these technologies also make them visible and more amenable to analysis. We use a plethora of analytical perspectives to delineate important aspects of aggregate data from these platforms, and seek to turn it into sensible and actionable indicators for improving decision-making and managing workplace processes. (Pl. Joachka Hüllmann)

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, which 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, consideration set and customer journey. (Pl. Julia Jacobs)

**IT service management**

In today’s digital business environments, IT has to respond flexibly and quickly to changing business conditions while at the same time has to ensure secure and stable IT operations. In practice, the paradigm of IT service management (ITSM) is the approach of choice for realizing reliable operations and the concept of an IT service at its core. Our research is concerned with clarifying this concept and with fleshing it out by developing guidelines and recommendations for specifying and contracting IT services. (Pl. Christian Remfert)

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

AACS B is an international accreditation agency organized as a club with a network administration organization. AACS B emphasizes the importance of 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 AABCB’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. (Pl. Sophie Wohlgage)

**SELECTED PUBLICATIONS**


Experience shows that the development of parallel programs is an elaborate and time-consuming task. The Münster University Library (MueSsi) 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 MueSsi for hybrid and heterogeneous architectures and have evaluated simultaneous executions on CPUs and GPUs. Moreover, we have investigated the parallel implementation of swarm intelligence-based metaheuristics, such as Particle Swarm Optimization and Fish Search, with algorithmic skeletons.

Another research field is the automatic generation of test cases based on the symbolic execution of Java bytecode. In particular, we have extended the Münster generator of glass-box test cases (Muggl) such that it now also reaches control-flow coverage in the presence of accessed data-structures and web services. In addition, 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) of Muggl is also generalized into the runtime for a novel programming language, the Münster logic-imperative language (Muli). Muli seamlessly integrates constraint (logic) programming and object-oriented programming by extending the Java programming language. This paradigm integration results in simpler development of (business) applications that require search, as constraints are stated declaratively using familiar Java syntax and solved implicitly by the JVM 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. An extensive survey on requirements of day care facilities around Münster has been conducted.

**PUBLICATIONS**


**BEST PAPER AWARDS**


**CONTACT DETAILS**

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2017, Venice, Italy, SACLA 2017, Magaliesburg, South Africa.

Moreover, he was:


Guest editor of Parallel Processing Letters 27(1), 2017.

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.
The group Quantitative Methods for Logistics at the University of Münster is headed by Stephan Meisel, who serves as an assistant professor. The group additionally has one postdoctoral researcher and three doctoral students. Activities in both research and teaching primarily focus on dynamic decision-making in logistics and energy systems. Recently, business operations within these fields have been subject to major challenges such as increasing resource prices, electronic commerce, renewable energies, real-time tracking and tracing as well as security issues. The group addresses these challenges by developing new models and methods that allow for best possible decision-making in today’s business operations.

As a natural counterpart of the complexity of modern decision processes, both the models and the methods developed need to draw on a number of different scientific disciplines. Consequently, the activities of the group are highly interdisciplinary – combining and integrating techniques from fields such as mathematical optimisation, artificial intelligence, computer simulation, stochastic processes and databases.

**Main Research Topics**

The research activities of the group pursue two main goals. On the one hand the focus is on modeling operational decision problems and solving them by application of state-of-the-art methods. On the other hand the group’s research also aims at advancing the algorithmic state-of-the-art by developing new methods that enable more efficient decision-making.

As a response to the needs of today’s processes in logistics and energy systems, the research activities revolve around the area of Anticipatory Optimisation for Dynamic Decision-Making, which serves as a general framework for studying multistage decision problems under uncertainty.

Uncertainty has become one of the main characteristics of real-world business processes. Today’s companies continuously receive new information in terms of, e.g., customer orders, price changes or availability of resources such as renewable energy. Due to technological innovations such as GPS, mobile communication and Big Data, companies are able to use this newly arriving information for continuous adaptation of their current operational plans.

However, any plan revision that is made now affects the future evolution of the business process under consideration. Coordination of planning decisions over time becomes the crucial point in adapting an operational process. Anticipatory Optimisation takes into account the decision maker’s uncertainty about the future and aims at an optimal sequence of planning decisions within a given logistics process.

**Research Projects**

Most of the current research projects focus on multistage decision problems within a specific application domain. The main projects currently are:

- **Energy Storage Management**
  - Energy storage management has become a crucial issue with renewable energies. Sources of renewable energy such as wind or solar are intermittent and energy prices tend to vary over time. Therefore, companies relying on renewable energy make use of energy storage devices.
  - The main research question is: how to repeatedly make good decisions about how much energy to store and how much energy to buy from electricity providers.

Together with a research partner at Princeton University, we have been working on a universal policy for making energy storage decisions. As a new intermediate result, we recently published a research paper on dynamic decision-making in energy systems with storage and renewable energy sources.

- **Stochastic Path Detection**
  - Stochastic path detection is a multistage decision process for protecting a network against threatening activities. Path detection problems arise naturally in a variety of areas such as humanitarian logistics, energy networks, infectious disease control and security checks in traffic networks.
  - The goal is to protect a given logistics network with high probability by using limited resources. In order to allocate resources as, e.g., monitoring stations, in the network, the protector must rely on assumptions about how the threatening activity is going to move in the network. The main research question is: how to cope with the risk introduced by errors in these assumptions.

Together with Professor Ricardo Collado, ERCIS partner at the Business School of the Stevens Institute of Technology in Hoboken, New Jersey, we published a research paper on risk-averse stochastic path detection.

- **Dynamic Service Vehicle Routing**
  - The group has started to work on a joint research project with flashpenpost.de, a young IT-driven and very successful home delivery company in Germany. The goal of the research project is to develop new approaches for real-time vehicle routing.

Service vehicles play an important role in many business models. Grocery shopping home delivery, less-than-truckload trucking and on-site maintenance services are just a few examples. In each of these examples a company running a fleet of service vehicles aims at either minimisation of operational costs or maximisation of customer satisfaction. In order to achieve these goals, the company has to make repeated decisions on the assignment of customers to vehicles and on the vehicles’ routing plans.

Each time a new customer calls in, both, current customer assignments and routing plans need to be revised. The main research question is: how to do plan revisions such that the decision maker’s goal is achieved at the end of the day.

**Selected Publications**


In November 2017, the 6th International Workshop on Modeling and Management of Big Data (Mobile ’17) was held in Valencia, Spain, in conjunction with the 9th International Conference on Conceptual Modeling. The workshop was co-chaired by Heike Trautmann, Gottfried Vossen (DBIS Group, Münster) and Thomas Back (LIACS, Leiden).

EVENTS
In January 2017, Christian Grimm was invited to an expert hearing of the Committee on Education, Research and Technology Assessment of the German parliament.

In March 2017, Heike Trautmann organized the 5th International Conference on Multi-Criterion Optimization (EMO2017) in Münster together with Günter Rudolph, TU Dortmund, which attracted a large number of international experts of the community and was a great success.

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PUBLICATIONS


Dissertations
Kerschke, Pascal: Automated Feature-Based Problem Characterization and Algorithm Selection Through Machine Learning
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 the accessibility of the data. Therefore, the DBIS group will focus on developing a big data integration architecture and an appropriate data management architecture.

Machine Learning & Stadtwerke Münster

In cooperation with the municipal utility Stadtwerke Münster, the DBIS Group conducted two projects with a machine learning background, namely K-SCOR for customer churn analysis in energy markets and Bus 4.0 for predictions related to seat utilization in local bus lines. The newly developed K-SCOR is a predictor for the probability of contract terminations by customers based on pseudonymized customer data. Predictions make use of diverse features such as financial institution, method of payment, payment plan, and frequency of customer inquiries. Whenever these features change, the K-SCOR will be recomputed and allows, for example, tracing customers’ transitions from loyal to defecting. In the project Bus 4.0 we developed a prototype to predict bus seat utilization at a chosen time and bus station beyond real-time utilization measures. Towards this end, passenger data are combined with current numbers obtained from so-called “people counters” and with weather forecasts. Predictions are self-maintaining in view of changing bus schedules and passenger data.

DBIS Group

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 solution and an appropriate data management architecture.

Contact

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The department of Information Systems & Operations consists of five institutes. The Institute for Information Business conducts research in the area of business- and technology-driven innovations with a specific focus on business process management, data management, and knowledge management. The Institute for Information Management and Control's focus is on responding to the needs of organizations and societies in regard to information and technology management, especially considering accountability. The research areas of the Institute for Information Systems and New Media emphasize two major areas: new media, in particular computational media, active media, polymorphic media, and information systems, in particular highly flexible systems and application engineering. The Institute of Management Information Systems aspires to use a wide range of methods to contribute to the development of a sustainable technology aspect. The institute's aim is to be a think tank for business and society that focuses on the sustainable design of information technology. The Institute for Production Management is focusing on research in the area of supply-chain management. The established Master’s Program in Information Systems was designed together with a board of leading Austrian Stakeholders from industry and government to meet today’s challenges and to provide a solid basis for tomorrow’s demands. The program is recognized by Austria’s leading degree program in this field (according to Format Uni-Ranking, 2009).

The contradiction between Big Data innovation and privacy-aware data protection by proposing a technical solution that makes both of these goals realistic. During the project they will develop technology that supports the acquisition of user consent at collection time and the recording of both data and metadata (consent, policies, event data, context) according to legislative and user-specific policies. The project started in January 2017 and will end in December 2019.

AWARDS
Axel Polières won the prestigious Stanford Distinguished Visiting Austrian Chair Professorship and will be visiting Stanford January through June in 2018.

Martin Beno's bachelor thesis conducted under the supervision of Prof. Dr. Axel Polières from the Institute for Information Business received the WU’s 2017 TALENTA award for best bachelor thesis. The bachelor thesis resulted in a publication, which was nominated for the CEDEM conference’s best paper award.

Bastian Wurm's master thesis with the title "Development and Application of a Measurement Scale for Business Process Standardization" was awarded the most innovative master thesis award by the University of Liechtenstein as well as the best thesis award by the Society for Process Management (Gesellschaft für Prozessmanagement). Bastian conducted his master thesis at the University of Liechtenstein under supervision of Theresa Schmiedel and Roopoj Jakobkomi and is now a PhD candidate with the Institute for Information Business.

EVTNS
WU Vienna is organizing the ISWC International Semantic Web Conference (ISWC) each year.

The Institute for Information Business contributes to the research area of supply-chain management. Bastian conducted his master thesis at the University of Liechtenstein under supervision of Theresa Schmiedel and Roopoj Jakobkomi and is now a PhD candidate with the Institute for Information Business.

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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, founded in 1425, one of the oldest and most renowned universities in Europe. KU Leuven is a research-intensive, internationally oriented university that carries out both fundamental and applied research. It is strongly inter- and multidisciplinary in focus and strives for international excellence.

Following the integration of the university colleges, the ‘entire’ KU Leuven counted 51,771 students as of October 2016. The largest student populations are found in the faculties of Economics and Business, Medicine, Engineering Technology, Arts, and Law. Students from approximately 150 countries study at KU Leuven.

The Leuven Institute for Research in Information Systems (LIRIS) was founded in 1987 by the KU Leuven Faculty of Economics and Business and is one of the core competencies of KU Leuven. The current LIRIS Faculty currently counts 7 professors, 1 postdoc and around 15 PhD researchers.

LIRIS

The Leuven Institute for Research in Information Systems (LIRIS) was founded in 1987 by the KU Leuven Faculty of Economics and Business in close collaboration with a world-wide network of companies and fellow researchers, it studies various research topics within the field of data science. Another key research track concerns the development of social network based analytical models for fraud detection, credit risk modeling and marketing analytics (e.g., churn prediction).

Business decision management

Business decision management (modeling, mining and implementing decision representations and business rules) is an area with a long tradition in LIRIS. The research recently led to an industry standard, DMN (Decision Model & Notation), adopted by the OMG.

TETRA (Technology Transfer) project, Decision Analytics, 2017–2019.

Management of information, performance and finance: this cluster focuses on research about methods and approaches to manage, use and exchange information by governments in the policy, management and financial cycles. This may be within as well as between administrative organizations, but also across and between governments.

Research projects within LIRIS are conducted in four major areas:

- Engineering information solutions
- 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.

- Business processes intelligence
- A second important area is the area of business processes intelligence. This includes some important new contributions to the theory of process analytics and discovery, and applies process analytics to some specific new domains (auditing, learning, service composition and administrative processes), giving rise to auditing analytics, e-learning analytics, service analytics, etc.


- Business decision management
- Business decision management (modeling, mining and implementing decision representations and business rules) is an area with a long tradition in LIRIS. The research recently led to an industry standard, DMN (Decision Model & Notation), adopted by the OMG.

Recent research projects of Public Governance Institute are:

- Strengthening institutional capacity to support Public Administration and/or Development Management Programmes at Ambo University (2013–2018).
- SLICE3D – Slovenian Centre of Excellence on 3D geodata, Slovenia, University of Ljubljana, EU Horizon 2020 Teaming Instrument.
- chair of domain experts spanning disciplines.
The Department of Software Engineering is widely recognized. Among them are a number of top experts working as researchers or entrepreneurs. Members of the School of Mathematics and Physics are also outstanding. They are also successful in various areas of database systems, semantic web, multi-model data management, 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:


**PUBLICATIONS**

- D. Bednář, M. Brabc, M. Králíček: Improving matrix-based dynamic programming on massively parallel accelerators, Information Systems, 64: 175-193, 2017
- J. Misek, F. Zavoral: Control Flow Ambiguous-Type Inter-Procedural Semantic Analysis for Dynamic Language Compilation, ANSEIT 2017: 955-962
- DISERTATIONS
  - Marek Polič, Evolution and Adaptability of Complex Applications, 2017
  - Jaroslav Pokorny, Functional Querying in Graph Databases: What’s New and What’s Next?, 2017

**PARALLEL ARCHITECTURES/ALGORITHMS**

**Applications**

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

**SilkT (Similarity RETrieval) Research Group**

SilkT was founded in 2006 at the Department of Software Engineering, Faculty of Mathematics and Physics, Charles University in Prague. SRG deals with database methods for efficient and effective similarity search in databases of complex unstructured objects. In particular, SRG is interested in three areas: general methods of indexing similarity (metric and non-metric spaces), biological applications of the similarity search, and indexing image databases for content-based retrieval.

**XML and Web Engineering**

- XML and Web Engineering Research Group (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. 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, Parallel/Apiphany), distributed computing on tightly coupled clusters, parallel data processing, concurrency in database systems, and languages (and compilers) for parallel processing.

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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. 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 ITM 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. They 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, CBS participates in the development of an EU reference curriculum for business process management. CBS’ 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 (CBS/BDIA) 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. This will 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 its use and experience? 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, Celci Mobile, IBM and Innovation Lab.

PUBLICATIONS


The project started in January 2017 and lasts until June 2019 (30 months) having a budget of 8 Million Euros. TOOP is an innovative action that explores and demonstrates the implementation of the “once-only” principle on a cross-border scale with the aim to reduce the administrative burden for businesses and public administrations. It contributes to the EU digital single market by developing a generic federated architecture that is able to connect registries and e-government architectures in different countries. This architecture is tested and refined through pilot projects in three domains: 1) cross-border e-services for business mobility; 2) connected company data; 3) online ship and crew certification for business mobility; 2) connected companies data. The project’s duration is 28 months – 1 January 2017 until 31 December 2019 and has a budget of 5,000,000 Euros. With the general decline of voter turnout in established democracies around the world, a number of countries have started to look into adding alternative means of voting, including internet and postal voting resulting in complex multi-channel elections. However, research into the governance thereof remains limited. The aim of this project is to conduct empirical research into why such offerings are being undertaken and how they influence and change the voting process and governance thereof, as well as answering the question of how the adding/removing of internet voting and other electronic voting/removing of internet voting and other electronic means of voting, in- cluding internet and postal voting resulting in complex multi-channel elections. How- ever, research into the governance thereof remains limited. The aim of this project is to conduct empirical research into why such offerings are being undertaken and how they influence and change the voting process and governance thereof, as well as answering the question of how the adding/removing of internet voting and other channels affects the overall costs thereof.

# Publications


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**About the Institution**

The Ragnar Nurkse Department of Innovation and Governance (RND) under School of Business and Governance was established in 1992 and was called the Department of Public Administration until 2012. RND is the largest and most international Public Administration teaching and research centre in Estonia, having approximately 30 staff members. RND is the only higher education research centre in Estonia that teaches Public Administration on all three levels: BA, MA and PhD, having over 500 students.

RND is part of Tallinn University of Technology (TUT), which is a public university that was established in 1928 and ranked in top 3% of the global universities. It is the only university focusing on engineering and technology in Estonia. Furthermore, it is going to become one of the leading technological universities in the Baltic Sea region. The University’s approximately 70,000 alumni have shaped the economic landscape of the present-day Estonia. TUT offers its students exciting student and cultural life and the best accommodation and sporting opportunities in the Baltic Sea region. The TUT campus is also a home to more than 200 high-tech companies (e.g. Skype). TUT has four Schools: School of Business and Governance, School of Engineering, School of Information Technologies and School of Science, plus Estonian Maritime Academy, making up 20 departments.

**Research Topics**

RND integrates effectively its three main research fields: (1) Governance, Public Administration and Management; (2) Innovation Policy and Technology Governance; (3) e-Governance and Public Sector Innovation, leading to a rather unique research profile. Research topics include:

- e-Governance and e-Government
- Technology Governance
- Innovation Policy
- Public Sector Innovation
- Managing Innovation in Government
- Digital Transformation of Government
- Public Administration, Management and Policy

**Current Research Projects**

RND coordinates one of the largest public sector innovation pilots of the Horizon2020 Programme: The Once-Only Principle Project, acronym TOOP.

The project started in January 2017 and lasts until June 2019 (30 months) having a budget of 8 Million Euros. TOOP is an innovative action that explores and demonstrates the implementation of the “once-only” principle on a cross-border scale with the aim to reduce the administrative burden for businesses and public administrations. It contributes to the EU digital single market by developing a generic federated architecture that is able to connect registries and e-government architectures in different countries. This architecture is tested and refined through pilot projects in three domains: 1) cross-border e-services for business mobility; 2) connected company data; 3) online ship and crew certification for business mobility.

RND is one of twelve partners in the Horizon2020 project OpenGovIntelligence, acronym OGI. The Project with the full name “Demonstrating the Once-Only Principle: A European Perspective. Proceedings of ACM Digital Government Research conference: June 2017, New York, USA: ACM.” The project’s duration is 28 months – 1 January 2017 until 31 December 2019 and has a budget of 5,000,000 Euros. With the general decline of voter turnout in established democracies around the world, a number of countries have started to look into adding alternative means of voting, including internet and postal voting resulting in complex multi-channel elections. However, research into the governance thereof remains limited. The aim of this project is to conduct empirical research into why such offerings are being undertaken and how they influence and change the voting process and governance thereof, as well as answering the question of how the adding/removing of internet voting and other channels affects the overall costs thereof.

**Publications**


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**Tallinn University of Technology – School of Business and Governance**

[www.ttu.ee/nurkse](http://www.ttu.ee/nurkse)
About the Institution

The roots of the Institute for Information Systems Science were established in the year 1971. Nowadays the Institute is 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 adding to the more technical/natural science-oriented work at the department of Information Technology. Research widely covers 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 business.

Current Research Projects

The institution runs a rich portfolio of projects in different areas. Current openings contain issues such as preparing for the health social services renewal in Finland, information system continuity management, management of waste flows, ethical issues within IT, digital divide, networks and business models and hospitality management.

Events

In 2017 the University of Turku continued hosting the Kilpisjärvi Information Systems Seminar, one of the oldest continuing IS seminars established in 1990.

Publications


Dissertations


Institution at a Glance

The University of Turku is a multidisciplinary scientific university located the Southwest coast of Finland, in the vibrant student city of Turku. With over 32,000 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 employees with approximately 20 active doctoral 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. Yearly, in addition, 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 the research methods used, the institute has a track-record and long traditions of conducting action research dating back to the 1990s. 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 has run a rich research tradition on the public sector and third sector organisations. E-health is a good example of this, where the role of public service is essential. 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.
KEDGE BUSINESS SCHOOL –
DEPARTMENT OF OPERATIONS MANAGEMENT
AND INFORMATION SYSTEMS

ABOUT THE INSTITUTION
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
HRM Practices and Intelectual Capital Architecture: Fostering Ambidexterity in MNCs
The study of a French MNC, which simultaneously uses structural and contextual approaches to ambidexterity, is in the focus of a transdisciplinary project developed by Olivier Dupouet, Tatiana Bouzdine-Chameeva together with professor C. Lakshman from Tongji University School of Economics and Management in Shanghai, China. The research provides an empirical understanding of practices at a large French MNC with global (50 countries) operations encompassing both structural and contextual ambidexterity. This revelatory case design provides an in-depth investigation of a French MNC. If organizational ambidexterity has been well researched during the last decade, yet, the human resource perspective on this is non-existent, and this project contributed to that new area of research. Findings suggest that an intellectual capital configuration, with relatively high levels of human, social, and organizational capital respectively is essential for fostering ambidexterity. Additionally, both a human-capital enhancing HR system and an administrative HR system aids ambidexterity. The intellectual capital architecture is also discussed.

Global Business and Organizational Excellence is published six times a year by Wiley in collaboration with KEDGE Business School. GBOE publishes original articles, research and applied research and case studies that provide practical guidance on operational issues for global organizations. Articles should be submitted directly to Chris Kimble: chris.kimble@kedgebs.com

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Events
Topics:
- Information and Decision Systems for Supply Chain Management
- Collaboration and Sharing Practices in the Supply Chain
- Supply Chain Management under Risk and Uncertainty
- Innovative and Smart Technologies for Interconnected Era in Logistics
- Smart and Durable City Logistics

Publications


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GLOBAL BUSINESS AND ORGANIZATIONAL EXCELLENCE
ABOUT THE INSTITUTION

NUI Galway was founded in 1845. NUI Galway has grown massively in size and reputation over the past 170 years. According to QS World University Rankings, the University is now among the Top 1% in the world, and we are recognised as being one of the best universities for our international outlook. Our unique location boasts the unique landscape and culture of the west of Ireland. Our global network connects us to partners around the world. Our researchers are shaping the future. Our students are shaping their own.

NUI Galway offers a wide range of undergraduate and postgraduate courses, and a wide range of part-time diplomas and degrees, as well as flexible learning, professional qualifications and online learning options. NUI Galway has five Colleges: the college of Arts, Social Sciences & Celtic Studies, the college of Engineering & Informatics, the college of Medicine, Nursing & Health Sciences, the college of Business, Public Policy, & Law, and the college of Science.

The Lero research group resides within the J.E. Cairnes School of Business & Economics. Lero is the Irish software research centre. It brings together leading software research teams from Universities and Institutes of Technology in a coordinated centre of research excellence with a strong industry focus. Lero has raised the level and profile of Irish software research with such effect that it is now one of the best known and highly regarded software-related research centres in the world.

Lero NUI Galway works at the cutting edge of software development and management, providing unique insights that impact the performance of organisations, while also setting the academic research agenda in the area. The mission of the research group is to deliver world-class, high-impact research through industry collaboration. The research group at NUI Galway is comprised of sixteen staff including academic, postdoctoral and Ph.D. researchers from diverse industry backgrounds and is part of a global network of industry domain experts and thought leaders.

The group has received over €4m in research funding and have secured another €5.5m for research over the next 4 years. The research is funded by Enterprise Ireland, Science Foundation Ireland, the Irish Research Council, the European Commission and by a variety of indigenous and multinational industry partners.

RESEARCH TOPICS

Our research concentrates on a number of key areas: agility, open innovation, project portfolio management.

Agility: The growing popularity of Agile and Lean methods such as Scrum, extreme Programming, TDD and Kanban indicate a strong desire to improve how we work and how we create value for our customers. While there are many potential benefits to Agile and Lean adoption there is no recipe to follow that will guarantee success. We examine agile methods within industry settings. We study the key challenges in agile and further contribute to the conceptualisation of agile methods.

Temporality: While time is often a critical measure of technology, it is often over-simplified in research and the evaluation of technology. Instead, time is an inherently complex, multi-faceted, subtle and complex. While IS researchers are quick to highlight the impact of ICTs on the speed of organizational and social life, they can be slow to address the complexities of time. Our research in this area includes the evaluation of the true ‘velocity’ and speed afforded by methods such as agile and flow. We also examine the extent to which the speed of analytics provides true business value to organisations using these technologies.

RESEARCH PROJECTS

A core activity is the researcher-industry knowledge exchange. These exchanges take place every three months and provide evidence-based insights on software implementation and management issues. This enables Lero to NUI Galway to create tangible research outcomes that are immediately applicable to organisation settings. The team works with multinationals such as Dell, All, Accenture, and Markit | Information Mosaic to deliver solutions to software agility issues.

Currently the team looks at areas such as: (i) information networks, with a particular emphasis on open and networked innovation and the role of information and communication technologies within these paradigms, (ii) the use of open innovation strategies and practices across public, private and philanthropic organisations, (iii) the socio-technical aspects of information systems development (ISD) (Lean, Flow, Scrum) and the emphasis of viewing ISD as evolving activity systems (teams, organisations) beyond a single user, (iv) software product innovation, open innovation, software startup, Lean startup, inner source, (v) agile information systems project portfolio management through the lens of complex adaptive systems theory, (vi) temporality within the context of ISD.

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Open Innovation: Open innovation and the associated domains of crowdfunding, crowdfunding and inner source software development are changing the way that public and private organisations run projects. While there has been much focus in practice about the use of these methods there has been little reflection upon the theory and processes that underpin the open innovation domain. As organisations are faced with increased competition in the innovation space coupled with deplet- ing resources new methods are needed to form the generation of innovative products.

Project Portfolio Management: This gap in the literature becomes even more pertinent when we consider that contemporary implementations of agile go beyond small co-located teams as was originally intended, with non-standard implementations now widespread i.e. large teams, start-ups, distributed development environments, greenfield sites, educational environments, open source development, outsourcing, and systems maintenance. This presents new and different challenges for the scaling of agile and lean and requires a rethink of project portfolio management.

CURRENT RESEARCH PROJECTS

A core activity is the researcher-industry knowledge exchange. These exchanges take place every three months and provide evidence-based insights on software implementation and management issues. This enables Lero to NUI Galway to create tangible research outcomes that are immediately applicable to organisation settings. The team works with multinationals such as Dell, All, Accenture, and Markit | Information Mosaic to deliver solutions to software agility issues.

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PUBLICATIONS


LUISS GUIDO CARLI UNIVERSITY – CENTRE FOR RESEARCH IN LEADERSHIP, INNOVATION, AND ORGANISATION (CLIO)

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 Fondazione Guido Carli 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, Management, Law, and Political Science. The Business School and the Department of Business and Management are EQUIS accredited for all programmes delivered, from the BA to the PhD.

LUISS 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— initially through the Research Centre on Information Systems (CeRIS) and since 2016 through the Centre for Research in Leadership, Innovation, and Organisation (CLIO). The LUISS IS group represents Italy in the ERCIS (European Research Centers in Information Systems) project started in February 2016. In 2017 LUISS has hosted scholars from 10 different European countries. The main objective of MATIS is to align and possibly update programs and teaching methods in most Universities of Ukraine and Montenegro, but as a secondary outcome, it supports a fruitful exchange of experiences on methods, tools, and arguments among ERCIS members and Universities of Eastern European countries. The CLIO team is providing feedback and advice on how coding, design thinking and gamification are applied as teaching practices in the area of digital innovation.

Additional IS projects led by CLIO members are related to platform dynamics in deep web anonymous markets, social media engagement for business, government and charity organizations and digital workplace transformation. In September 2017, a COST action led by the University of Oslo, named “European Network for eHealth Infrastructures (III)” Workshop, in Hoholm T. et al. (Eds) Controversies in Healthcare Innovation, Palgrave Macmillan, Houndmills, 2017.

PUBLICATIONS


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EVENTS

XIV edition of the IAIS conference, Milano, October 6th-7th

5th Innovation in Information Infrastructures (III) Workshop, Roma, November 7th-9th
Culture in BPM is primarily concerned with identifying the constituent elements of a cultural setting that supports process-management objectives.

Digital nudging investigates how small modifications to websites (i.e., nudges like setting defaults) affect decision-making in digital environments.

CURRENT RESEARCH PROJECTS
Data-driven estimation of market value in association football
Football players’ market values have long been estimated by sports publications or by online crowds like transfermarkt.de. While crowd estimates have repeatedly been shown to be accurate, they are usually updated only once or twice a year. Together with ERCIS personal member Oliver Müller (IT University Copenhagen), Alexander Simons and Markus Weimann from the University of Liechtenstein developed a statistical model for estimating market values that is more objective and efficient than crowd estimates. The research results, published in the European Journal of Operational Research, have been covered by various print and online media, including DER SPIEGEL, Sueddeutsche.de, and Zeit Online.

Digital Innovation in Entrepreneurial Organizations
Sanja Tumbas’ dissertation spans the domains of information systems research and entrepreneurship to investigate the role that digital technologies play in entrepreneurial innovation. The dissertation’s exploratory journey delves into the turbulent growth stage of entrepreneurial organizations and presents three studies with the objective of developing novel theory on the digital façade was awarded the “Best Paper Award” at the International Conference on Information Systems (ICIS) in 2015. The second study investigates the digital capabilities facilitating rapid growth, and the third study explores digital ventures. The papers, co-authored together with Prof. Dr. Nicholas Berente and Prof. Dr. Jan vom Brocke, will be presented at ICIS 2017, with the rapid growth paper nominated for the best theory paper award.

AWARDS
AI Senior Scholars Best Paper Award Published in MISQ, “Using Text Analytics to Derive Customer Service Management Benefits from Unstructured Data,” by Prof. Dr. Oliver Müller (IT University Copenhagen, Denmark), Prof. Dr. Iris Junglas (Florida State University, USA), Dr. Stefan Debortoli, and Prof. Dr. Jan vom Brocke (both University of Liechtenstein), received the AIS Senior Scholars Best Paper Award 2017.

Best Ph.D. Paper and Best Paper Award Nomination “Tensions in Design Principle Formulation and Reuse,” by Leona Chandra Kruse and Prof. Dr. Stefan Seidel, was published in the DESRIST 2017 Research in Progress Proceedings “Designing the Digital Transformation” by A. Maedche, J. vom Brocke and A. Hevner in Karlsruhe. The article was nominated for Best Ph.D. Paper and Best Paper Award.

Students win international competitions
In November 2016, students in the master’s program in Information Systems won the SAP DemoJam at the SAP TechEd Conference in Barcelona with their tool “UniBuddy.” Students in the master’s program also won the Swiss regional final of the Accenture Campus Innovation Challenge 2017 with their project “Connect – Farming of the future.”

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Dissertations
Ph.D. graduations summa cum laude
Sarah Zelt: "On the Concept and Role of Context in Business Process Management"
Sanja Tumbas: "Digital Innovation and Rapid Growth in Entrepreneurial Organizations"
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 2017, the Department and Centre jointly employed 23 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. Recently, admissions to these programmes have been on the rise despite the steadily falling higher education admittance in Lithuania. In 2017, 56 students were admitted to the Bachelor study programme, and 22 to the Master’s. There were also ten PhD students at the Department.

### RESEARCH TOPICS
- The KTU Department of Information Systems / Centre of IS Design Technologies specialised in areas related to Information Systems Engineering, namely:
  - Model-driven development,
  - Model-to-model transformations
  - Computer-aided software engineering (CASE) technologies
  - Conceptual modeling and databases
  - Modeling of business processes, business vocabularies, and business rules
- User needs analysis and requirements modeling
- Ontologies and solutions for the Semantic Web
- Machine learning
- Big data and business intelligence
- Knowledge based systems
- Model-driven testing of information systems
- Project management
- Information systems user interface and usability

### CURRENT RESEARCH PROJECTS
- Establishing Modern Master-level Studies in Information Systems – MASTIS (2016-2018), Sponsored by the Erasmus+ Programme. The project is aimed at modernisation and/or establishment of second cycle IS studies in seven Ukrainian and two Montenegrin universities. The efforts are coordinated by the University Lyon 2 (France) and Simon Kuznets Kharkiv National University of Economics (Ukraine) and involve seven other EU universities.

In 2017, the ten course framework of the IS Master Curriculum based on the results of the stakeholder needs study was developed.

Professional Network of Master’s Degrees in Informatics as a Second Competence – PROMIS (2013–2017). In 2017, work was concluded on this long-term initiative aimed at establishing the Master study programme of Informatics as a Second Competence at ten beneficiary universities from five Central Asian countries. Financed by the Tempus Programme and coordinated by the Grenoble Alpes University, this project also involved five other European universities and three enterprises, allowing for new and promising partnerships to develop.

Development of Public Services of the Syntactic Semantic Information System of Lithuanian Language (2017–2020). The project is carried out along with the Vytautas Magnus University (Lithuania) and financed by the Ministry of Transport and Communications of Lithuania. At the end of 2017, the work starts with the design and implementation of tools for the statistical analysis of texts as well as automatic transcription of audio records based on deep neural networks and related technologies.

Smart Application Technology for Cloud Computing – SCAF (2017–2018). This EU Structural Funds co-financed project is coordinated by JSC “Sekasoft” and supervised by the Ministry of Education and Science and the Ministry of Economy of Lithuania. Here, the task is to develop a solution that would enable the application of machine learning and semantic analysis systems for the development of self-adapting organisational management applications for Microsoft Office 365 and Microsoft Azure platforms.

Continued development of the national forestry IS infrastructure in cooperation with the Lithuanian state forestry institutions and local companies. In 2017, among other efforts, two innovative modules were being developed by our researchers, namely, the forestry cadaster data supply module and private property forestry projects management module.

### EVENTS
- 23rd International Conference on Information and Software Technologies, ICIST 2017, organised by the Faculty of Informatics of KTU, took place in the resort town of Druskininkai near the capital city of Vilnius, Lithuania, on October 12–14.

### PUBLICATIONS


### DISSERTATIONS
- Algirdas Šukys, Querying Ontologies on the Basis of Semantics of Business Vocabulary and Business Rules.

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The Department of Information Systems at the University of Agder (UiA) is one of four departments within the Faculty of Social Sciences at the University of Agder. With an academic staff of 16 permanent positions and two adjunct professors, this is one of the largest IS departments in Norway.

The department offers a three-year bachelor programme in IT and Information Systems, a one-year undergraduate study in IT and Information Systems, a two-year masters programme in Information Systems, and a three-year PhD programme in Information Systems. The master programme started in 1999 as the first IS master programme in Norway. The University of Agder also has a Department of ICT, responsible for education and research within computer science and ICT engineering.

The Department of Information Systems contributes actively to the IS community by publishing in leading IS journals, and contributes actively to the IS community and ICT engineering.

CURRENT RESEARCH PROJECTS

InWork – need-based innovation for including persons with disabilities in working life through the use of technology (2017–2020).

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

Polyxeni Vassilakopoulou from the University of Agder received the Best Paper award at the Scandinavian Conference on Health Informatics (SHI 2017), with the paper: “Collective action in national e-health initiatives: findings from a cross-analysis of the Norwegian and Greek e-prescription initiatives”. Co-authors were Aleksandra Pesalgievic, Nicolas Marmaras, and Margunn Amnestad, from the University of Oslo and University of Athens.

More info on: http://ciem.uia.no/project/smart-mature-resilience


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.

RESEARCH TOPICS

The research in the Department of IS is mainly organized in three interdisciplinary centres:

Centre for Integrated Emergency Management (CIEM) focuses on how the potential of evolving information and communication technologies can be fully deployed for significantly improving emergency prepar- edness and management. In collaboration with emergency stakeholders, the centre conducts research on networks and mobile devices, human-centered sensing, social media, decision support, community resil- ience, cybersecurity, and critical infrastruc- tures.

Centre for Digital Transformation (CeDiT) conducts advanced social science research on how digitalization transforms societies and institutions. CeDiT applies an institutional approach to address transformation processes following digital innovation and change, based on a multidisciplinary ap- proach with active engagement of multiple stakeholders. The centre includes researchers from the Faculty of Social Sciences, in- cluding academics within areas such as organizational studies, political science, sociology, developmental studies and in- formation systems.

Centre for eHealth focuses on teaching, re- search, 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 tech- nological solutions such as smart house solutions and mobile home services.

More info on: http://ciem.uia.no/project/smart-mature-resilience

More info on: http://cidot.uia.no/project/center-for-digital-transformation

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CONTRIBUTING MEMBERS


UNIVERSITY OF GDANSK – DEPARTMENT OF BUSINESS INFORMATICS

ABOUT THE INSTITUTION
With almost 27,000 students, 15 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 75 different fields with over 220 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. 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.

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

- Polish Chapter of Association for Information Systems – PLAIS (awarded an outstanding chapter of the AIS in 2014 and 2016).
- 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 the Department of Business Informatics cover the following topics:

- Agility, SCRUM
- Big Data
- Business Informatics
- Business Processes Modeling
- Computer Networks
- Computer Programming
- Databases
- E-Business
- E-Learning
- Enterprise Modeling
- ERP, CRM, SCM, WFM, BI Systems
- Information Systems Development
- ICT Global Development
- IT Acceptance Research
- 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. A survey on IT in Polish enterprises in respect of IT occupational culture (ITOC) has been conducted with a funding grant by the energy producer Energa. The results are going to be published in numerous research papers.

EVENTS
The 10th SIGSAND/PLAIS EuroSymposium’2017 (Gdansk, Poland, September 22, 2017)

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PUBLICATIONS


OUTLOOK
In 2018, the Department of Business Informatics will organize the 11th anniversary EuroSymposium conference. More information will be available on eurosymposium.eu.
Wrocław University of Science and Technology – Department of IS

THE DEPARTMENT OF INFORMATION SYSTEMS (DIS) WUST is a public institution founded in 1945, but its academic legacy dates back to the Lwów University in 1661. Now WUST belongs to the best universities in Poland – over 32,000 students study here under the guidance of around 2,000 academic teachers, at 16 faculties. Recently, the position in the research and teaching field places WUST among the top four universities in Poland. The degrees awarded by WUST, e.g. the HR Excellence in Research logo, are a symbol of high quality of research and education, confirmed by the European Commission, National Accreditation Committee, and the Accreditation Committee of Universities of Technology.

The Department of Information Systems (DIS), chaired by Professor Ngoc Thanh Nguyen, as part of the Faculty of Computer Science and Management, currently consists of 18 computer science scientists and 10 Ph.D. students. We regularly co-organize three international scientific conferences: Asian Conference on Intelligent Information and Database Systems, International Conference on Computational Collective Intelligence, and International Conference on Multimedia and Network Information Systems.

The majority of current research projects in DIS are supported directly from the Ministry of Science and Higher Education in Poland as a core funding for statutory R&D activities in WUST. The main topic is Collective Intelligence from heterogeneous sources. The knowledge states referred from these units partially reflect the real knowledge state of a subject in the real world, but due to incompleteness and uncertainty the extent remains unknown.

Agents and Multi-Agent Systems related to the modern software for constructing autonomous, complex and intelligent systems including the specification of agent communication languages and formalization of ontologies.

Recommendation and Personalization in Web Systems applied in net-news filtering, web recommender, personalized newspaper, e-commerce, user interface recommendation, negotiation systems, etc.

Ensemble and Hybrid Models that combined linear and non-linear features of existing models of Computational Intelligence.

Semantic Information Retrieval ranged from link structure analysis to using social network relationship semantics.

Multimedia Information Processing covered the following aspects: audio signal processing, image recognition and video clustering, lossy and lossless compression.

System Performance Analysis with content caching techniques, usability testing, content indexing algorithms, and Web-based optimization techniques.

E-Learning Methodologies focused on applications of online collaboration paradigms, like wiki and video conferencing, Learning Management Systems (LMS) and Learning Content Management Systems (LCMS).

The majority of current research projects in DIS were supported directly from the Ministry of Science and Higher Education in Poland as a core funding for statutory R&D activities in WUST. The main topic is Collective Intelligence from heterogeneous sources. The knowledge states referred from these units partially reflect the real knowledge state of a subject in the real world, but due to incompleteness and uncertainty the extent remains unknown.

For four years (2013–16) the DIS has been part of the ICT COST Action IC1302: Semantic Keyword-based Search on Structured Data Sources (KEYSTONE), investigating synergies from fields like Semantic Web, AI or Machine Learning.

EVENTS

The 9th Asian Conference on Intelligent Information and Database Systems (ACIDIS 2017) took place in Kanazawa, Japan, April 3–5, 2017. WUST and Japan Advanced Institute of Science and Technology jointly organized the event. 154 papers with the highest quality were selected for publication in the two volumes of LNCS/LNAI (Vol. 10191 and 10192).

The 9th International Conference on Computational Collective Intelligence (ICCCI 2017) took place in Nicosia, Cyprus, September 27–29, 2017. The conference was co-organized by the University of Cyprus and WUST. 114 best papers were selected for publication in two volumes of LNCS/LNAI (Vol. 10448 and 10449).

AWARDS

According to the recent Springer Reports of May 2017 Proceedings of ACIDIS and Proceedings of ICCCI belong to the top 25% most downloaded eBooks in the relevant SpringerLink eBook Collection. Dr. Elżbieta Kukla from DIS received the Polish Medal of the Commission of National Education for outstanding services to schooling and education.

E-Learning Methodologies focused on applications of online collaboration paradigms, like wiki and video conferencing, Learning Management Systems (LMS) and Learning Content Management Systems (LCMS).

Dr. Dariusz Krol finished his habilitation (Doctor of Science) on September 26, 2017, on the topic “Modelling data propagation in multi-agent and network systems” at WUST to conduct self-contained university research and teaching.


HABILITATIONS

Dr. Dariusz Krol finished his habilitation (Doctor of Science) on September 26, 2017, on the topic “Modelling data propagation in multi-agent and network systems” at WUST to conduct self-contained university research and teaching.

Dr. Dariusz Krol
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Department of Information Systems Faculty of Computer Science and Management Wrocław University of Technology Wyspiańskiego 27 50-370 Wrocław Poland
The Department of Information Systems among others.

Software Engineering and Management group devoted to the advance of the state-of-the-art of software-based information systems, both on the engineering and management aspects of the following research tracks: (i) modeling approaches for analysis and design; (ii) business and location-enhanced database systems; (iii) metadata and ontologies for the semantic Web; and (iv) process and project management life-cycles.

Some of the research projects currently being performed in the IST research line include:

- EQUIAL/IST – Gender Equality Plans for Information Sciences and Technology Research Institutions, project Horizon 2020, GERI-4-2015 – Support to research organisations to implement gender equality plans; Partners: VI.Labs OE (Greece), European Centre for Women and Technology (Norway), University of Muenster (Germany), University of Liechtenstein (Liechtenstein), University of Turku (Finland), Kau- niaus University of Technology (Lithuania), Universidad de Modena e Reggio Emilia (Italy), University of Minho (Portugal), Simon Kuznets Kharkiv National University of Economics (Ukraine). Starting: 1-06-2016, Duration: 36 months

- Jobs for Work 4.0 – The Future of Employment, ERASMUS+, Key Action II – Strategic Partnerships for vocational education and training – N-16-1PLOI-KA202-022790, PARTNERS: Universidade do Minho (Portugal), Wissenschaftsinitiative Niedersatereich (Austria), INTEGRA INSTITUT, Institut za razvoj clovekove (Slovenia), QUaled obcianska združeni-}

pre kvalifikáciu (Slovakia), Centre For Ad- vancement Of Research And Development in Educational Technology LTD-CARDET (Cyprus), Meath Community Rural And Social Development Partnership Limited (Ireland), Ente Bilaterale Veneto (Italy);

Starting: 10-2017, Duration: 24 months. - Project SmartEGOV, United Nations University – Operating Unit on Policy-Driven Electronic Governance, University of Min- ho, Started in January 2012. - Some members of the department participate in the “Innovative Car HMI” programme, which results from a partnership of RDI between the Bosch Car Multimedia Portugal and the University of Minho. The Innovative Car HMI programme is the re- sult of two applications: INNOV CAR and iFACTORY. Its size and complexity combines the two consortiums entities to operation- alize it as a single programme, with a to- tal budget of 54.700.000,00 €.

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- SOME EVENTS

In 2017, the main event organized by the Department of Information Systems was the 25th European Conference on In- formation Systems (June 5th–10th – www. eci2017.eu). About 550 people from 43 countries and 250 different institutions at- tended the conference. In addition to this event of great international visibility, the following events were also held: Annual Conference of the Portuguese Chapter of AIS (CAPS2017 – June 6-7, 2017), CENT- ERIS 2017 – Conference on ENTERprise Information Systems (Barcelona, 8 to 10 November 2017), ProMAN 2017 – Interna- tional Conference on Project Management (Barcelona, 8 to 10 November 2017).

- SOME PUBLICATIONS


CONTACT DETAILS

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Now a dynamic university with four campuses, HSE is a leader in 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 centres in a number of international fields. The HSE has four campuses, 2,500 faculty members, 25,000 students, 35,000 alumni. Founded in 2002, the HSE’s School of Business Informatics was created with the active participation of leading Russian and multinational 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 elite 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
ICANN new gTLDs program analysis for Russia
The project analyses the impact of new gTLDs on Russian market.

World IT project
The 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. It is a study on the evolutionary dynamics of social networks based on conditional simulation-textured resource environment.

AWARDS
Students from the School of Business Informatics won the Space app Challenge Hackathon by NASA.

Students from the School of Business Informatics won the SAP InnoJam&BootCamp.

Students from the School of Business Informatics won the HackUPC hackathon.

Students from the School of Business Informatics within their team Dolphin Blockchain Intelligence (Dolphin BI) won the Startupbootcamp program.

The master programme “Business Informatics” was awarded with the public-professional accreditation from the Russian Association of IT Companies.

EVENTS
Lecturers from the School of Business Informatics participated in the Winter school for University professors of SAP CIS, Moscow, Russia, February 2017.

Round table on digital transformation based telecommunication technologies.


Annual meeting and a workshop of SIG on Big Data Application organised by the Special Interest Group (SIG) on Big Data Analytics within the International Conference on Information Systems (ICIS 2017), Seoul, South Korea, December 2017.

2nd French-Russian Workshop on Big Data Applications.

24th Russian Workshop on Big Data Applications, Moscow, Russia, October 2017.

SELECTED PUBLICATIONS
Big Data Normalization for Massively Parallel Processing Databases

Model for organizing cargo transportation with an initial station of departure and a final station of cargo distribution

Leveraging heterogeneous device connectivity in a converged 5G-IoT ecosystem

Dissertations/Theses
D. Neklyudov “Pricing policy development for telecommunication company”
The research of the Faculty IMCS focuses on following directions: 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 Modeling – multidimensional modeling of the behavior and decision making processes of individual and collective agents in complex distributed systems.
- New mathematical models and multiagent 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 aggregation (decision making rules) and development of 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.

Employees of the laboratory LATAS won the contest of the Russian Science Foundation for the extension of the grant 14-4100099. Clustering and Search Techniques in Large Scale Networks.

AWARDS
Senior research fellow of LATNA Andrei Savchenko has won the Grant of the President of the Russian Federation for young PhD holders.

EVENTS
The 7th International Conference on Network Analysis (June 22–24, 2017)
The Summer School on Operational Research and Applications (May 12–14, 2017)
The Workshop “Organizations Engineering Days”, September 6–9, 2017 with the participation of Prof. Erik Proper, Institute of Science and Technology (Luxembourg).

Participating in Program Committees of the following conferences:

EOMAS-2017, E. Babkin (Co-chair), P. Malyshenkov (PC Member)
EEWC-2017, E. Babkin (PC Member)

SELECTED PUBLICATIONS

Kalyagin V. A., Pardalos P. M., Special Issue on Clustering and Search Techniques in Large Scale Networks, Volume 11, Issue 2, February 2017, Springer.

EOMAS-2017, E. Babkin (Co-chair), P. Malyshenkov (PC Member)
EEWC-2017, E. Babkin (PC Member)

SELECTED PUBLICATIONS

Kalyagin V. A., Pardalos P. M., Special Issue on Clustering and Search Techniques in Large Scale Networks, Volume 11, Issue 2, February 2017, Springer.
The Faculty of Organizational Sciences is a founding member of the University of Maribor. It has been involved in research and education about the organizational and information sciences for more than 50 years. Today it provides Bologna programmes 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 focuses on various aspects of human resources, information systems, business processes and general management. Research is organized in many laboratories and in the eCenter. All are involved in research projects, prototyping, consulting, education and training at national and international level. Their activities have been organized in many laboratories and in the eCenter. All are involved in research projects, prototyping, consulting, education and training at national and international level. Their activities have been organized in many laboratories and in the eCenter. All are involved in research projects, prototyping, consulting, education and training at national and international level. Their activities have been organized in many laboratories and in the eCenter. All are involved in research projects, prototyping, consulting, education and training at national and international level. Their activities have been organized in many laboratories and in the eCenter. All are involved in research projects, prototyping, consulting, education and training at national and international level. Their activities have been organized in many laboratories and in the eCenter. All are involved in research projects, prototyping, consulting, education and training at national and international level.

**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 on implementation of newest ICT and their impact on new business model development, and increasing effectiveness and efficiency of business and government organizations, ICT industry, universities and society as a whole. Majority of our research and development activities are carried out within the following research topics:

- Business models and business model innovation
- Management of information systems
- Business processes management
- ERP systems
- e-Commerce and eBusiness
- eCollaboration
- Social CRM
- Social media
- Cloud computing
- Internet of Things

**Current Research Projects**

- ENVISION – Empowering SME business model innovation, Horizon 2020
- MASTIS – Establishing Modern Master-level Studies in Information Systems, Erasmus+ KA2

**National Research Programmes**

- Decision support systems in the global e-business, Research programme, Pj-0018
- Impact of management, organizational learning and knowledge management in modern organizations, Research programme, Pj-0364-058

**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 Cyber Physical System, Bilateral project SI-MNE

**Contact Details**

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**Faculty of Organizational Sciences**

**Bled eConference**

**Organizational Science Development**

**EU projects:**

- ENVISION – Empowering SME business model innovation, Horizon 2020
- MASTIS – Establishing Modern Master-level Studies in Information Systems, Erasmus+ KA2

**National research programmes:**

- Decision support systems in the global e-business, Research programme, Pj-0018
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**Selected Publications**


The mission of the Department of Industrial and Management Engineering is to cultivate creative leaders in the era of convergence and innovation based on the core competencies of Pohang University of Science and Technology (POSTECH). To achieve this mission, we focus on providing specialized education and research programs based on the unique strengths of the Department, conducting research that significantly contributes to the academia and to the industry, and fostering the development of young talents with systems thinking capability, passion, and humanity.

The mission of the Department of Industrial and Management Engineering is to cultivate creative leaders in the era of convergence and innovation based on the core competencies of Pohang University of Science and Technology (POSTECH). To achieve this mission, we focus on providing specialized education and research programs based on the unique strengths of the Department, conducting research that significantly contributes to the academia and to the industry, and fostering the development of young talents with systems thinking capability, passion, and humanity.

Research Topics
There are three research groups at the department. The Business Analytics (BA) research group studies quantitative analysis techniques based on statistical techniques and optimization techniques to support corporate decision making and strategy formulation. BA research group extracts information from data and uses it to derive knowledge and finally wisdom. BA research group’s main research topics are (1) data mining and graphical modeling techniques, (2) process mining and social network analysis techniques, and (3) large-scale sustainable system analysis. The Smart Service System Research Group studies techniques that optimize the architecture, processes, and operations of the service system to meet the needs and context of stakeholders. Examples of smart service systems include smart home and smart health care, smart transportation system, and smart factory. Smart Service System research group’s main research topics are (1) Human-centered system UI / UX design, (2) Smart healthcare service system, and (3) Smart transportation / energy / information network system. The SRM Research Group conducts research on systemic risk management that takes into account the interdependencies of risk factors, from a more diverse perspective on risks at the national, social, and enterprise levels that may arise in various sectors. Therefore, Industrial and Management Engineering provides excellent opportunities to create new values and innovations in today’s dynamic global environment.

We are pursuing an understanding of engineering technology and management by combining the contents of business administration with the existing industrial engineering field. While Industrial Engineering deals with the systematic planning, design, and optimization of complex industrial systems, Industrial and Management Engineering extends its coverage to more comprehensive fields, including the service industry, information industry, and management science.

Current Research Projects

Development of IoT Intelligence Services based on Multi-device/Multi-source data (Samsung Electronics, May 2017 – Sep. 2017)


A methodology for clinical pathway development based on data mining / process mining and CP management system development (National Research Foundation of Korea, Jun. 2016 – May 2019)

Mining of Technology Functions for Customer-Driven Product Development (National Research Foundation of Korea, Jun. 2016 – May 2019)

Propelling business process management by research and innovation staff exchange (National Research Foundation of Korea, Dec. 2014 – Nov. 2018)


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LULEÅ UNIVERSITY OF TECHNOLOGY – ENABLING ICT – INFORMATION SYSTEMS

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 2017, the university had 18,000 students and 1,500 employees. Research is carried out in close cooperation with partners from industry such as Bosch, Ericsson, Scania, IKAB and SKI, 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 interdisciplinary research approach, which covers topics connected to the design and use of information technology in relation to people, organizations and societies. IS involves, currently, a faculty of 25 persons and 10 active doctoral students. IS-related research is also conducted within other research subjects such as Data Science, Industrial Marketing and Mobile, Pervasive Computing, Industrial Internet, e-Communication, e-Commerce, e-Government, and e-Health.

RESEARCH TOPICS
The following diagram explains the six main research areas in the IS research group, together with each partner at a contact person with a group:

1. Open and user centered IT service innovations enable the development of smart cities and smart regions. Within this area, we are especially interested in understanding people’s needs, value and motivators related to service innovations such as Internet of Things, energy monitoring services and privacy enhancement awareness services. We also carry out research within the Living Lab area in which the focus is to understand and research Living Lab as a phenomenon and its contribution to innovation processes.

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

3. The Scandinavian tradition has a strong focus on user oriented design of information systems. The systems science is based on soft systems thinking and contributes with an approach to make different user needs explicit. These two parts together, integrate user needs within technical aspects in early phases of product development. Our research is focusing on sharing experience based knowledge in multifunctional design team. The perspective to identify and analyze needs that our research work is focusing on, to be used to improve existing products, which is particularly useful for innovations.

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

5. Big Data Analytics is one of the key research areas within the information systems group. We have three PhD students conducting their thesis utilizing analytics and big data for various purposes such as: smart cities, enterprise systems, and digital service innovation. Also, we have conducted research related to: fact-based decision making, big data epistemological challenges, and big data analytics framework.

6. Sustainable Data and Information Management regards data, information, and knowledge as a valuable resource that needs to be managed, cultivated, and utilized systematically throughout its lifecycle both in enterprises and in the public sector.

RECENT PROJECTS
LTU is an active member in the MASTIS Erasmus+ project (https://mastis.pt) that aims at establishing modern master studies in information systems. The project was initiated through the EKCS network.

UpTo (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.

OrganCity (http://organcity.eu) is an EU project with € 7.2 million in funding that puts people at the center of the development of future cities. The project brings together 3 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 promote cross-border collaboration.

Nimble (2016-2019) is a Horizon 2020 Research and Innovation action. The main objective is to develop the infrastructure for a cloud-based, Industry 4.0, Internet-of-things-enabled B2B platform on which European manufacturing firms can register, publish machine-readable catalogs for products and services, search for suitable supply chain partners, negotiate contracts and supply logistics, and develop private and secure B2B and M2M information exchange channels to optimize business flows.

EVENTS

The third biennial Luleå seminar on design-oriented research was organized by IS and Maung Sein and Tero Paivärinta in Autumn 2017. The topic for the seminar was design research and action design research. Previous mentors having participated in the seminar include Sandeep Purao, Matti Rossi and Olivier Müller.

AWARDS AND ACHIEVEMENTS
Students of the Master Programme in Information Security at Luleå University of Technology have won a Cyber defense exercise arranged by the Swedish Armed Forces in 2016.

A student on the Master Programme in Information Security at Luleå University of Technology have won the ISACA Sweden Chapter Scholarship for the best Master’s thesis in information security in 2017.

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


Recent publications


Mobile Business: The CC Mobile Business is focused on the use, application, and management of mobile technologies in organizations. It 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. 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: This research project, funded by the Swiss National Science Foundation, seeks to develop a reference modeling language. The main focus is on facilitating the understanding of value co-creation across different disciplines. Further information: http://pp3.snf.ch/project-162404

PUBLICATIONS
The following list is a very limited extract of the IWI-HSG publication list in 2017. A complete list of publications, as well as full texts of many papers, is available at: http://www.iwi.unisg.ch/publikationen.


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 lecturers engage in executive education, offering degree and non-degree programs in areas such as Business Engineering or IT Business Management. Being one of the largest research units at a top Business School, IWI-HSG’s contribution is on Business Innovation, focusing methods, reference models, and innovative prototypes.

As of fall 2017, Andrea Back, Walter Brenner, Reinhard Jung, Jan Marco Leimeister and Robert Winter as full professors are heading five research groups comprising eleven assistant professors or postdocs, twenty-eight research assistants, ten research affiliates, eight student assistants and twelve support staff members.

SELECTED RESEARCH PROJECTS
The complete list of competence centers and current projects can be found at: http://www.iwi.unisg.ch/?id=1120

Business 2.0: The CC Business 2.0 focuses on the development of applicable methods for implementing and managing web 2.0 technologies, considering knowledge-intensive processes in the area of marketing, corporate communication, sales and services. Further information: http://www.aback.iwi.unisg.ch/kompetenz/cc-business-20/

Crowdsourcing: Crowdsourcing is a principle for organizing digital work. The research goals of CC Crowdsourcing include the development of models and instruments for systematic design, introduction as well as usage of crowdsourcing approaches for digital work and IT-based innovations. Further information: http://crowsourcing.iwi.unisg.ch

Design Thinking: The Design Thinking Group is focused on embedding human-centric innovation tools into corporate structures. The research team strives to improve the capability of corporate IT and to reduce costs and risks in innovation projects. Further information: http://diethsg.com/

Dynamics of Institutional Mechanisms in Enterprise-wide Information Systems Architecture: This research project, funded by the Swiss National Science Foundation, aims at a distinctive theorization of enterprise-wide IS architecture management that goes beyond the existing, merely centralized conceptualizations. Further information: http://pp3.snf.ch/project-165607

Industrial Service and Enterprise Systems: The CC Industrial Service and Enterprise Systems is engaged in studying the interplay between industrial services and corporate information systems. Goal of the CC is the development of scalable and flexible processes, systems, and data management approaches in the industrial context. Further information: https://www.iwi.unisg.ch/id/projekt/143295

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PUBLICATIONS
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Events
In February 2017, IWI-HSG hosted the 13th International Conference on Wirtschaftsinformatik (www.wi2017.ch) in St. Gallen – the leading conference in the German-speaking scientific information systems community. Over 700 attendants from academia and industry, 110 scientific contributions, and 11 CIO/CEO presentations contributed to the successfullness of the conference.

In Mai 2017, the 45th edition of the St.Galler Anwendertagforum took place, this time focusing on project governance. Other one- or two-day practitioner events, organized by IWI-HSG, are the Business Engineering Forum, the Swiss Industry 4.0 Conference, and the Mobile Business Forum.
a linking pin between all research activities, and is as such profiling for ‘Science for a Smart Society’. The Campus becomes a center of open innovation, to which also industry, government bodies and citizens are committed.

CTIT’s research is internationally oriented; there is a large participation within European projects. The research areas of CTIT are linked to scientific challenges that are either economically relevant (such as the Dutch Top Sector, pillar 2 Industrial Leadership Horizon 2020), or socially relevant (e.g., pillar 3 of Horizon 2020 Societal Challenges). Various departments are joining efforts in these centers to address research challenges in an interdisciplinary way. More information on the centers 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 EOCS research themes are the IEBIS (Industrial Engineering and Business Information Systems) group and the SCS (Services, Cybersecurity and Safety research group).

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 business- 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:**

- Catelog – Ebusiness 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.
- Synchronomally! – 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-organisational processes for a coordination hub for the flower industry.

**AWARDS**

The N.W.O. funded several projects for PhD and postdoc positions in the IEBIS department in the area of complexity in networks and Internet of Things and Big Data in Logistics.

Prof. Jos van Hillegersberg was appointed as chairman of the research program committee of the Dutch Logistics Topsector.

**EVENTS**

A free online course (MOOC) was developed on Supply Chain Innovation. It was run throughout 2016 and 2017. Over 10,000 students enrolled and participated in the discussions. The course was developed in a collaborative effort of several research- ers of University 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 be evaluated and renewed to run again in 2017/2018, see https://www.futurelearn.com/courses/supply-chain-innovation.

**PUBLICATIONS**

Predictive analytics for truck arrival time estimation: a field study at a European distribution centre, S van der Spool, C Amr- init, J van Hillegersberg, International Journal of production research 55 (7), 5062-5078.


Unlocking how start-ups create business value with mobile applications: Development of an App-enabled Business Innovation Cycle, M Ehrichard, F Wijnhoven, T van den Broek, MZ Stagno, Technological forecasting and social change 155, 26–36.


**DISSENTATIONS**

Pluggable services: a platform architecture for e-commerce, Aukemeiers, F. 12 Apr 2017 Enschede: Universiteit Twente.

Enhancing sustainable development in sub-Saharan Africa: new integrated sustainabil-
Leiden University is a university with a long history of excellent research. It belongs to the League of European Research Universities (LERU) and is regularly ranked in top 75 positions in international rankings.

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, Bioinformatics, and in Media Technology that are carried out at Leiden University. Research & education are closely intertwined and students of LIACS actively contribute to the research and get courses from top experts in their fields.

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 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.

Current research projects:

**Current Research Projects**

- Data science – that is the science of analyzing and managing big data – is a major research field of LIACS. Next, we highlight two projects in this direction.
- **SAPPAO: A systems approach in Airlines Operations**
  - The SAPPAO project is an NWO-funded, four-year collaboration between LIACS, the GE India Technology Center and the Indian Institute of Technology Roorkee.
  - The research is targeted towards developing methods for safer, faster, economical, environmentally sustainable and reliable global air travel. By analysing historical flight data and data on the associated disruptive events on the flight network, the SAPPAO project aims to optimise the accuracy and reliability of predicting scheduled flight times, thereby potentially saving millions of Euros on better utilisation of airplanes, decreased fuel consumption, decreased CO2 emissions, a decrease of ambient noise and better use of time for passengers and airports. In the project, the combination of network data, e.g., air connection networks, with time series plays, e.g., weather & aircraft condition, is used to improve schedules and delay management with respect to multiple criteria.
- **PROMIMOC, a new system for controlling and optimizing industrial production processes**
  - The Leiden Institute of Advanced Computer Science (LIACS) received a grant award from NWO for a joint proposal with Center Wiskunde & Informatica (CWI, Amsterdam), Tata Steel (Ijmuiden), BMW (Munich), and database company MonetDB. Within the NWO Data Science program ‘Challenging big data’, LIACS is about to engage in a four-year project aimed at developing a new system for controlling and optimizing industrial production processes based on big data sets from sensors and online quality assessment.

For a comprehensive list of research projects by LIACS we refer to the webpage of the institute.

**Publications**

- Wessel Kraaij: Data van waarde, Oratie uitgesproken door Prof.dr.ir. Wessel Kraaij bij de aanvaarding van het ambt van hoogleraar op het gebied van Applied Data Analytics aan de Universiteit Leiden op vrijdag 24 februari 2017, http://hdl.handle.net/1887/516
Simon Kuznets Kharkiv National University of Economics (KHNUE) is the leading higher education institution of the Eastern Ukraine, which provides a full range of educational services, carrying out multistage training, retaining and upgrading experts' skills in 35 specialties, such as Economics and Entrepreneurship, Management and Administration, Information Systems and Computer Science, Publishing and Printing Business.

The Information Systems Department has about 7,769 students (including 1494 foreign students), 701 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 models 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
- System of monitoring in scientific researches in higher education
- Fuzzy logic and modelling in logistic and marketing
- Information security
- Distributed data warehouses
- Knowledge based and artificial intelligence
- Innovative computer technologies in higher education

**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 DocHub – Structuring cooperation in doctoral research, transferable skills training, and academic writing instruction in Ukraine’s regions.**

One of the project objectives is to establish inter-HEI subject-specific research network in information systems that is integrated through regular seminars and co-supervision of PhD students.

**ERASMUS+ CBHE CyQA – Promoting internationalization of research through establishment and operationalization of Cycle 3 Quality Assurance System in line with the European Integration Agenda.**

Specific project objectives are: to establish an external and internal quality assurance system to promote quality of Cycle 3 programs and to promote internationalization of the Cycle 3 programs with joint efforts of the key stakeholders and cross-regional cooperation. 15 department of KHNUE will work on the establishment of QA system for PhD programme in Information Systems.

**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.

**CONFERENCES**

**IX Annual International Conference “IT Industry Development: Problems and Perspectives”**

**EVENTS**

Prof. Zolotaryova served on the program committees of the following international conferences: ManComp 2017 – 2nd Work- shop on Managing Complexity, BIR 2017 International Conference on Perspectives in Business Informatics Research, Euro Symposium 2017 on Systems Analysis and Design.

**Dissertations**


**Publications**


**PROJECTS**

- EU Project: Horizon 2020 EQUAL-IST – Gender Equality for Information Sciences and Technology Research Institutions.
- ERASMUS+ CBHE DocHub – Structuring cooperation in doctoral research, transferable skills training, and academic writing instruction in Ukraine’s regions.
- ERASMUS+ CBHE CyQA – Promoting internationalization of research through establishment and operationalization of Cycle 3 Quality Assurance System in line with the European Integration Agenda.
- Cryptographic means for information protection in banking systems.
- Modern simulation technology and designing of information systems and management objects.
- Computer imitational modeling of industrial and commercial systems.

**CONTACT DETAILS**

PROF. IRYNA ZOLOTARYOVA

Member of the Ukrainian Higher Education Reform Experts Team, Head of Ukrainian-French Master Double Diploma Program MBA “Business Informatics”, Information Systems Department

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http://ei.hneu.net/lecturer/30


The School of Business has 61 full-time faculty and 430 undergraduates, 500 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.

The Center focuses on bringing needed techniques to several areas. In the area of crowdfunding 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 that relates to the open source sharing of designs for the 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 to be 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 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 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 that development by creating technical infrastructure and working out organizational adoptions, while others try to elaborate 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.

At the CEBPI latest research aims to understand the skills, positions, and organization structures of process management professionals in industries under different regulatory intensities. Additional research projects focus on the implications of digital technologies on organizational and technological infrastructures and the changing jobs of technology professionals in digitally transformed organizations.

Selected Publications

Dissertations/Habilitation
Yue Han: Collective Exploration: Understanding Remapping Patterns in Online Communities
Prior Ozturk: Dynamics of Online Community Collaborations

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Since last 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, a recommendation from someone inside the network might strengthen your motivation to become a personal member.

This year we welcome three new personal members who signed their official Certificate of Membership during the ERCIS Annual Workshop in Leiden.

Welcome to Alessio, Daniel, and Stefano!

About Me:
My research interests comprise service science, business process management, information modelling, and the socio-technical design of information systems. A particular focus is designing information systems that enable service-oriented business models. Apart from conducting several projects for the German government, I am involved in the RISE_BPM project that networks many ERCIS members in the field of business process management.

I am a member of the editorial boards for Business & Information Systems Engineering (BISE) and the Journal of Business Research (JBR), and a guest editor for the Information Systems Journal (ISS). Currently, I am President of the Special Interest Group on Services (SISVC) in the Association for Information Systems. Here, my mission is to network service researchers from different backgrounds to shape the future agenda of the service science field.

SELECTED PUBLICATIONS


In addition, I am also working on a study of the behavioural traits of the millennials generation, and their implications for sense making and decision making.

SELECTED PUBLICATIONS


About Me:
I am an Associate Professor at the University of Tuscia, where I teach Organization Theory and Management of Information Systems. I am member of the board of advisors of the PhD course in Economics, Management and Quantitative Methods, which has a curriculum on Digital Transformation.

My research activity studies the impact of ICT on communication and coordination of teams and organizations. Currently I am analysing how social media platforms support and constrain the management of communities for collective action, with a specific focus on eParticipation, and in cooperation with the University of Agder (NO).

In addition, I am also working on a study of the behavioural traits of the millennials generation, and their implications for sense making and decision making.

SELECTED PUBLICATIONS

About Me:
I am an assistant professor ("junior pro-
fessor") in Digital Media in the Public
Sector at the University of Bremen. In my
research, I am concerned with how digitali-
sation changes the relationship between
governments and citizens. For instance, I
study how e-government is adopted both
government employees and by citizens
and how both stakeholder groups can be
couraged to use the "e-"channel. In do-
ing so, I find it especially interesting to
combine my Information Systems back-
ground with insights from other disciplines
such as communication and media sci-
ence. My research has a strong interna-
tional focus and I am happy to collaborate
with researcher from various countries.

SELECTED PUBLICATIONS
Ojanen, K., & Hofmann, S. (2018) Govern-
ments’ Need for Digitization Skills. In:
International Journal of Public Adminis-
tration in the Digital Age (accepted for pub-
lication).

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About Me:
Oliver Müller is an Associate Professor in
the Business IT department at the IT Uni-
versity of Copenhagen. He holds a BSc and
MSc in Information Systems and a Ph.D. from the University of Münster’s School of Business and Economics. In his research, Oliver studies how organizations create value with (big) data and analytics; for example, by enhancing judgment and decision making, supporting knowledge management, or automating business pro-
cesses. His research has been published in the Journal of the Association of Infor-
mation Systems, European Journal of In-
formation Systems, Management Information Systems Quarterly, Executive, European
Journal of Operational Research, Decision
Support Systems, and various others.

SELECTED PUBLICATIONS
Müller, O., Simons, A., & Weinmann, M. (2017). Beyond crowd judgments: Data-
driven estimation of market value in as-
sociation football. European Journal of
Operational Research, 263 (2), pp 611–624. Available at:
https://doi.org/10.1016/j.ejor.2017.05.005
Burann, B., Beverungen, D., & Müller, O. (2017). An open-data approach for quanti-
fying the potential of taxi ridesharing. De-
cision Support Systems (DSS), Forthcom-
ing. Available at:
https://doi.org/10.1016/j.dss.2017.05.008

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About Me:
I am head of the research group „Profes-
sional 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 Col-
laboration” and “Social Media Analytics”.
Currently, we are working in several funded
projects. Two selected projects are:

Funded by the BMSGF (German Federal Min-
istry for Education and Research) we coop-
erate with the RWTH Aachen to investigate
the habits of researchers concerning the management of their research data. The objective of the collaborative 2-years pro-
title titled “UNEKE” is the development of
criteria for the establishment of research
data infrastructures at universities.

The DAAD funded research project “Social
Media for Integrated Emergency Manage-
ment” between ERCIS-partners University
of Agder (Norway) and the University of Duisburg-Essen (Germany) aims at the
development and improvement of concepts,
methods and tools that can be used in the
context of crisis situations. In particular,
we address emergency situations that are
caused by humans (e.g. rampages, terroris-
tic attacks) and have major societal impli-
cations.

SELECTED PUBLICATIONS
Stieglitz, S., Bunke, D., Mirbabaie, M. &
Media During Extreme Events. Journal of
Contingencies and Crisis Management
(JCCM), DOI: 10.1111/1468-5973.12193.

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About Me:
I’m currently adjunct professor in Infor-
matics and Management of Information
Systems at LUISS Guido Carli University.
In 2017 I was visiting scholar at the EM Stras-
bourg Business School (France) and at the
University of Agder (Norway). I’m the Sec-
tary of the Italian chapter of AIS
(http://www.itais.org) since 2008, and member of
program committees and reviewer for na-
tional and international conferences and
journals in domains of Information Sys-
tems and Organization Studies. My main
research interest is the analysis of human
behaviour in the digital ecosystem and
the design of digital artefacts in order to fos-
ter new organizational learning process. In
addition, I’m currently using SNA tools and
Agent Based Simulation to analyse and
investigate the evolution of some specific
social networks properties.

SELECTED PUBLICATIONS
Degooij P. and Za S. (2017), SME e-business
development: an interaction based ap-
proach, in Proceedings of the 25th Euro-
pean Conference on Information Systems
(ECIS), Guimarães, Portugal, June 5–10,
2017
Carillo K., Scornavacca E., Za S. (2017), The
role of media dependency in predicting
continuance intention to use ubiquitous
media systems, Information & Manage-

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Nowadays, conceptual modeling supports a variety of business tasks aimed at improving 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 organization. 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 analyze specific aspects of corporate reality to support economic decision-making. For instance, the use of conceptual models supports Business Process Improvement, Benchmarking, Software Customizing, 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 analyze 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, identify 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 Diaied Model Query Language (DMQL). This year, we developed a new version of the latter including extended analysis capabilities.

**Patterns for Query Languages**: Patterns for query languages define model sections of interest that represent, for instance, compliance violations, process weaknesses, or errors. In several empirical studies, we identified more than 100 query patterns that can be used in business process management projects, for instance, to identify business process compliance violations or inefficiencies.

**Predictive Process Analytics**: Predictive Process Analytics is used to learn the structure and behavior of a business process automatically from log files of business software and predict the future behavior of currently running process instances. The prediction results can be used to proactively influence process instances, for instance, to assure beneficial behavior and avoid unfavorable ones. We can use predictive process analytics, for instance, to support public traffic systems or tourist installations to optimize their operating rate or to avoid congestion, optimize the behavior and output of plants, or decrease fine particulate matter pollution in major cities. We have developed a generic predictive process analytics approach recently, which we currently apply in the mentioned fields.

**Standardization**: In 2017, we completed the founded research project on EPC standardization that we work on together with our colleagues from the University of Osna- brück. The project is funded by the German Federal Ministry of Economic Affairs and Energy (BMWi). We are happy that we could publish our research results in renowned, high-ranked outlets (such as ISF and MISQ).

For more information visit: www.conceptual-modeling.org

**SELECTED PUBLICATIONS**


**CONTACT DETAILS**

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The Competence Center for Crisis Management (C³M) integrates research efforts of the ERCIS network in the domains of crisis management and humanitarian logistics. Our main objective is to identify relevant research questions and to design appropriate socio-technical solutions. C³M investigates 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 practitioners and researchers from the crisis management and humanitarian logistics domain.

Our main objective is to identify relevant research questions and to design appropriate socio-technical solutions. C³M investigates 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 practitioners and researchers from the crisis management and humanitarian logistics domain.

Next to contributing as a solution provider of different developments for the design, planning and simulation tools for disaster relief supply logistics, our team is now also responsible for some overarching objectives with regards to the DRIVER+ test bed and the portfolio of solutions. C³M became a member of the review board and is now involved in the development, application and evaluation of the test-bed methodology. Furthermore, C³M facilitates the review process of the Solution Selection Group, where crisis management practitioners evaluate potential solutions in a double blind review process. Due to its involvement in various scientific and practitioner crisis management networks C³M is also in charge of various dissemination activities, such as conferences or standardization activities.

One very exciting highlight in 2017 was the involvement of the C³M in the 4th International Conference on Information Systems for Crisis Response and Management (IS- CRAM). Together with the German Aerospace Center (DLR) we have organized a workshop about “Transport and Logistics Management in Crisis Situations”. The aim of the workshop was to demonstrate and discuss different approaches for logistics and transportation issues within crisis management. A mix of presentations and an interactive session led to many constructive and insightful discussions. Next to this, Adam Widera from C³M co-chaired the track “Logistics and Supply Chain Management in Crisis Response” together with Prof. Jacques Lamotte from École des Mines d’Albi-Camurac.

We are proud to have finally institutionalized our collaboration with the group of Prof. Marc Haselkorn at the Centre for Collaborative Systems for Security, Safety, and Regional Resilience (CoSSar) at the University of Washington under a Memorandum of Understanding. Next to the plans of regular researcher exchanges, joint projects and other activities, we have successfully initiated joint lectures and co-supervised degree theses, also collaborating together with our practitioner networks, like the Red Cross Societies.

In the area of teaching, the C³M team is very happy to have integrated the Red Cross Disaster Response Simulation in the regular Bachelor and Master seminars on Quantitative Methods and Simulation in Humanitarian Logistics. The simulation is designed and supported by Prof. Garde- mann and the Centre of Competence for Humanitarian Relief at the University of Applied Sciences Münster.

The year 2017 ended with an excellent event for the whole C³M team: we are very glad to have been asked to host the 4th edition of the International Conference on Information and Communication Technologies for Disaster Management (ICT-DM). It was a big honor to welcome authors, practitioners and solution providers from all over the globe: many different countries between Seattle in the US and Waikato in New Zealand participated in this event. We enjoyed every minute of being creative in planning and preparing a warm stay for our guests. To get a textual and visual insight on the overall program and the online available proceedings please have a look at our conference website: http://ict-dm2017.ercis.org/

SELECTED PUBLICATIONS

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.

Official start of the new Master’s Programme Public Secur Innovation and E-Governance

With the beginning of the academic year 2017/18 the new Master’s Programme Public Secur Innovation and E-Governance (PI-ONEER) has officially started. Six students from 14 nations are now studying in the interdisciplinary field of E-Government, Public Management, Information Systems and Governance. After their first semester in Leuven, the students will come to Münster in spring 2018 and continue their studies in Tallinn from late summer 2018 on.

PIONEER is a 120 ECTS joint master programme organised by the KU Leuven, the University of Münster and Tallinn University of Technology, and co-financed by the European Union under the Erasmus+ programme. The general idea behind this Master programme is that the public sector needs interdisciplinary expertise in order to be able to fully benefit from the potential of ICT and technological innovations. Thus, the sector itself needs experts (1) who are able to translate technological expertise into efficiency, effectiveness, performance and user needs, and (2) who are able to take into account the organisational, cultural, social and structural peculiarities of the public sector when implementing new technologies.

Joint Seminar eGov 4.0

In a cooperation between Münster and the Technical University of Munich (TUM), a joint master seminar on the topic of E-Government took place during the summer term 2017. In five teams with members from both universities, the students created an innovative artefact for the public administration of the future. The seminar was set up in a very creative manner, in which not only new knowledge in the field of E-Government was gathered, but also creative and innovative artefacts in the form of prototypes or short films could be created. All students were invited to present their findings to an interested audience at the IT service provider [in] AG in Berlin.

Around 450 participants attended MEMO convention

This year’s MEMO took place at the ERCIS headquarters in May 2017 and was attended by around 450 participants. MEMO is a convention dealing with e-government topics and bringing together German practitioners and researchers to develop new ideas to modernize the public administration.

The project Federal Information Management (FIM) was successfully completed After two prior projects in 2012/2013 and 2014/2015, the third project Federal Information Management (FIM) was conducted in 2016 and 2017. FIM’s aim is to develop a method for the harmonization of service descriptions, processes and forms of government services. The ERCIS – together with the fortiss GmbH of the Technical University of Munich - was involved in the form-related part of the project to evaluate the previously developed concepts and prepare the German governmental practice. The German IT Planning Council made the decision to establish and apply FIM permanently as an application of its own.

Collaboration of ERCIS researcher in Kristiansand

In August, Alessio Maria Braccini and Stefano Za from Rome and Sara Hofmann from Bremen visited Øystein Sæbø at the University of Agder and worked together on the topic of collaboration consumption in the public sector (see also p. 105).

Forthcoming event: E-Government track at MKWI 2018

Members of the E-Government Competence Center organize an E-Government at MKWI (multi conference Information Systems), which will take place in Lüneburg, Germany in March 2018.

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<th>EVENTS</th>
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<tr>
<td>SIG IT for Public Administrations Meeting in Münster</td>
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<td>In May 2017, the German Informatics Society (Gesellschaft für Informatik e.V. (GI)), SIG information technology for public administration and the National E-Government Competence Center (NEGI), supported by the IT Planning Council jointly organized a workshop on the topic of E-Competence in education and training. In total, 26 participants brainstormed, discussed ideas and exchanged best practices concerning e-competences, employer branding and learning- and knowledge platforms in the public sector. Based on the findings, a position paper was published.</td>
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<td>During this meeting, Michael Räckers was elected as German Informatics Society (Gesellschaft für Informatik e.V. (GI)) spokesperson of the SIG information technology for public administration for the next three upcoming years.</td>
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Group photo of the joint seminar eGov 4.0
The ERCIS Service Science Competence Center is twofold. On the one hand, we strive to understand the nature of service management and service science in general. On the other hand, we strive to understand the nature of service providers and service customers.

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, the public sector, and 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.

Our research is equally dedicated to re- search 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 ERCIS network.

The digital era and the advent of omnichannel retailing transform consumers' shopping behavior in favor of digital channels and also raise their expectations towards the digital profile of high street retailers. By now, digitalization potentials in high street retailing are almost exclusively utilized by large retail chains, which leaves the number of small and medium-sized retailers to decline in many city centers. Smart Market² adapts successful strategies from online retailing to the physical realm of high streets to create interactive customer experiences. The research sets out to develop data-driven value-added services, as well as mobile apps that network high street retailers and high street customers. The three-year joint project includes Paderborn University, University of Duisburg Essen, LANCOM systems, Dialogo AG and the University of Münster and was launched in March 2017.

More information: https://www.smartmarketsquare.de/
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 wellbeing.

As a result, we turned our attention to Lego® Serious Play® (LSP) that has become a popular method for overcoming the common deficiencies of organisational conversations, characterized by exclusion, domination of few individuals, lack of commitment and passion. Instead, it emphasizes on the ‘Lean Forward’ dispositions and genuine insights of participants. Conceptualized in relation to Jean Piaget’s theory that children use their hands-on experience of the world around them to build and develop their knowledge, LSP is presented as a facilitated thinking, communication and problem-solving technique for organizations, where participants build a metaphorical model from LEGO®. We adapted the LSP and organised Lego workshops that included a challenge, individual time for building a model and sharing a story about the model. These workshops incorporated the idea that tacit experience is a key to “building” knowledge, and that the Lego models become boundary objects in the group conversations, and enablers for productive team cultures.

Our work with Lego rendered outcomes that suggested that more was at play:

- The building of the Lego models stimulated creativity and imagination, which resulted in valuable ideas.
- The design of the process allowed for a combination of individual “work” and sharing narratives in turn-taking mode.
- The Lego models built by the participants become both material boundary objects, which facilitate conversations, and metaphors, which facilitate creative thinking and de- and re-contextualizing the task at hand.

Improving customer experience through digitalization

We participated in a project with ERCIS Advisory Board member CLAAS KGaA mbH. The project involved the development of a smart solution for improving the customer service process in case of machinery breakdown. We co-organised and managed a student team that researched, proposed and developed a digitalized solution for making this process more efficient and reliable.

The team followed a Design Thinking approach in the first phase of the project. The participants engaged with selected customers of CLAAS across Germany in order to evaluate their current experiences and identify potential improvements. The second phase drew on these insights to conceptualize the process into two separate facets: ‘as is’ and ‘improved to be’ process. The team also developed a prototype of a customer self-service app, and triangulated their accomplishments by means of a survey.

The project was supported and co-organised by the Chair for practical computer science (Prof. Dr. Herbert Kuchen).

ONGOING RESEARCH INITIATIVES

- Organizational implications of the transformation of individual and corporate communication media repertoires
- Identification and Visualisation of Group Metrics in Enterprise Social Networks
- Enterprise Social Networks and the dialectics of collaborative advantage and collaborative overload
- Sustainable high performance work: physiological indicators and psychological mechanisms
- The ambivalent relation between IT and time management

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The ERCIS Omni-Channel Lab – 2017 review

The long-term partnership between the European Research Center for Information Systems (ERCIS) and Arvato CRM Solutions (Arvato), a hugely successful collaboration of research and practice, continues to grow and develop.

The ERCIS Omni-Channel Lab – powered by Arvato – 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 from some of the world’s best-known brands. This means that it is perfectly placed to investigate innovative solutions and concepts to meet the unique demands of Omni-Channel Customer Service.

The Lab’s research focuses on integrating, modelling and analysing relevant customer data from many sources and across multiple channels with the goal of improving Customer Relationship Management (CRM) and, specifically, Customer Service.

Research

The Lab’s work in practice-oriented research in the area of CRM technology has led to several publications, which have been presented at international conferences during 2017.

For example, the Lab undertook an extensive evaluation of customer service in social media by analyzing millions of tweets and Facebook messages. The results were presented at the Conference on Database Systems for Business, Technology, and Web (BTW ’17) in Stuttgart, Germany, as well as at this year’s ERCIS annual meeting in Leiden, Netherlands. In addition, members of the Lab conducted a comparison of stream clustering algorithms suited for real-time customer segmentation. The results were presented at the Computing Frontiers Conference (CF ’17) in Siena, Italy.

The Lab also co-organized a Workshop on Modeling and Management of Big Data (MoBiD ’17) as part of the Conference on Conceptual Modelling (ER ’17) in Valencia, Spain. MoBiD ’17 is an international forum for exchanging ideas on the latest and best proposals for modeling and managing Big Data. The Lab’s contributions to the workshop included two papers addressing the analysis of text streams as well as the challenges and huge potential of Big Data analytics for Omni-Channel CRM. The latter was also more thoroughly discussed in a respective ERCIS working paper.

Furthermore, members of the Lab attended the Conference on Very Large Data Bases (VLDB ’17) in Munich, Germany; the Conference on Evolutionary Multi-Criterion Optimization (EMO ’17) in Münster, Germany; the German-Brazilian Workshop on Information Systems in Logistics and Production Engineering in Recife, Brazil, as well as the Summer School on Data Management Techniques in Dagstuhl, Germany. In addition, Karsten Kraume (CIO/CSO at Arvato CRM Solutions), was an invited speaker at the Dagstuhl seminar of the EU-funded Business Process Management by Research and Innovation Staff Exchange (RISE_BPM) program to discuss future directions of CRM.

Practice

The Lab offers the opportunity to focus on actual industrial projects and challenges that are addressed by interdisciplinary teams. Participants from both ERCIS and Arvato work on CRM innovations on various projects. For example, the Lab has recently started a new collaboration with an established online-retailer to improve customer identification, data integration and customer segmentation in a real-world scenario.

The Lab was also involved in seminars on Infrastructure for Data-Driven Services, Statistical Methods in Retail; Applied Machine Learning; Stream Clustering; Omni-Channel ERP Software Selection; and Hate Mining, as well as lectures on Management Information Systems and Data Warehousing, Data Management, and Data Analytics. The Lab invites students to write their Master’s or Bachelor’s theses in the context of Omni-Channel CRM. In total, the Lab supervised seven theses with topics ranging from customer segmentation to the modelling of Omni-Channel services and customer journeys.

Publications


For more information about the ERCIS Omni-Channel Lab, please visit: https://omni-channel.ercis.org/
**NETWORK RESEARCH ACTIVITIES**

**PROPelling BUSINESS PROCESS MANAGEMENT by RESEARCH and INNOVATION STAFF EXCHANGE (RISE, BPM)**

Since the year 2015 RISE_BPM is an ongoing project and the first favourably evaluated 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).

In March 2017, the consortium met in Brusse- lsets to have the first official evaluation by the European Commission. Furthermore, in September, a joint consortium meeting with all partners took place in Dagstuhl, Germany, where joint future research endeavours as well as strategic lines for the two remaining project years were defined. The participating researchers also decided to consolidate forces and to have a joint publication about important challenges and future directions within the world of Business Process Management, which was started right away during the Dagstuhl meeting.

**TESTIMONIALS**

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:

**Kate Reveno from UNIRIO (Brazil), who went to Vienna:**

“In January 2017, I did my second second- ment in the context of RISE_BPM project. This time, I visited for a month the Institute for Information Business at Vienna University of Economics and Business (WU). The visit was motivated by a work the research groups of WU and UNIRIO started in 2016 during the secondments of WU researchers to UNIRIO. The purpose of the visit was to continue the collaboration within project mining. The idea was to analyze software development pro- cesses from the perspective of changes made to the files. We considered that the develop- ment process was supported by a Version Control System. Therefore structured (e.g. amount of changes) and unstructured (e.g. comments associated to commits) data were analyzed providing insights to the manag- ers on how the development process was being conducted. The results obtained were presented at BPM 2017, last September. The collaboration continues and now we are in- vestigating other techniques towards files dependency discovery. The secondment was not only good from the research perspective, it was also possible to enjoy the wonder- ful city of Vienna. I had the luck to be there during the Ball season. The whole city had over 400 balls and I had the opportunity to attend the WU ball dance. It was an unique and memorable experience. Moreover, for a Brazilian used to 18°C in winter, it was great to explore winter in Vienna with its snow and frozen river. Walking on frozen Danube was fascinating. Participating in RISE_BPM has been a great experience. Beside, the won- derful moments visiting partners in second- ments, it has been quite enriching to host different researchers, from different univer- sities, with different backgrounds, and re- search themes, strengthening the collabora- tion network. I am looking forward to my next secondment in Nürnberg.”

**Thomas Grishold from WU Vienna (Austria), who went to Brisbane:**

“I was a visiting researcher at the Queensland Institute of Information Systems at the University of Queensland. From May to July 2017, I visited the Institute of Information Systems at the University of Technology (QUT) in Brisbane, Australia, from February to March 2017. It was my first stay in Australia and it is hard to put this amazing experience into words. First and foremost, I could gain invaluable insights into my research on ‘organizational unlearning’. My collaboration with Prof. Jan Recker provided me with the chance to explore the phenomenon from an IS perspective. We used a recently developed simulation tool to investigate the consequences of unlearning in routines. We found that unlearning parts of sub-processes in routines can lead to unwanted and unexpected effects, which need to be taken into account when realizing un- learning in practice. Throughout my stay, I enjoyed the open and inspiring atmosphere that was provided by QUT, and it was great to get to know the variety of BPM and IS topics that are being pursued there. Besides my research, I had the pleasure to make friends with wonderful people from all over the world (Canada, South Korea, Argen- tina, etc.). On weekends, my flatmates and I would rent a car and visit the beautiful places and beaches that were within reach. My fa- vourite place was Byron Bay where we went surfing and enjoyed the famous East coast vibes. Looking back, RISE_BPM was a fantastic ex- perience where I could broaden my horizon both research and culture wise. The ideas I developed in Australia will have a lasting ef- fect on my future research.”

**Jan Betzing from the University of Münster (Germany), who went to Liechtenstein:**

“From May to July 2017, I visited the Institute for Information Systems at the University of Liechtenstein. During my visit, we deep dove into the novel EU General Data Protection Regulation that is effective May 2018, in order to understand its impact on business processes for personalized mobile services. We focused on mobile privacy decision making and collaboratively designed and conducted a study to assess, how transpar- ency influences users in consenting to data collection and processing practices. We cur- rently finalize our joint publication that will be submitted to a journal soon. Especially in my situation as an early stage researcher, working with experienced col- leagues with different backgrounds yielded valuable lessons that greatly improved my research skills.”

**The folks I met at Uni Liechtenstein are all great people that instantly integrated me into their team and made me feel welcome. Besides research, the Alpine region of Liech- tenstein, Austria, and Switzerland provides picturesque landscapes and offers many oppor- tunities for outdoor activities. I frequent- ly went hiking, which often yielded fresh ide- as and helped me to tackle problems from a different mindset. Working abroad also allowed to focus more on research and less on daily chores.**

The RISE_BPM project gives participating re- searchers a premier opportunity to strength- en their ties to the research community and to generate knowledge on BPM that spans across country borders. I am thankful to be part of the project and thank my colleagues at Uni Liechtenstein in particular for making this visit a great experience in many ways.”
The project combines gender mainstreaming and positive actions at four main levels:

1. HR and management practices
2. Institutional communication
3. Teaching and services for (potential) students
4. Research design and delivery

The project consortium is formed by such ERCIS member institutions as the University of Münster (Münster, Germany), the University of Modena and Reggio Emilia (Modena, Italy), the University of Venice (Venice, Italy) and the University of Kuznets Kharkiv National University of Information Sciences and Technology (Kharkiv, Ukraine). Two further research institutions include Ca’ Foscari University of Venice (Venice, Italy) and the University of Minho (Guimarães, Portugal), and Simon Kuznets Kharkiv National University of Information Systems and Technology (Kharkiv, Ukraine).

The project started in June 2016 and will last until May 2019. To date, the following activities have been performed within the project:

First, best practices were collected in order to inform the further course of action. For that, the analysis of related projects aimed at the promotion of gender equality in research institutions was performed.

Second, internal gender audits were conducted at the participating research institutions. The objectives here were to reveal (i) the specific challenges related to gender equality, diversity, and work-family balance that each institution faced, as well as (ii) the promising initiatives to address each of the identified challenges.

Third, a co-design of tailored Gender Equality Plans (GEPs) for each participating research institution was performed. This process was facilitated by the CrowdEquality idea crowdsourcing platform (https://www.crowdequality.eu). The platform was developed by the team of eight Bachelor students studying Information Systems at the University of Münster as part of their project seminar.

Finally, the GEPs were discussed and approved by decision-makers at each research institution. Each GEP contains the detailed action plan for each of the selected initiatives aimed at addressing the identified challenges. The designed GEPs are currently being implemented and the progress is being continuously evaluated both internally and externally.

For further information please visit http://equal-ist.eu

JANUARY-MARCH 2019
RESEARCH ACTIVITIES

SUCCESSFUL ERASMUS+ PROJECT
“BPM-ONLINE”

The joint project on “Simulation studies in IS research” started in 2013 by LUISS and IWI-HSG resulted in the publication on Communication of the AIS of the paper “Exploring Foundations for Using Simulations in IS Research”. This was a joint endeavor of Paolo Spagnoletti and Stefano Za (LUISS Business School), Tobias Mettler (University of Lausanne), and Robert Winter (IWI-HSG).

The project started in June 2016 and will last until May 2019.

The goals of the project are to derive a novel semi-automatic, data driven curriculum design process (supported by software), and to develop two reference curricula, one in the domain of Data Science, and one in the area of Business Process Management. The data for the domains will be collected from online job ads, professional career platforms, and platforms like eduglopedia.org.

The project will last for two years and started in October 2017.

COOPERATIVE TEACHING BETWEEN THE UNIVERSITY OF LIETZENSTEIN AND SEVERAL ERCIS PARTNERS

As part of the University of Liechtenstein’s master’s course in Information Systems (with majors in Business Process Management and Data Science), Prof. Dr. Gattfried Vossen, Dr. Armin Stein, and Dr. Jens Lechner (all of the University of Münster), and Prof. Dr. Jan Mendling (WU Vienna) visited the University of Liechtenstein, where they delivered lectures for the students. Prof. Dr. Jan vom Brocke and Prof. Dr. Stefan Seidel serve as Visiting Professors at our new ERCIS member, the National University of Ireland in Galway.

ERCIS MEMBERS VISITING UNIVERSITY OF AGDER

In August 2017, ERCIS personal members Alessio Maria Braccini, Stefano Za (both from Rome), and Sara Hofmann (from Bremen) visited the University of Agder, Norway, in order to explore collaboration opportunities and to jointly work on projects. Together with Øystein Sæbø, they have embarked on joint research projects in the area of e-government, social media, and collaborative consumption.

In addition, Alessio, Øystein, and Stefano organised a joint seminar for PhD students at the University of Agder.

PEARL YMER (LUISS BUSINESS SCHOOL) AND HAYLEY FORD (UNIVERSITY OF AMSTERDAM)

From left to right: Alessio Maria Braccini, Stefano Za, Øystein Sæbø and Sara Hofmann.
**WORLD IT PROJECT**
The University of Gdansk took part in the World IT Project (http://worlditproject.com/). It included 45 countries from all continents. The research topic was IT occupational culture (TOC). The videoconferences on IS/IT research were given by Professors from Slovenia and Latvia.

**HORIZON2020 PROJECT TROPICO**
The University of Tallinn (RHD) is a partner in Horizon2020 project "Transforming into Open, Innovative and Collaborative Government, acronym TROPICO. The project has altogether 12 partners, from ERCIS network including EU Leuen. Project's duration is June 2017 until June 2021 (48 months) and budget allocated to RND 245,000 Euros. The TROPICO project aims to comparatively examine how public administrations are transformed to enhance collaboration in and by governments, with a special emphasis on the use of information and communication technologies (ICT), and its consequences. This multidisciplinary project will focus on a truly comparative approach, examining ten countries representing the five administrative traditions in Europe: Eastern European (Estonia, Hungary), Continental (Netherlands, Germany), Napoleonic (France, Spain; Belgium (mixed)), and Anglo-Saxon (United Kingdom).

**JOINT RESEARCH WITH THE LIACS, UNIVERSITY OF LEIDEN**

Multibjective Optimization aims at optimizing several quality criteria of a problem or process simultaneously based on finding the best levels of process influencing factors. 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 multibjective 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.

The development of effective automated algorithm selection and configuration techniques has been one of the major success stories in the area of empirical algorithmics in recent years. Building on a wide range of algorithmic approaches for problems such as the Traveling Salesperson Problem (TSP), these methods permit the selection of appropriate algorithms based on efficiently computable characteristics of a problem instance to be solved (algorithm selection) and the automatic determination of performance optimizing parameter settings (algorithm configuration). In both cases, statistical models that enable performance predictions for previously unseen problem instances or parameter settings play a key enabling role.

Heike Trautmann (WWU Münster) and Holger Hoos (LIACS, Leiden) currently organize a special issue on “Algorithm Selection and Configuration in Evolutionary Computation” of the Evolutionary Computation Journal together with Frank Neumann (University of Adelaide, Australia).

**REFERENCES**


**REFERENCES TO JOINT PAPERS 2017**

**RESEARCH VISITS WITHIN THE NETWORK**

- **Professor Robert Krimmer gave a talk during the Handelsinformationssystem-Tagung, 15–16 May 2017, at the University of Münster. The Republic of Estonia is creating a borderless digital society for global citizens and it is the first country to offer e-Residency, a state issued digital identity that empowers entrepreneurs around the world to set up and run a location-independent business. Already more than 20,000 people from 138 countries have applied for e-Residency. The talk focused on e-residency and location-independent business — what new opportunities the e-Residency has opened up. E-Residents can, for example, establish a trusted EU company online in one day, start and manage a company 100% online from anywhere in the world, sign and authenticate documents anywhere, access international payment service providers, such as PayPal, declare Estonian taxes online, and more.**

- **Ongoing collaboration and visits of Dr. Jonas Hedman of Copenhagen Business School at the University of Twente resulted in a joint publication on Sports Analytics that will be presented at ICIS 2017 in Seoul, Korea.**

- **LUSS University and the University of Agder have continued their strong collaboration activities also for the last year, resulting in three researchers from the LUSS IS group visiting UIA, while researchers from UIA have visited LUSS many times during the year. 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.**

- **Members of the University of Liechtenstein visited numerous ERCIS partners. Dr. Markus Weinmann visited the Queensland University of Technology in Brisbane, Australia, for one semester, and Dr. Bernd Schenk visited Prof. Dr. Jan Mendling and his team at WU Vienna in August 2017. In turn, researchers from other ERCIS partner universities (WU Vienna, WWU Münster, UNIST Republic of Korea) visited the University of Liechtenstein.**
SPECIALISATION MODULE
“SMART CITIES”
Following the ERCIS Virtual Seminar of winter term 2016/2017, where students from various partner institutions developed a curriculum and lectures for a course about “Smart Cities”, the University of Münster brought this draft into action. During summer term, three lecturers of the headquarter used a good share of the students’ deliverables to offer a specialisation module (seminar, lecture, and exam) to eight undergraduate Information Systems students. According to the evaluation, the module was a success, being rated 1.3 by the students (with 1.0 being best). The module being offered to Münster students. The project seminar is being supervised by the chair of Prof. Heike Trautmann.

PROJECT SEMINAR WITH HILTI: CUSTOMER SERVICE AT HILTI
This project seminar investigates how to measure and manage customer experience in a global contact center. The goal of the respective technology platform is to set high standards to achieve aspirations towards quality, efficiency and reliability. The project seminar is being supervised by the chair of Prof. Heike Trautmann.

MASTER PROJECT SEMINAR: CLAAS SELF SERVICE APP
During summer term 2017, six students participated in a project seminar with the ERCIS Advisory Board member CLAAS. From March to September, the students developed a concept for improving the customer service process in case of machinery breakdown. Specifically, they tried to answer the question how the customer could be involved to speed up the process.

First, grounded in a Design Thinking approach, the students interviewed selected customers across Germany to analyze how the service of CLAAS is currently evaluated. Based on these interviews, a concept consisting of as-is and improved to-be processes as well as a prototype of a customer self-service app were developed. In a last step, the concept was also tested by means of a survey. On Wednesday, 23rd of August, the students presented their convincing results at the CLAAS Headquarters in Harsewinkel, Germany, in front of the management of CLAAS and the supervisors from University, supported by Prof. Dr. Herbert Kuchen and Dr. Stefan Schellhammer.

The project seminar was a joint effort of the two chairs of Interorganizational systems (Prof. Dr. Stefan Klein) and the chair for practical computer science (Prof. Dr. Herbert Kuchen).

GUEST LECTURES AND INVITED TALKS
Professors Matne Kirkova, University of Riga and Joze Zupancic, University of Maribor, gave a series of videoconferences for the students of new specialization Information Applications in Business at the University of Gdansk.

EXECUTIVE CERTIFICATE IN BUSINESS PROCESS MANAGEMENT
As a result of the BPM Online Erasmus+ project, Jörg Becker (University of Münster), Jan vom Brocke (University of Liechtenstein), Jan Mendling (Wirtschaftsuniversität Wien), Hajo Reijers (VU Amsterdam), and Matthias Trier (Copenhagen Business School) initiated an online certificate in Business Process Management (BPM) programme. During this one year course, a maximum of 20 participants will learn about the concepts of BPM Essentials, BPM Models and Methods, BPM Technologies, BPM Actors, Networks, and Innovativeness, and BPM Applications. The course will be accompanied by a case study; it starts and ends with a BPM Executive’s Round Table. Registration is open until January 15th, 2018. The programme will start in February 2018.

Read more here: http://www.bpm-executive.com/

PH.D. SEMINAR AT FLUMSERBERG AND KLOSTERS
In February 2016 and 2017, Prof. Dr. Stefan Seidel (University of Liechtenstein), Prof. Dr. Nicholas Berente (University of Georgia), Prof. Dr. Roland Holten (Goethe University Frankfurt), and Prof. Dr. Jan Mendling (WU Vienna), and Prof. Dr. Christoph Rauenzahn (University of Cologne) conducted Ph.D. seminars at Flumserberg and Klosters in Switzerland on the topic of research quality in Information Systems. About fifteen Ph.D. students from a variety of universities presented their research propositions, discussed current topics in the field of Information Systems, and enjoyed winter sports and tours of the region. The seminar was carried out for the fourth time in 2017 and has become a prestigious and popular seminar on Information Systems in Europe.

JOINT PHD COURSE OFFER
In 2017, a course on design science research has been launched by Jan vom Brocke (University of Liechtenstein) and Robert Winter (IWI-HSG). The course has been offered for the doctoral program pro dok of the VHB association (http://vhbonline.org/veranstaltungen/prodok/kurse-2017/ds17/).
For the 9th edition, which took place in 2016, the number of submissions remained at the all-time high of the previous year, and six finalists were invited to pitch their ideas to the jury. Eventually, ProLeap won the award for best overall concept (sponsored by Fiducia & GAD IT AG) for their platform for the analysis, optimization, and transformation of COBOL legacy applications; feelSpace convinced with their vibrotactile navigation belt and won the innovation award (sponsored by noventum consulting GmbH), the regional medium-sized business award (sponsored by Wirtschaftsclub NordWestfalen), as well as the audience award; innoMMT presented a solution for mobile breath diagnostics and won the award for best scientific grounding (sponsored by ERCIS), while DailyDress as personalized recommender for the perfect outfit won the best commercial potential award (sponsored by NRW Bank) and the PayPal start-up support.

ERCIS LAUNCH PAD
ERCIS Launch Pad – the annual IT business ideas competition of ERCIS – will be held for the 10th time on 6th December 2017. 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 10th Launch Pad can win cash and attractive prizes.

ERCIS@ICIS
Already a tradition, ERCIS members met at the International Conference on Information Systems (ICIS) in Dublin, Ireland, on December 12th. More than 35 members of the network attended the meeting on a boat on the river Liffey, near to the Convention Center Dublin, the venue of the ICIS conference 2016.

As ICIS 2017 took place at our network partner, the University of Minho in Guimaraes, Portugal, where we have already been in 2015, we met at Papa Boa, a traditional restaurant in the heart of Guimaraes, for inspiring talks and discussions on various topics.

After lunch Steffen Höhenberger and Dennis Riehle, both from the University of Münster, presented the project “Hatemi-nig” which deals with the questions how to identify hate speech and if analytics can curb hate speech in the internet.

ERCIS ADVISORY BOARD MEETING 2017 IN MÜNSTER
Since the decision was made to have an Advisory Board Meeting every 9 months, we had one meeting this year, on May the 22th.

Researchers from the ERCIS headquarters and representatives of the member companies arvato Bertelsmann, Claas, Informationsfabrik, IQ Optimize Software AG, Lidl, Vodafone and zeb as well as invited guests from Convotis and AVSMI (Association for Service Management International) met in Münster’s palace, which houses the university, for inspiring talks and discussions on various topics.

In the beginning of the meeting, the academic director Jörg Becker gave a short introduction and Armin Stein, the managing director, presented a recap on the ERCIS activities in 2016. In the first session of presentations Jan Stockhinger from the University of Münster, presented the Research Group on Strategic Information Management. Followed by the presentations of the new advisory board members Informationsfabrik, Lidl and Vodafone.

After lunch Steffen Höhenberger and Dennis Riehle, both from the University of Münster, presented the project “Hatemi-nig” which deals with the questions how to identify hate speech and if analytics can curb hate speech in the internet.
EVENTS IN THE ERCIS NETWORK

9th INTERNATIONAL CONFERENCE ON COMPUTATIONAL COLLECTIVE INTELLIGENCE

The International Conference on Computational Collective Intelligence (ICCCI 2017) took place in Nicosia, Cyprus, September 27–29, 2017. The conference was co-organized by the University of Cyprus and the Wroclaw University of Science and Technology, under the patronage of the IEEE SMC Technical Committee on Computational Collective Intelligence.

In response to the call for papers, 240 papers from 39 countries were submitted to the conference and 114 best papers were selected for publication in two volumes of LNCS/LNAI (Vol. 10448 and 10449). Moreover, 40 additional papers were published in the form of chapters of the scientific monograph issued in Studies in Computational Intelligence (vol. 642) by Springer Verlag. All other accepted publications, including full papers in the election experience track, accepted abstracts in any of the tracks, and from the submissions in the PhD coloquium will be published in proceedings with TUT press. The submission deadline is May 15th, 2018.

www.e-vote-id.org

ACIIDS 2017 AT THE JAPAN ADVANCED INSTITUTE OF SCIENCE AND TECHNOLOGY

The ninth Asian Conference on Intelligent Information and Database Systems (ACIIDS 2017) took place in Kanazawa, Japan, April 3–5, 2017. Wroclaw University of Science Technology and Japan Advanced Institute of Science and Technology jointly organized the event. As in the previous year, Dr. Jaroslaw Gowin, the Deputy Prime Minister of the Republic of Poland and Minister of Science and Higher Education granted the honorary patronage over the conference.

More than 400 submissions came from 42 countries, but only 154 papers with the highest quality were selected for publication in the two volumes of LNCS/LNAI (Vol. 10391 and 10392). Moreover, 40 additional papers were published in the form of chapters of the scientific monograph issued in Studies in Computational Intelligence (vol. 642) by Springer Verlag. Keynote speeches were delivered by Prof. Tu-Bao Ho, Prof. Bernhard Pfahringer, Prof. Edward Szczerbicki, and Prof. Hideyuki Takagi.

THIRD INTERNATIONAL JOINT CONFERENCE ON ELECTRONIC VOTING

This conference is one of the leading international events for e-voting experts from all over the world. In 2016 the two previously bi-annually held conferences, EVOKE and VoteID, were merged into the annual E-VOTE-ID conference. The third joint conference will take place in October 2018, 2–5th in Bregenz, Australia. One of its major objectives is to provide a forum for interdisciplinary and open discussion of all issues relating to electronic voting. Cumulatively, since 2004 some 3,200 experts from all over the world have attended this conference to discuss electronic voting and related topics.

The conference proceedings will be available at the time of the conference. Full papers accepted for the tracks on security, usability, and technical issues, respective administrative, legal, political, and social issues will be published in Springer LNCS. All other accepted publications, including full papers in the election experience track, accepted abstracts in any of the tracks, and from the submissions in the PhD colloquium will be published in proceedings with TUT press. The submission deadline is May 15th, 2018.

www.e-vote-id.org

WIRTSCHAFTSINFORMATIK 2017

In February 2017, IWI-HSG hosted the 13th International Conference on Wirtschaftsinformatik (www.wi2017.ch) in St. Gallen – the leading conference in the German-speaking scientific Information Systems community. Over 700 attendants from academia and industry, 110 scientific contributions, and 11 CIO/CEO presentations contributed to the successfullness of the conference.

SIXTH LIECHTENSTEIN WINTER SCHOOL ON BUSINESS PROCESS MANAGEMENT AND DATA SCIENCE

For the sixth time, the University of Liechtenstein organized the Winter School for Business Process Management and Data Science. Thirty Bachelor’s degree students, including students from the University of Münster, learned about BPM and data science from case studies and from input sessions led by lecturers from the University of Liechtenstein and the University of Münster. Students also visited Hilti AG and Swarovski AG and enjoyed sleigh-riding in the mountains of Liechtenstein.

 STUDY TRIP TO VIENNA 2017

In April 2017, students in the Master’s program in 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 students of more than fifteen nationalities, the excursion was a unique experience to get to know the Austrian capital and the newly opened campus of WU Vienna to gain important competencies they can use in their studies.

BPM ROUNDTABLE

The 12th BPM Roundtable on “Digital Innovation and Transformation in Practice” took place on October 12, 2017, at the University of Liechtenstein. With the participation of Prof. Dr. Jan Mendling (WU Vienna) and a presentation by the Lufthansa Technik Group, the book BPM Cases was officially launched.

STUDYTRIP_Vienna_2017

WinterSchool_Vienna_2017

WinterSchool_2017

Studytrip_Vienna_2017

BPM Rountable
Customer service is about technology, because constantly evolving technology is driving up customer expectations and has the power to simplify service delivery for our clients too. So naturally we support because constantly evolving technology
Customer service is about technology, experience, we ensure our clients perform. Consistency as well as individual nuance. Deliver effectively in the face of the un-
means we’re defined by our people, who if it’s delivered by a robot. And it’s people, because service is a human thing even Above all, customer service is about people. It’s our people that apply technology, draw on 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.
Avrato CRM Solutions has 44,600 people at 110 customer service centers in 27 countries speaking 35 languages and is recognized as a ‘clear leader’ in the global customer services/customer experience (CX) sector. It is a part of Arvato, the world’s third largest BPO provider1 and, in addition to customer services, the company also provides supply chain solutions, finance business process outsourcing (BPO), and IT solutions, with total revenues of €3.8 billion in 2016. Arvato is wholly owned by Bertelsmann.

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.

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FOR MORE INFORMATION, PLEASE CONTACT:

Ongoing research projects are focused on developing effective solutions to improve the customer experience, reduce costs, and create positive brand experiences. Arvato CRM Solutions has a leading position on the market, especially in the field of Planning Analytics. TM1.
In the field of SAP we employ more than 100 SAP Business Analytics consultants group-wide and we have an extensive portfolio of efficiency-increasing additional solutions and our own application management.

Our core competencies include Data Management and Big Data, Reporting and Analytics, Planning and Forecasting, Artificial Intelligence and Advanced Analytics:

- Tools for agile strategy implementation
- Definition and implementation of Business Analytics strategies
- Implementation of Business Analytics competence centers
- Functional and technical analysis and design of Analytics Solutions
- Implementation of trend-setting Analytics Solutions
- System checks and optimizations of extensive BI landscapes

Our solutions are based on the market-leading technologies from IBM and SAP.

We are an IBM Gold Business Partner and have a leading position on the market, especially in the field of Planning Analytics. TM1.

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- TM1 Planning Analytics
- Predictive with CPLEX
- Optimization with CPLEX
- Data Governance for Analytics
- Cognos BI / Watson Analytics
- Predictive Customer Intelligence (Bluents) (platform)

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:

1) CED – Service Provider Landscape with TOEAK Matrix™ Assessment 3.2015 by HfS Research (January 2015)
As a leading supplier of merchandise management systems, Bison offers complete solutions for retail. Bison has its headquarters in Sursee, employs approximately 300 staff and generates a turnover of over EUR 70 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.

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 Omnichannel customer experience.

The new CLAAS “Greenhouse” in Harsewinkel, Germany is the new place for interdisciplinary co-working and creativity. The architecture is completely open for workshops and projects from overall CLAAS and external stakeholders who want to create the CLAAS future actively with agile project management methods like design thinking. CLAAS is investing in its digital future and has now laid the foundations for a new electronics development center in Dissen, near Osnabrück, Germany.

For further information please visit www.bison-group.com

CLAA S

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 best 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 12,000 employees are engaged in this task in 40 countries. Talented people from all professions, who make their daily contribution towards feeding the world.

TOPICS OF INTEREST

- Customer centric development
- Connected machines
- Farming 4.0
- Agile IT development
- Precision Farming
- Data Management

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 come through, especially in drive technology, machine intelligence and networking.
Healthcare is a major concern to all of us. We have relatives or friends who are patients, and there is a certain likelihood we ourselves may become patients at some point in our lives. DMI focuses on enabling German hospitals to provide the best possible medical care – based on safe, fast, and effective clinical and administrative processes empowered by digital patient information.

This task is even more important in a healthcare market which is experiencing a trend with a huge momentum – Digital Transformation. Just like in all other sectors, this major shift is changing work processes, business models, partnerships, and the relationship with patients. Digital Transformation is leading to connected health with higher efficacy and better outcomes. Readily available patient records – in interoperable digital formats and system architectures – are the enabler at the heart of this revolution.

What is the positioning of DMI in this transition? This provider of specialist services has more than 50 years of expertise in archiving patient records. With technologies and requirements changing over the years, DMI has been fulfilling its mission of providing services which comply with rigid German regulations in particular in the area of data privacy and archiving. Intelligent digitization of widespread paper records including identification of document types and consolidation with electronic documents serve to power comprehensive repositories for convenient clinical and administrative processes. DMI sports top certifications such as ISO 27001 and offers interoperability according to healthcare communication standards organizations such as HL7, IHE, and DICOM. Jointly with standardization bodies, the company’s research teams develop patient documentation frameworks and tools. They support safe and precise diagnosis and therapy as well as enhanced administrative and economic results for roughly 800 medical service providers across the care chain.

**TOPICS OF INTEREST**
- Consolidating medical records including electronic and digitized documents
- Interoperable IT architectures based on current standards
- Audit-proof digital archiving for compliance
- Deep integration of archived documents into administrative and clinical workflows for enabling effective clinical processes for best patient outcomes
- The link between informatics and medical research as well as routine practice in healthcare

**DMI AS AN EMPLOYER**
DMI is not your typical medium-sized company: it is an owner-managed organization of roughly 1,000 highly motivated staff and a flat hierarchy. Its approach is long-term and sustainable, with continuing education of employees as a key ingredient. With a focus on the German healthcare market and additional activities in banking, insurance, general business, and the public domain, DMI offers high-value services:
- digitization, qualification, consolidation, presentation, and archiving of documents
- integration into information-based processes
- analysis of documentation process landscapes and support for optimization aiming at effectiveness and compliance.

Company headquarters are situated in the pulsating university city of Münster in North Rhine-Westphalia (NRW); service centers are located in the castle town of Leisnig near Leipzig (Saxony) and Essen (the “Green Capital”, NRW).

**JOB OPPORTUNITIES**
Are you up to this challenge? DMI’s team members are committed to achieving results for customers in a dynamic ecosystem of evolving technologies and continuously changing customer demands. A multitude of benefits make DMI an attractive employer.

- Selected vacancies in Germany for professionals: (senior) software developers for applications, experts for IT infrastructures and networks
- Selected vacancies in Germany for students: thesis students (IT / software development) for innovation in documentation and archiving enabled by state-of-the-art IT and by Digital Transformation.

**FOR MORE INFORMATION, CONTACT:**
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Mobile +49 151 4078718
viola.henke@dmi.de
www.dmi.de

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**DMI ARCHIVIERUNG**

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viola.henke@dmi.de
www.dmi.de

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**DMI ARCHIVIERUNG**
At Hilti we design leading-edge technology, software and services, which clearly stand out from the rest. We run our own research and design labs, working with top technical universities and partners, all over the world. We make our own products in Hilti factories and with external partners, making sure all our products match the same high quality and standards. And we are a privately owned company, founded in 1941 by Martin Hilti and still held by the Hilti family today. So we are looking to build for the future and not for a short term gain.

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), Tulsa (US) Plano (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.

ABOUT THE COMPANY

At Hilti we like to do things differently. We create technologies, software and services, which clearly stand out from the rest. We run our own research and design labs, working with top technical universities and partners, all over the world. We make our own products in Hilti factories and with external partners, making sure all our products match the same high quality and standards. And we are a privately owned company, founded in 1941 by Martin Hilti and still held by the Hilti family today. So we are looking to build for the future and not for a short term gain.

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TOPICS OF INTEREST

- Business Process Management
- IT Project Management & IT Governance
- Smart Workplace & Client Technology
- Digital Customer Collaboration
- Cloud Deployment
- Internet of Things
- User Mobility & Mobile Apps

JOB OPPORTUNITIES

- IT Process Consultants in SCM, Sales or FICO in Kuala Lumpur, Malaysia or Buchs (SG), Switzerland
- Junior IT Specialist – Logistics Execution and Warehousing in Buchs (SG), Switzerland
- Junior SAP Platform & Security Specialist in Buchs (SG), Switzerland
- Junior Process Integration Developer in Switzerland, United States or Malaysia
- Internship on Digital Customer Collaboration in Buchs (SG), Switzerland
- Intern or thesis student: Hilti Cloud Architecture and Service Development in Buchs (SG), Switzerland
- Hilti Fellowship program at University of Liechtenstein


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.

ownCloud is currently being adopted by these institutions faster than by any other type of ownCloud customer. Customers tell us this due to many reasons, but the top three reasons are as follows:

- ownCloud seamlessly integrates with an institution’s existing security and rights-management protocols, allowing IT admins the ability to extend those same protocols to cloud-hosted data, negating internal and external compliance issues.
- ownCloud works well across all major operating systems and mobile devices in use at today’s schools and universities. Whether students or faculty come equipped with iPhones or Android devices, Macs or PCs, Chrome or Safari, or any other major platform, ownCloud delivers a seamless experience.
- ownCloud delivers to schools and universities a comprehensive and flexible solution at a discounted subscription-based price point that fits well within the tight IT budgets of modern educational institutions.

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 favored pricing scheme for GÉANT members and their attached constituents. For further information please contact us: sales@owncloud.com
ADVISORY BOARD

INFORMATIONSFABRIK

ABOUT THE COMPANY

Where quick reactions to ever changing business requirements are of paramount importance and subsequent decisions have a wide impact, we provide the pertinent facts. Informationsfabrik consultants are experts in the areas of Business Analytics, Business Intelligence, and Data Science. Our focus lies on the financial and insurance service industry, and the banking sector.

We produce information. Decision making in companies is based on the evaluation and analysis of information. Be it for intelligent marketing, for improved customer communications and recommender systems, or for determining churn probabilities: Accurate information to act upon has become a major asset for any business process. With methods provided by Data Analytics and Data Science, a whole lot of new possibilities to extract and condense information from data came into existence.

We support our customers in several analytics subject areas. Our team shares the aspiration to deliver information in the correct format to the right person at the right time using modern technologies and our innovative approaches.

Visual Analytics promises a fast and effective way to get a thorough understanding of business data. No means are better suited to give meaning to data than a visual form of representation. We support our customers by creating diagrams and conveying the required knowledge. In fact we also empower our clients to conduct ad-hoc analysis and reports by providing an environment in the sense of BI Self-Service which can be used by power- or business users without IT assistance. Eventually this leads to faster and more accurate decision-making. Of course we will make sure that any data governance and legal obligations are met.

We design and implement BI, DWH and Big Data solutions. In a Data Warehouse data from different source systems and of varying formats is consolidated, stored for data analysis and ultimately used to support business decisions.

Our highly qualified staff has acquired profound knowledge for conception and design of such solutions and are familiar with new modelling and architecture paradigms.

Another important subject area is Big Data. In recent years the amount of semi- or unstructured data sources has massively increased. At the same time the challenge of realizing storage, information extraction, and information integration for analysis rises. We support our customers to cope with the difficulty of complex Big Data solutions.

Last but not least we employ Data Science and Predictive Analytics methods to create new possibilities for extracting knowledge from our client’s data. We offer guidance on planning and executing Data Science projects.

Following our self-developed approach, shaped by the experience from hundreds of projects, we handle vast amounts of data and deliver high quality information and predictions.

We collaborate closely with our customers and help to expand their knowledge with individual trainings and valuable coaching.

Since our foundation in 2000, we managed to become renowned business analytics experts. To give you certainty in a couple of mouse clicks is the goal we have devoted ourselves to.

JOB OPPORTUNITIES

- Data Scientist
- Big Data Engineer
- Scrum Master
- Internship

Send your application to: personal@informationsfabrik.de

For further information please visit: www.informationsfabrik.de

AHOY AND WELCOME TO THE TREASURE HUNT!

DATA SCIENCE ISLAND

WWW.DATA-SCIENCE-ISLAND.DE
ABOUT THE 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 over 10,000 stores, more than 50 distribution centers in currently 28 European countries and has some 225,000 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 2016 financial year, Lidl generated revenues of 69 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 entrepreneurial 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- and technology companies such as SAP, Intel, Apple, Microsoft, GK Software, Teradata, Microstrategy and implementation partners such as KPS, Software AG, Ernst & Young, PricewaterhouseCoopers and MGM. This is supplemented by projects with research institutes such as SAP Retail/EWM/CAR – Big Data & BI – SAP HANA – Business Transformation – Process Benchmarking – Change Management – Process-oriented Budge Consolidation – Implementation of Document Management Systems Reorganisation – Studies Interface Analyses.

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 contextual 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.

ADVISORY BOARD
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 saracus competence and portfolio on the topics 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 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, telecommunications, 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 focussed 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

JOB OPPORTUNITIES
For students: Diploma/Bachelor theses, internships,
For graduates: Junior Consultants
Please visit our website for further information: www.saracus.com
zeb is the number one strategy and management consultancy for financial services in Europe. With more than 950 employees, we develop sustainable strategies and implement them together with our clients—banks, savings banks, insurance companies and other financial institutions—along the entire value chain. Be it in Münster, Milan or Moscow—we, the management consultancy zeb, use the same language all over the world: straight talk. An honest working environment, reliable statements and open communication are part of our corporate culture and form the basis that enables us to achieve long-term success—for us and our clients.

**PRODUCTS AND SERVICES — TOPICS OF INTEREST**

As a partner for change, it is our aim to improve the performance and competitive strength of our clients. The success of our consulting services is based on well-founded methodology, combined with in-depth expertise and excellent knowledge of the sector. The focus of our work lies in strategy & organization, finance & risk and IT. We intend to continue our growth path in the future. Our thematic growth focus is on management and IT consulting.

**ADDITIONAL INFORMATION ABOUT THE COMPANY Collaborative**

What you can expect at one of the most successful management consultancies in the demanding financial services market? Respect, trust, team spirit and a down-to-earth attitude. Because at zeb, we firmly believe that only a culture of collaborating as partners can ensure our success and the success of our clients in the long run. Therefore, flat hierarchies and communication at eye level are very important to us—amongst colleagues, but also in the interaction with our clients.

**Diversity**

For us, all employees are equal—in terms of opportunities and career development. When it comes to national origin, gender, skin color or sexual orientation, however, we welcome diversity, because at zeb, we care for an open culture where employees are treated solely according to their professional skills. Therefore, zeb promotes international and intercultural cooperation: client projects are deliberately staffed with employees who have different geographic, cultural and linguistic backgrounds, in order to encourage them to learn from each other and grow together as a team.

**JOB OPPORTUNITIES**

Required specializations:

- Business Administration
- Economics (business)
- Informatics
- Mathematics
- Applied Physics

Possibilities to join the company:

- Internship
- Student assistant
- Theses and dissertations
- zeb.bachelor.welcome
- Direct start

**COLLABORATION WITH ECWT**

The European Centre for Women and Technology provides a European level meeting place for 150 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.

We are proud to have ERCIS among our Members and believe that with the extended governance structure adopted from 2004, ECWT, ERCIS and ERCIS Competence Centres should be able to identify joint research priorities for working together within HORIZON2020.

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**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 customers.

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

**JOB OPPORTUNITIES**

We are offering various job opportunities within our Software Developing, Billing, Operation, Business Intelligence and Project Management Units. Additionally to these areas we are offering job opportunities within our Cloud Technology area based on OpenStack. Please refer to https://www.iq-optimize.de/job for further details.

www.iq-optimize.de

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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.

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OUTLOOK FOR 2018

JANUARY 2018
EUROPEAN DATA PRIVACY DAY, Vaduz, Principality of Liechtenstein, 25.1.2018

FEBRUARY 2018
PHD SKI SEMINAR, Klosters, Switzerland, 05–10 February 2018
LIECHTENSTEIN WINTER SCHOOL ON BPM AND DATA SCIENCE, Vaduz, Principality of Liechtenstein, 18–23 February 2018, www.winterschool.li

MARCH 2018

APRIL 2018

JUNE 2018
PHD SAILING SEMINAR, Pto. Pollensa, Spain, June 9–16, 2018

AUGUST 2018
9th ANNUAL ERCIS WORKSHOP, Luleå University of Technology, Sweden, August 22–24, 2018

SEPTEMBER 2018
11th ANNIVERSARY OF THE EUROSYMPOSIUM CONFERENCE, eurosymposium.eu
10th INTERNATIONAL CONFERENCE ON COMPUTATIONAL COLLECTIVE INTELLIGENCE (ICCCI 2018), University of the West of England, Bristol, UK, 5–7 September 2018

OCTOBER 2018
3rd INTERNATIONAL JOINT CONFERENCE ON ELECTRONIC VOTING, Bregenz, Austria, 2–5 October 2018, e-vote-id.org
15th EDITION OF THE ITAIS CONFERENCE

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.

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!

info@ercis.org