



Contact

Karlsruhe Institute of Technology (KIT)
Karlsruhe Service Research Institute (KSRI)

Campus South
Kollegiengebäude am Ehrenhof (Bldg. 11.40)
Englerstraße 11
76131 Karlsruhe, Germany

Phone (Office): +49 721 608 45758
Fax: +49 721 608 45655
E-mail: info@ksri.kit.edu

www.ksri.kit.edu

Editor

Karlsruhe Institute of Technology (KIT)
Kaiserstraße 12
76131 Karlsruhe, Germany

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www.kit.edu



Report 2012/2013

KSRI - KARLSRUHE SERVICE RESEARCH INSTITUTE



2012 / 2013 - KSRI Report

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Preamble by the Directors



KSRI Directors (from left to right): Prof. Dr. Wolf Fichtner, Prof. Dr. Hansjörg Fromm, Prof. Dr. Kai Furmans, Prof. Dr. Stefan Nickel, Prof. Dr. Ralf Reussner, Prof. Dr. Rudi Studer, Prof. Dr. Christof Weinhardt, Dr. Helmut Wlcek.

Germany is turning more and more into a services-oriented society. Today, more than 71% of GDP in all industrialized countries can be derived from services. The service sector overall has one of the largest growth rates. This development is mostly based on the enormous progress in information and communication technology. Since April 2008 KSRI fosters interdisciplinary service research and ensures an excellent student qualification in this field.

KSRI's remarkable success in teaching is mainly based on practice-oriented lectures and workshops covering a wide variety of subjects. Since the beginning of the teaching activities, KSRI lectures are ranked among the top 10 lectures of the faculty of business science at KIT. Particularly, the lectures Business and IT Service Management, Service Innovation, eServices and Business Models for the Internet scored highest in 2012 and 2013. Moreover, a handbook on Service Science, Management and Engineering has been drafted. The book will be published in 2014 and contains service-related methods, projects and current advances in research, which will provide a blueprint for teaching state-of-the-art service science.

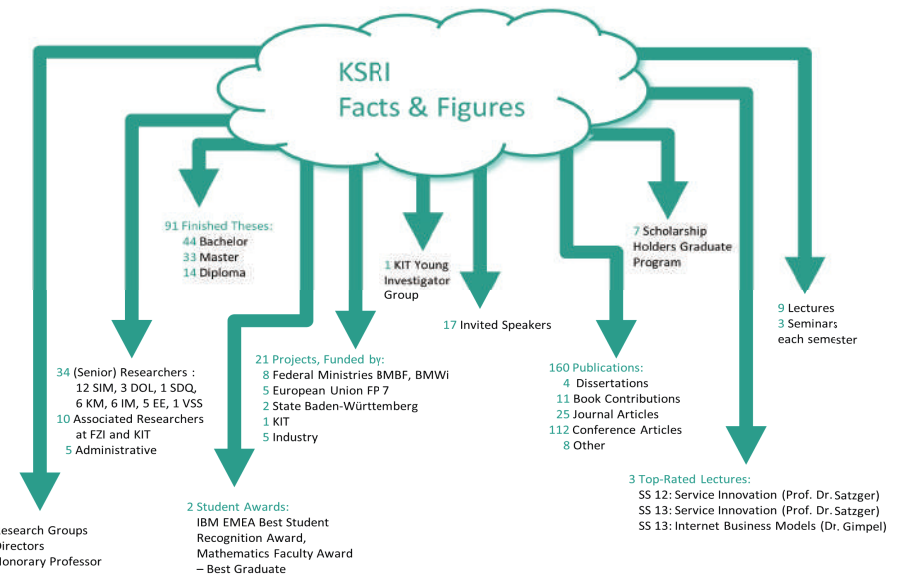
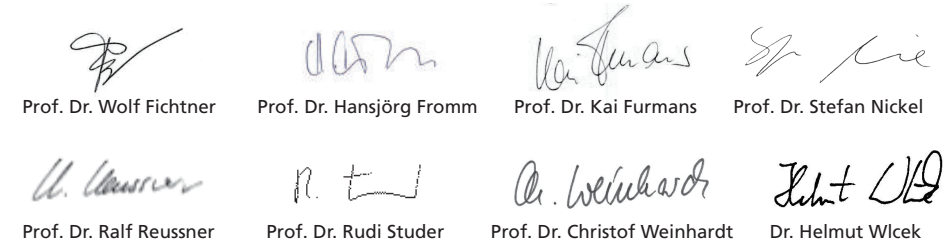
In order to emerge on new paths of research, KSRI always aims at widening its research profile. Therefore, KSRI welcomes three new directors: Prof. Dr. Wolf Fichtner, who heads the research group Energy Economics, and Dr. Helmut Wlcek and Prof. Dr. Kai Furmans that both head the research group Value Stream Services. Concurrent to the creation of the Value Stream Services research group, KSRI received a long-term commitment of the Robert Bosch GmbH. Now two industrial partners, IBM and Bosch, have a dedicated research group at KSRI.

In addition to the new directors, there are several new projects that enhance KSRI's research agenda. For example the Supply Chain Lab, which was founded in 2012 under the umbrella of KSRI with the participation of four KIT institutes and industrial partners that deal with logistic services. Its target is to develop holistic and innovative solutions for practical problems in the supply chain management, thus bundling the latest findings and methods of the associated research institutes. Another project is the Young Investigator Group Social Cloud, which investigates social network-based collaboration environments. Its interdisciplinary oriented research agenda therefore leverages methods and expertise in the broad areas of Computer Science, Economics and Sociology. KSRI also fosters research in the field of electric mobility. The project Get eReady as part of the 'LivingLab BWe mobil' carries out a large-scale field trial in which the economic use of more than 750 hybrid and electric vehicles running in a regional fleet is analyzed.

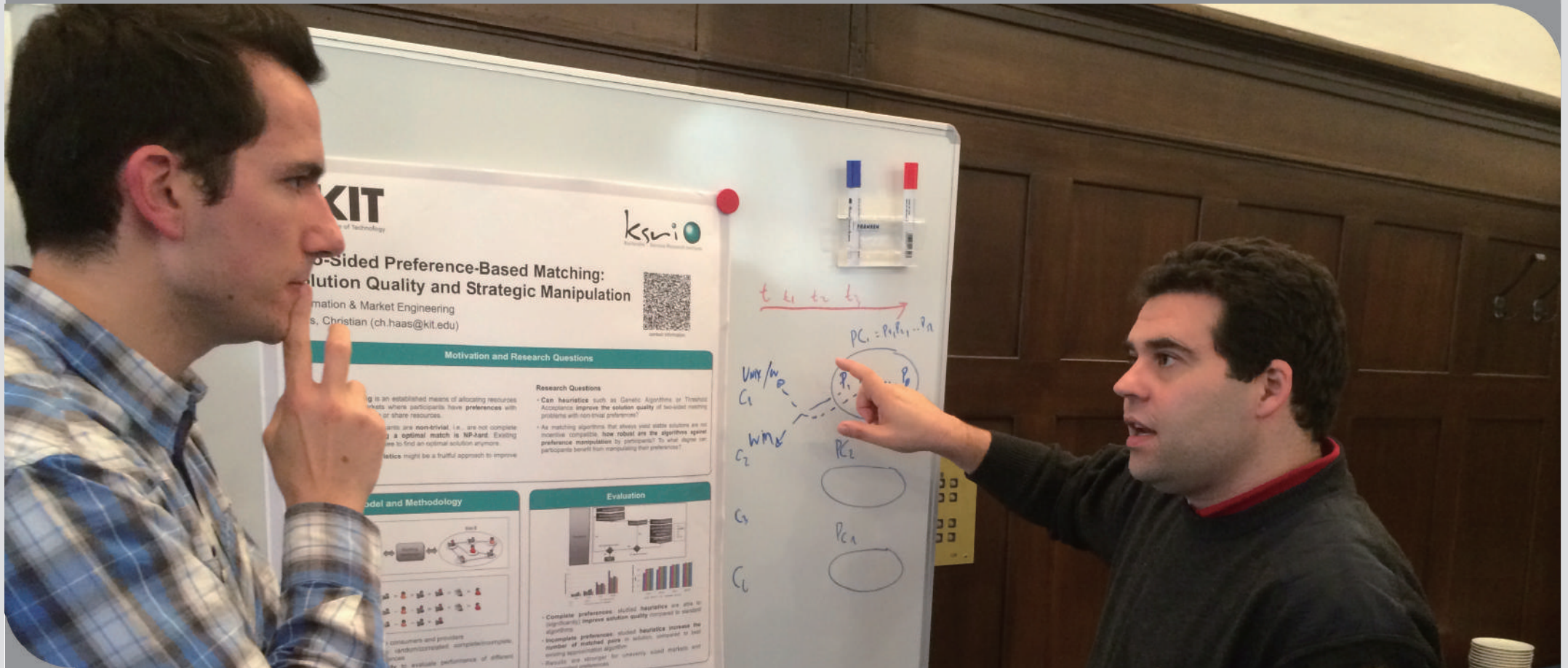
Since 2010 KSRI offers an interdisciplinary graduate program 'Service Research' specifically-tailored to the investigation of questions arising from complex service systems in industry, energy, healthcare, logistics and information and communication technology. In 2012 and 2013, six researchers, which closely cooperated with associated industry partners, were part of the graduate program.

Highlights of 2012 and 2013 include two Service Summits, the second Summer School and the fifth KSRI anniversary. At the Third Service Summit 2012, which was held on 27th of January 2012, practitioners and scientists discussed the future of the service-oriented economy. In September 2013, Prof. Dr. Hansjörg Fromms held his inaugural lecture entitled 'Service Research in Motion: Analytics, Networks, Innovation' at KSRI's fifth anniversary. Around 100 invited guests from industry and academia celebrated this event in the Tulla-Lecture Hall at KIT together with the KSRI staff and their honored guests Martina Koederitz, General Manager IBM Germany, General Manager DACH IMT, Dr. Jim Spohrer, Director IBM University Programs World-Wide und Prof. Dr. Detlef Löhe, Vice President Research and Information, Karlsruhe Institute of Technology. Another benchmark was set with the 2nd Karlsruhe Summer School on Service Research (September 23-26 2013) when about 50 PhD students, young scientists and practitioners from industry benefited from the expertise of international experts in the field of Service Research. The Summer School provided a forum for participants to discuss and learn about Service Research combining lectures in the areas of Cloud Computing, Semantics, Service Analytics and Optimization, Service Economics, Service Innovation, Social Computing, Survey Design and Evaluation with further offers such as excursions, labs, interactive workshops, and social events. The Service Summer was complemented by the Fourth Service Summit on September 27, 2013. In accordance with KSRI's interdisciplinary approach, multiple fields within Service Research were addressed by distinguished talks and panel discussions with renowned participants both from academia and industry.

These events and the continuous advances in service research as well as service-related projects show that KSRI has evolved into a well-established and successful institution in the research field of service science, management and engineering. However, such a positive impact was only achieved because KSRI can count on its employees' commitment. Thus, we want to thank them and all the involved students for their effort. Moreover, we want to thank IBM, Bosch and all other industry partners without whose financial and organizational support, KSRI's success would not have been possible. We are looking forward to continue the existing co-operations and embrace new partners that want to join us in our interdisciplinary service research.



Service Research at KSRI



Service Research at KSRI

1. Service Research at KSRI

Since Germany is turning more and more into a service-oriented society, professional and private environment is rapidly changing. Already more than 70% of Germany's GDP is based on services and the proportion will further increase in near future. Particularly information and communication technology (ICT) influences people's everyday life driving the indicated changes.

In line with this development, KSRI's major research fields comprise the study of ICT's impact regarding business models, organizational structures and revenue management as well as services' general effects in a global and intertwined economy. Among others, this includes service innovation, value stream services and service analytics. Together with the founding industrial partner IBM, the major industrial partner Bosch and several other industrial and research partners, KSRI advances the field of service research while providing a research hub to academia in service science.

1.1. Service Innovation and Management



The research group Service Innovation & Management (SIM) is an interdisciplinary team of researchers focusing on concepts and applications of new types of services that will shape an increasingly 'services-led' economy. The group represents a unique approach to connecting business and academic research - with IBM being a key industry partner for the Karlsruhe Service Research Institute, IBM and university researchers are closely collaborating 'on campus'.

Future economic value will predominantly be created within joint service value networks, also called service systems, which are formed and constantly adapted by a number of partners. As a consequence, businesses will need to focus more on service-oriented relationships: 'In an economic sense, services are the intentional co-creation of value'.

The SIM group's research program comprises the following:

- **Service Innovation and Transformation:** Methods to capture new sources of value, in projects on methods and barriers for service innovation, customer integration and service design, on the impact of joint value creation on forms of work and business models, and the transformation of companies from products to services.
- **Service Relationships:** Management and engineering of complex service systems, with projects on decision support and coordination, on the design of interaction and communication, on key performance indicators, as well as on the measurement and management of productivity.
- **Service Analytics:** Development of business analytics and optimization methods and tools tailored to the specific characteristics of service-led business models. Focus on the identification, analysis and interpretation of pattern in service value networks and service encounters.

The integrated teaching and training concept of the Karlsruhe Service Research Institute pursues the education of future leaders in a global, services-led world. Based on a solid understanding of service systems / networks, the SIM group contributes to an educational program in which students develop economic, technical, social, and legal competences essential to successfully engineer and manage services. The SIM group's courses are usually taught in English.

PeopleClouds

Research focus: Crowdsourcing, human computation, service science
quality management Period: 2010 - 2012
Contact: Robert Kern
Funding: IBM

Organizations will have to adapt their business processes to further increase their flexibility to react to changing markets and varying demands. This requires a scalable provisioning and 'de-provisioning' of resources, especially in productive business processes. For IT resources, the huge interest in cloud computing solutions already underscores this trend. For human resources, which are still the core of most organizational endeavors, traditional modes of operation still prohibit a flexible adaption and scalability of workforce capacity to changing needs.

In this context, crowdsourcing in the form of human-based electronic services is posing a promising approach for the scalable on-demand and per-request outsourcing of human tasks to a large group of people - in fact is the first step to develop public or private 'people clouds': Amazon.com first addressed this issue with its Web marketplace Mturk, in which organizations can publish open calls for Human Intelligence Tasks (HITS). Any Internet user who meets certain skill criteria may act as a service worker and complete tasks in return for

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(still) small amounts of money. This platform is already used for supplementing low-level business processes. However, when leveraging human-based electronic services in more critical business contexts, it is crucial to be able to monitor or even to guarantee the quality of the work results.

The objective of this project is to understand how an open group of people can be coordinated in a way that the result delivered by the whole group meets a certain level of well-defined quality although contributions of the individuals may not. The key idea is to 'recursively' apply human based e-services for mass quality assurance mechanisms. Starting from statistical quality control and group decision theory, an integrated approach for quality management of human-based electronic services is being developed, implemented and evaluated via a series of experimental and real life scenarios.

DELFIN

Research Focus: Services for Electric Mobility

Period: 2013 - 2015

Contact: Carola Stryja, Peter Hottum

Funding: Federal Ministry of Education and Research BMBF



DELFIN is funded by the Federal Ministry of Education and Research (BMBF) under the funding code number 01FE13002 and part of the BMBF initiative 'National Platform on Electric Mobility'. The project aims at developing strategies and concepts for innovative value-added services in electric mobility and provides technology-based support activities to supplement market and user-oriented perspectives. Therefore, the project is geared towards the objectives stated in the 'National Platform on Electric Mobility' and supplements them with the development of service-related issues and action plans. Networking within the BMBF supported projects in the context of the BMBF initiative Service Innovation in Electric Mobility is one of DELFIN's major objectives as well as the coordination of the exchange processes between science and industry.

DELFIN's core objectives are

- Scientific screening and evaluation of the electric mobility related initiatives – funded or non-funded – focusing on the role of services
- Interconnection and integration of the issue-areas as addressed in the BMBF's Announcement 'Service Innovation for Electric Mobility' and networking within funded projects
- Continuous collection and processing of current project results
- Implementation of the results in national and international initiatives
- Consultation of the 'National Platform on Electric Mobility' with regard to service-related topics

With the DELFIN project KSRI focuses on information technology as a success factor for the implementation and continuity of services in the value creation system electric mobility. A valuation framework for the classification of existing IT-based electric mobility services contributes to the identification, analysis and location of ongoing projects. Analyzing overlaps between different initiatives and identifying thematic deficits will result in the formulation of concrete recommendations for practice and research.

Inspire

Research Focus: Health Care Services, Service Productivity, Service Systems

Period: 2010 - 2013

Contact: Peter Hottum

Funding: Federal Ministry of Education and Research BMBF



Researchers at KSRI and FZI work in the INSPIRE project with hospitals and nursing organizations on the question of how to measure and improve the care of patients. For this purpose we make use of instruments of service research, considering the medical and nursing organizations as service providers. In two specific examples we will point out how this new perspective can help to realize innovations in the health care sector.

The project Inspire aims at

- Creating solutions to improve the productivity of health care services
- Providing a data base to evaluate the quality of services within the complete patient care pathway
- An empirical analysis of service provider support
- Realizing a continuous innovation process by improving services quality and productivity in the health care sector

Service Level Engineering

Research Focus: Service Level Management, Service Level Engineering, IT-Outsourcing

Period: 2009 - 2012

Contact: Axel Kieninger

Funding: IBM

IT outsourcing services enabling many business operations in the first place are a crucial factor for business success in many companies. The management of service quality – often denoted as Service Level Management (SLM) – however remains a major challenge.

Quality measures used in Service Level Agreements mostly are too related to IT and do not consider customers' business objectives sufficiently. So far an integrated and systemic view

Service Research at KSRI

on service, i.e. from end-user desks down to service components applied, is rarely taken in present SLM approaches. Therefore, IT outsourcing providers often are not able to satisfy all of their customers' needs simply by meeting stipulated Service Levels.

Within the research project 'Service Level Engineering' these challenges are examined in detail. Based on this, methods and concepts are developed – in cooperation with IT outsourcing providers and their customers – which allow for an efficient definition of Service Level Agreements considering customers' business goals.

ServIs

Research Focus: Industrial Services, Service Management

Period: 2013 - 2015

Contact: Björn Schmitz

Funding: ABB

Value creation of manufacturing companies is experiencing a shift from the development of pure products to the bundling of products and services to product-service systems. The latter allow service providers to offer integrated solutions to their clients. The design and operation of these solutions require providers to anticipate future trends to take account of their customers' needs at an early stage.

The objective of this research project is to identify current challenges and trends in designing and operating industrial services and to analyze their respective influence. In a first step a study shall be conducted to identify and prioritize challenges and trends. Afterwards, a prototypical solution for one of the identified challenges shall be developed.

ServUp

Research Focus: Service Systems, Service Innovation, Service Lifecycle

Service Productivity Period: 2012 - 2013

Contact: Marc Kohler

Funding: Federal Ministry of Education and Research BMBF



The project aims to develop scientific principles and practical solutions for a dynamic phase-based productivity management. Along the Service Life Cycle methodological and conceptual approaches to measure, assess and increase productivity of Service Systems will be developed.

1.2. Discrete Optimization and Logistics



The research group Discrete Optimization and Logistics (DOL) of Prof. Dr. Stefan Nickel focuses on the systematic conception, development and application of mathematical optimization models for practically relevant processes. These processes can be found in different domains such as industrial logistics or health care. Due to the practically oriented process modelling, a high degree of complexity will be encountered. Therefore, a wide range of optimization methods, e.g. combinatorial or stochastic optimization approaches, have to be incorporated into the solution strategies.

Health Care Logistics is the main research topic of the group at KSRI. Hereby, special problems regarding process optimization and in-house logistics in the health care sector are investigated. In order to improve quality, transparency and profitability of in-patient services on a long-term basis processes have to be analyzed and adapted if necessary. Operations Research offers numerous methods that may lead towards significant improvements not only in an industrial environment but also in hospitals, care services, telemedicine services and health care networks. The characteristic of this field of application is that not only profitability but also quality of treatment and patient satisfaction have to be focused on. Medical competence is prior to any other criteria.

Different challenges comprise the planning of operating rooms, patient transportation, staffing, shift/roster design and allocation as well as the planning of layout, rescue service, territories or storekeeping. Some of these planning tasks occur along clinical pathways. These patient-related treatment processes determine the optimal sequence and timing of necessary interventions by hospital staff (doctors, nurses, etc.) from diagnostics to therapy and care. Logistical issues such as process durations, responsibilities and dependencies in between process steps or resource requirements should be integrated in clinical

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Demand analysis and forecast to improve the EMS system design in Mittelbaden
Research focus: Emergency Medical Service (EMS) systems, health services research, data analysis and forecast Period: 2013 – 2015
Contact: Melanie Reuter
Funding: German network 'Health Services Research Baden-Württemberg' of the Ministry of Science, Research and Arts in collaboration with the Ministry of Employment and Social Order, Family, Women and Senior Citizens, Baden-Württemberg

In this research project it is investigated which factors have an impact on the demand for emergency rescues and patient transports. The aim is to enable an accurate prediction and subsequently allow for resource-optimal planning of locations and required number of vehicles as well as allocation of vehicles and operations. In order to identify the relevant factors, a factor analysis will be made and structural equation models will be set up and evaluated. In addition, the data will be scanned for trends (e.g., general increase or increase in specific types of operations, seasonality, etc.). Apart from basic data such as population density, utilization of regions (residential or industrial area) including the number of various facilities such as schools, retirement homes, etc., the number and severity of traffic accidents as well as historic operation data of past years, the availability of other emergency services, for example in the form of on-duty emergency practices, will also be examined.

For this purpose, the treatment data of the on-duty practices in Rastatt and Baden-Baden will be analyzed and evaluated. An interesting question will be, whether rescue efforts have (initially) decreased in the respective areas as a result of the extension of the commuting area. Based on this, different future projects are conceivable. They could, for example, fundamentally examine and explore the supply and demand of emergency services in a certain area and therefore urge and inform patients to select the 'best' facility based on the availability of services (doctor's emergency offices, emergency departments and emergency rescues).

1.3. Software Design and Quality



The research group software design and quality (SDQ) headed by Prof. Dr. Ralf Reussner works on software technology as an engineering discipline and promotes software design focusing on an engineer's point of view. The area of activities covers all topics in connection with the systematic generation of larger software systems and ranges from the architecture design, development methods, tools and environments up to procedures for securing the quality and cost effectiveness of the programming.

The research group deals mainly with the close interaction between software architecture, software components, model-driven development and software quality. Particular focus is given to the processes for the systematic prediction of qualities in software and performance and reliability based on software architecture models using enhanced prediction models such as stochastic Petri nets, queuing models and Markov models. The research group Descartes headed by Dr.-Ing. Samuel Kounev which is integrated in SDQ and cooperates closely with KSRI works on novel methods, techniques and tools for the engineering of so-called Self-Aware IT Systems and Services including research questions from the area of Cloud Computing.

KSRI relevant research topics are:

- Resource reservation in cloud computing
- SLA management
- Benchmarking of software systems and services
- Monitoring and analysis of software systems
- Automated model extraction, their calibration and maintenance
- Performance prediction (throughput, response, time, etc.) of complex software systems
- Reconfiguration of software landscapes regarding cost and energy optimization

Service Research at KSRI

Cocktail
Research Focus: Mash-Ups, Business Enabling, CRM-Services
Period: 2009 - 2012
Contact: Dr. Samuel Kounev
Funding: Federal Ministry of Education and Research BMBF



The primary goal of the research project COCKTAIL is to define and prototypically implement a platform for software services, which can be offered as mashups or SaaS solutions. This platform will support a rich variety of business models, making the offered solutions highly attractive for small and medium-sized companies. Key platform features include scalability, flexible composition of services, and prediction of service quality to determine feasible service level agreements (SLA). Generic concepts for monitoring, accounting and billing complement the picture.

The COCKTAIL platform will be a major step towards the standardization of business-enabled mashup and SaaS solutions.

Relate FP7 Marie Curie ITN
Research Focus: Emmy-Noether-Program, Service-based Cloud Applications
Period: 2011 - 2014
Contact: Dr.-Ing. Samuel Kounev
Funding: European Union FP 7



The FP7 Marie Curie Initial Training Network 'RELATE' provides an opportunity for young researchers to study the latest technologies, platforms and tools in the area of engineering and provisioning of service-based Cloud applications. The ITN consists of seven leading European research institutes and five associated partners. The ITN organizes regular workshops and summer schools, so that the trained Early Stage Researchers (ESRs) and Experienced Researchers (ERs) can exchange research experience, insights and ideas. A total of 21 fellows, 18 ESR fellows registering for PhD degrees and three ER fellows, are recruited. Through an integrative and multidisciplinary research approach, RELATE is promoting the advancement of the state-of-the-art in the related areas of model-driven development of Software-as-a-Service (SaaS) applications, formal methods, service-based mash-ups and application integration, security and performance of SaaS applications, as well as quality management and business model innovation.

1.4. Knowledge Management



The research group Knowledge Management (KM) headed by Prof. Dr. Rudi Studer is one of the world leading institutions in the area of semantic technologies. Topics addressed by the group include methods for knowledge management in enterprises, technologies for realizing data integration solutions by employing semantics, and transparent use and interlinking of Web APIs and Linked Data. Areas of particular interest include also data and text mining for information extraction, the development of scalable semantic-enabled solutions for managing Big Data, seamless integration of Web 2.0 and Semantic Web technologies, and intelligent access to existing knowledge, including both static and dynamic data sources.

Semantic representation of knowledge by means of ontologies and metadata provides the methodological basis for this work. In addition, recognizing the growing importance of work in the area of Big Data, topics including the development of methods and systems for the management and analysis of big data are also considered. Leveraging intelligent methods for information extraction together with data-, text-, and web-mining techniques, facilitates semi-automated creation of ontologies as well as metadata and enables customization of applications to the behavior of a user. A further topic is the interlinking of Web APIs and Linked data, which provide the foundation for the development of flexible, robust and adaptive architecture solutions for the web. Realizing these applications often requires interdisciplinary cooperation with groups from other research areas such as economics or law. In particular, in order to foster exploitation of research results the group closely collaborates with the group Information Process Engineering (IPE) at the FZI Research Center for Information Technology. Furthermore, the group Knowledge Management is involved in many co-operations with companies and other research institutes, both on a European and a national level.

Service Research at KSRI

EUCLID

Research Focus: Educational curriculum for the usage of Linked Data
Period: 2012 - 2014
Contact: Maria Maleshkova
Funding: European Union FP 7



Current developments on the web are marked by the increasing importance and application of Linked Data technologies, which are establishing themselves as an innovative way for publishing, interlinking and exploring data sets. Until now the main adopters have

been research organizations, governmental institutions and a selection of companies. However, with the increasing number of interested parties committing to use Linked Data core principles, and through the plenitude of applications build on top of the already available data, it seems that the time is right for the wider industrial adoption of Linked Data. EUCLID supports this development by addressing the need for trained data practitioners who are able to apply a Linked Data approach as part of their data business solutions. In particular, this is achieved by providing an extensive training curriculum, covering the main technologies, tools, use cases and competencies that need to be acquired in order to complete both basic, as well as more complex, tasks related to practically using Linked Data.

RENDER

Research Focus: knowledge diversity
Period: 2010-2013
Contact: Maria Maleshkova
Funding: European Union FP 7



RENDER provides a comprehensive conceptual framework and technological infrastructure for enabling, supporting, managing and exploiting information diversity in Web-based environments. Diversity is a crucial source of innovation and

adaptability. It ensures the availability of alternative approaches towards solving hard problems, and provides new perspectives and insights on known situations. Diversity is one of the main credos of European culture and society, best exemplified by the official motto of the European Union: 'United in diversity'. Equally important, embracing diversity in information management is essential for enhancing state-of-the-art technology in this field with novel paradigms, models, and methods and techniques for searching, selecting, ranking, aggregating, clustering and presenting information purposefully to users, thus

alleviating critical aspects of information overload. RENDER develops concepts, methods, techniques and technology to collect and manage information sources, identify and extract the diversity, represent and process diversely expressed information and to use diversity as integral concept.

S-Cube

Research Focus: Service-oriented Architecture
Period: 2010-2012
Contact: Dr. Sudhir Agarwal
Funding: European Union FP 7



The Software Services and Systems Network (S-Cube) establishes a unified, multidisciplinary, vibrant research community which will enable Europe to lead the software-services revolution, helping shape the software-service based Internet which is the backbone of our future interactive society.

WisNetGrid

Research Focus: D-Grid
Period: 2009-2012
Contact: Dr. Sudhir Agarwal
Funding: Federal Ministry of Education and Research BMBF



WisNetGrid project developed a service layer for content in order to establish a common knowledge room, 'a joint language', within the D-Grid-Infrastructure, which is based on the virtual technical layer of joint hardware resources of the D-Grid.

Service Research at KSRI

1.5. Information & Market Engineering



The research group Information & Market Engineering (IM) focuses on the challenges imposed by electronic markets and on the approaches used to meet these challenges. Our vision is to apply a well-defined and structured engineering process to create new markets and to re-engineer existing markets. The methodology of Market Engineering is a very promising way to design and implement new possible market structures combining the disciplines of economics, informatics and law. The basis for a deeper understanding of the research field Market Engineering is established through theories, methods and tools from these underlying disciplines.

Within recent years, several new research projects have been initiated in cooperation with partners from industry and research. Several theories, methods and tools are applied to analyze coordination mechanisms in electronic markets, regard self-organizing and spontaneous markets, implement complex and dynamic organizations (eOrganization) and develop innovative and intelligent information services. As a result, a variety of software prototypes has been conceived and implemented for various application domains such as finance, logistics, eCommerce and energy.

Project research is made possible through a close collaboration between the institute and organizations and companies from industry and research. This relationship ensures the transfer of technology and knowledge between IM and its partners. As a result, several new research projects have been initiated and a variety of software prototypes have been developed and implemented. Two examples of research cooperations between IM and industry include the project ValueGrids as part of the BMBF Grid research program, as well as the Young Investigator Group 'Social Cloud' which involves research collaborations with the University of Chicago and Cardiff University.

The financial support and academic cooperation between a number of respected organizations from industry and academia is remarkable. Within this network, all participants contribute expertise, energy, and encouragement – the basis for excellence in research. We sincerely thank our partners and look forward to continued and enriching partnerships.

SocialCloud

Research Focus: Social Network-based collaboration, Sharing and Exchange

Period: 2012-2015

Contact: Dr. Simon Caton

Funding: KIT Young Investigator Group, KIT Start-up Budget



The pervasiveness of social network platforms (e.g. Facebook) has profoundly changed how humankind communicates and interacts today, e.g. in virtual platforms and communities, but also to represent, document and explore inter-personal relationships digitally. In parallel, our capabilities and resources are dramatically increasing and mean that many Internet connected users have significant resource endowments that are underutilized.

Volunteering computing has taught us that at the edges of the Internet resource owners are willing to make their resources available for 'good uses' altruistically. Consider that the average Facebook user has 190 friends, and immediately a large connected network of resources based upon social relationships begins to present itself.

Social Clouds are defined as resource and service sharing frameworks that utilize relationships established between members of a social network to address these observations. They provide an environment in which (new) provisioning scenarios can be established based upon implicit levels of trust that transcend from inter-personal relationships digitally encoded within social network platforms. Their vision is motivated by the need of individuals or groups for specific resources or capabilities that could be made available by connected peers and peer groups. In simple words: Social Clouds use social networks as mechanisms for efficient collaboration, as users leverage their existing networks to share capabilities and resources. Such resources are not necessarily only computational resources, but can be any electronically consumable service, including human resources, skills and capabilities.

To address the many research challenges in this domain an interdisciplinary approach is essential. The Social Cloud research agenda therefore leverages methods and expertise in the broad areas of Computer Science, Economics and Sociology.

Service Research at KSRI

ValueGrids

Research Focus: Service Level Agreements, Software as a Service

Period: 2009-2012

Contact: Dr. Simon Caton, Dr. Wibke Michalk, Christian Haas

Funding: Federal Ministry of Education and Research BMBF



The Information and Market Engineering group was an essential member of the interdisciplinary research project ValueGrids (<http://www.valuegrids.de/>) which ran from 01.06.2009 to 31.05.2012 and was financed by BMBF. KSRI members Wibke Michalk, Simon Caton and Christian Haas participated in the project along with the project partners SAP Research, University of Freiburg, IBM Research, and Conemis.

ValueGrids opens the D-Grid-infrastructure for a fundamentally new community, the users and providers of software-based services (SaaS, software-as-a-service providers). Already today, SaaS providers offer complex software solutions, which can be adapted comprehensively and individually to customer needs. In order to be able to react flexibly to changing markets and customer's requests, a service-oriented solution must rely on modular services of different providers. Equally, operation of such services implies a high need of computing and storage capacities. Grid technologies promise flexible and cost-efficient adjustment towards those changes in demand.

The project ValueGrids is focused on so-called value chains, which are traditionally characterized by a well-defined succession of process steps by which a superordinate goal – a creation of value – is to be achieved. With the increasing globalization, this well-defined succession nowadays more frequently is composed of rapidly changing providers. The chain thus becomes a dynamic network (value network) composed of decentralized participants.

1.6. Energy Economics



The research group Energy Economics (EE) headed by Prof. Dr. Wolf Fichtner analyzes services along the whole energy supply chain, from primary energy supply, over energy conversion and energy transport to energy distribution and energy use. The rearrangement of the energy system as a result of the ambitious targets concerning the expansion of renewable energy on a European as well as on a national level, accompanied by the trend towards an increasingly decentralized energy supply structure, has a significant impact on the future development of energy service requirements and, consequently, constitutes a particular challenge. For instance, the effects resulting from a conversion of traditional energy suppliers to energy service providers are of special interest in this context. Thus, a special emphasis is on short-, medium-, and long-term techno-economic analysis and evaluation of energy systems following an interdisciplinary approach since such system analyzes involve not only economic criteria, but also aspects of engineering, IT or social sciences. The research group particularly focuses on the development of methods and concepts in the fields of decentralized market mechanisms as well as electric mobility.

The field of decentralized market mechanisms is driven by the increasing decentralization of energy systems in particular as a result of the promotion of renewable energies. Research concerns different possible developments from existing central market structures to distributed systems focusing on appropriate market integrations of local energy supply and demand. Therefore, research concentrates on the analysis of changes in local energy supply and demand, the impact of these changes on low voltage grids and new market mechanisms to cope with the resulting challenges. In this context questions regarding future market designs, the integration of households via dedicated electricity tariffs as well as future market participants, including the services and business models they offer, are of special interest.

Service Research at KSRI

In the field of electric mobility the impacts of electric vehicles on energy systems and material flows is of key interest to our interdisciplinary socio- and techno-economic research. Besides strong interrelations with smart grids research questions concerning new mobility concepts (Mobility 2.0) and smart mobility including services for electric vehicle specific activities like e.g. the charging process with its corresponding services like localisation of charging stations, navigation, reservation, identification, authentication, billing, roaming, etc. are focused on. Furthermore, new business concepts in this context are analyzed and developed.

In its projects the group Energy Economics cooperates closely with manifold international partners, mostly from Europe and North America. A variety of application-oriented as well as fundamental research projects on behalf of or in cooperation with public authorities, industry or (scientific) foundations – such as the German Federal Ministry for Economic Affairs and Energy (BMWi), the European Commission, the Helmholtz Association or the German Research Foundation (DFG) – underline experience in applying scientifically sound methods to practical problems.

Get eReady

Research Focus: electric mobility, car fleets, e-mobility services, business models
Period: 2013-2015
Contact: Axel Ensslen, Sabrina Ried, Patrick Jochem
Funding: Federal Ministry for Economic Affairs and Energy BMWi



A large number of battery electric and plug-in-hybrid electric vehicles will be allocated in car fleets between Stuttgart and Karlsruhe. The project's goal is to identify the success factors to economical operation of electric vehicle fleets and to prove the effectiveness of those factors. E-mobility services, particularly services concerning

the charging process of electric vehicles, will support business models in the context of intra- and inter-company usage of electric vehicles and corresponding charging infrastructure.

Within Get eReady, KSRI provides scientific support and is responsible for analyzing the acceptance of electric vehicles from the point of view of persons in charge of commercial car fleets. Furthermore, the business model of an e-mobility service provider who is (1) selling electric vehicles and (2) providing solutions to operate electric vehicle fleets and corresponding charging infrastructure is evaluated.

Get eReady is a project within the "Schaufenster" electric mobility Baden-Württemberg 'LivingLab BWe mobil'. The BMWi funds the project with 4.7 million

ESC – Energy Supply Cooperative*

Research Focus: Analysis of thermal and electrical load profiles, Development of load forecasting methods, Decision support for layout optimization under uncertainty
Period: 2012 - 2015 Contact: Dr. Valentin Bertsch
Funding: European Institute of Innovation and Technology (EIT), KIC InnoEnergy

The project Energy Supply Cooperative (ESC) is aimed at developing energy-autarkic, environmentally friendly residential quarters. A large part of the required energy will be provided by photovoltaic systems within the quarters, the energy consumption is reduced to a minimum by modern passive house technology. A maximal self-usage of photovoltaic energy is achieved by heat pumps with hot water storages and intelligent load shifting within the quarter. Additionally, socio-economic effects of energy consumption are analyzed and opportunities for load reduction and shifting are derived. Electricity that cannot be covered by own production is obtained from an external energy supplier. In the micro-grid, an intelligent energy management using PowerMatcher ensures the optimal interaction between local energy supply and demand. In the end, the aimed innovations shall remain affordable for households with average incomes.

DEMO*

Research Focus: Distributed Energy Systems, Market Integration, Optimization
Period: 2013-2015
Contact: Dr. Valentin Bertsch
Funding: Foundation Energy Research Baden-Württemberg

The increasing electricity generation from renewable energy sources (RES) as a result of the German 'Energiewende' (energy transition based in particular on increased use of renewable energy sources and energy efficiency) leads to the expansion of distributed generation capacities (wind power, photovoltaics, biomass, combined heat and power,...). By 2050, the share of RES in the German electricity generation mix is expected to reach up to 80 %. Simultaneously, the last nuclear power plant in Germany will be phased out by 2022. Therefore, the trend towards a more and more distributed organization of the electricity system is expected to continue. This development will cause major challenges for the traditional electricity system, which was designed for few, central production units with a low fluctuation of supply.

Service Research at KSRI

Current approaches on energy system analysis often concentrate on a centralized market structure with large generation assets contributing to the electricity supply system. However, the wide-spread penetration with distributed generation and storage units as well as their interconnection with consumers in the future will create potentials to organize energy management in a decentralized way. As far as possible, decentralized electricity systems should resolve and also prevent operational problems in distribution and transportation grids.

The research project contributes to the development and evaluation of new concepts for the design of decentralized markets using model-based analyses.

iZeus – intelligent Zero Emission Urban Systems*
Research Focus: Electric mobility, smart grid, smart home
Period: 2012-2014
Contact: Dr. Patrick Jochem
Funding: Federal Ministry for Economic Affairs and Energy BMWi



Partners of research and industry have joined the intelligent Zero Emission Urban Systems project with a view to enhance research, development, and practical demonstration in the fields of smart traffic and smart grid.

The project is being funded with about EUR 20 million by the Federal Ministry of Economics and Technology under the initiative Information and Communication Technologies for Electric Mobility II. The project directly succeeds the successfully completed electric mobility project MeRegioMobil. Work at KIT focuses on two main activities: Further development of the Energy Smart Home Lab and support of the fleet test.

*These projects are conducted at the Chair of Energy Economics at IIP. However, they are closely related to the research of the Energy Economics group at KSRI.

1.7. Value Stream Services



The research group Value Stream Services (VSS) of Dr. Helmut Wlcek and Prof. Kai Furmans focuses on methods and services to systematically improve the flow of material and information in value streams (VS).

Value Streams are defined as the entire scope of all material and information flows as well as those activities involved to develop, produce and offer services or products within a product line. It covers the range of the activities of the supplier, different departments within a company and the customer.

VSS may be related to the product itself (e.g. transport and storage), they can be involved in the designing, planning or execution processes of the material and information flow (e.g. design, sales and inventory planning) or they can be concerned with the management and support functions for Value Streams (e.g. VS controlling). Services are examined at each stage within the entire life cycle of a VS or product, from the product development process to the ramp-up phase and the spare parts supply and the product discontinuation. The research takes an interdisciplinary approach considering logistics, production engineering, IT and management aspects.

Some of the research topics of the Research Group are listed below:

- Creation of value streams focusing on flexibility and supply reliability
- Inventory management in value streams
- Lean Transport Management
- Lean Management in warehouses
- Information transparency and process optimization in value streams with the application of RFID

Service Research at KSRI

1.8. Graduate Program

The interdisciplinary graduate program 'Service Research - Service Value Networks' is running at KSRI since 2010. In close collaboration with associated industry partners, the graduate program investigates research questions arising from complex service systems. The interplay of various basic (electronic) services creates value for the consumer by combining different services to a complex network of basic services, a so called Service Value Network. Two main research streams delineate the challenging research questions the PhD candidates are studying: Human based Services and Service Value Network Analytics.

Scholarship holders are being supervised by two professors each in order to work on their subject interdisciplinary by using methods from different research areas. The identified research questions ideally include practical problems located in the four domains: energy, healthcare, information and communication technologies as well as logistics.

Since 2012 there were seven scholarship holders: Johannes Kunze von Bischoffshausen and Carola Stryja from SIM group, Margeret Hall and Tim Straub from IM group, Anne Zander from DOL group as well as Julia Hoxha and Nico Stieler from KM group.



The 'Service Research' graduate program is continued by the newly established Karlsruhe School of Services (KSOS), which is designed to provide an ideal research environment to enable the qualification of young researchers and their autonomous research in the interdisciplinary research field of services.

The school provides scholarships to PhD students at several institutions at KIT.

1.9. SiNLAB

SiNLAB

Research Focus: Service Innovation, Disruptive Innovation, Service Transformation

Period: since 2009 - ongoing

Contact: Niels Feldmann and Marc Kohler

Funding: Industry



KSRI aims to further its unique approach to connecting research teams from business and academia. To support this, the institute has established first labs where teams from practice and science interested in related topics exchange knowledge and collaborate on solving challenges that are relevant for both sides. This was started through both the Service Innovation Lab (SiNLAB) and the Supply Chain Lab (SCL). In addition, KSRI directors are among the principal investigators of the Karlsruhe Decision and Design Lab (KD2LAB), which is currently in its founding stage.

The service innovation lab (SiNLAB) was launched at the Karlsruhe Service Research Institute in summer 2009. The lab is being run by the research group Service Innovation & Management of Prof. Dr. Hansjörg Fromm. In this lab, researchers, decision makers from industry and students are brought together. Innovative methods are used and explored to jointly generate and conceptualize ideas for innovations and new business models. The SiNLAB team draws on its accumulated experience in the area of service innovation and at the same time develops an understanding of realities in innovation processes. This way the SiNLAB has become a catalyst for the development of innovative services.

The SiNLAB's mission is to explore disruptive innovation:

- It investigates disruptive service innovations and real-world processes in a descriptive way.
- It visualizes innovation processes and makes them understandable.
- It connects ideas, methods, and decision makers.
- It supports its partners in developing new business models and overturning mental models.
- It enables disruptive innovations by questioning established rules .

Service Research at KSRI

1.10. Supply Chain Lab

Supply Chain Lab
Research Focus: Supply Chain Management
Period: Since 2012 - ongoing
Contact: Dr. Roland Görlitz
Funding: Industry
Involved Groups: FZI , IFL , IIP , DOL , wbk



The Supply Chain Lab (SCL) was established in 2012 at the Karlsruhe Institute of Technology (KIT) under the umbrella of the Karlsruhe Service Research Institute (KSRI). Engaged in the SCL are the four institutes of the professors Furmans, Lanza, Nickel and Schultmann which have a high affinity to logistics.

Its target is to develop holistic and innovative solutions for practical problems in the supply chain management. Creating interdisciplinary research teams the SCL integrates most recent results and methods of the different associated institutes.

The SCL benefits from the experience of collaborations with numerous business partners. It encourages the contact between private enterprise and young scientists and offers contact partners for problem solutions in the supply chain management.

1.11. Startup Calpano

Calpano
Research Focus: Personal task management, SaaS, Freemium, Cloud
Period: 2011 - 2012
Contact: Max Völkel, Heiko Haller
Funding: EXIST Foundation Scholarship

The start-up company Calpano was started by KSRI associates. Its goals were defined as establishing an online software for task management with a special focus on the delegation and the coordination of tasks to make sure that they do not disappear. Not only within complex projects but also in any professional and private life people depend on collaboration with others. Often frictional losses occur, agreements are not kept and important tasks are left behind, forgotten or not properly finished. Calpano offered collaborative task lists which could be sent to anyone, making them mandatory and thus enabling the customer to monitor their progress, easily.

The information architecture was realized by the psychologist Heiko Haller whose focus was on convenience and usability while computer scientist Dr. Max Völkel implemented the project based on state of the art web technologies and acted as CEO.

1.12. Guest professors and scientists

KSRI promotes the exchange and discussion on current research topics with external guests: With the establishment of a KSRI guest professorship, a position which has been created for external experts for the duration of three up to six months, the institute aims at further encouraging and supporting international academic exchange over an extended period of time. Goal of the guest professorship is to foster debate on the current state of research, incite discussions on the external view on KSRI's main focus and the identification of new mutually beneficial projects to maintain a sustainable international academic cooperation.

Prof. Christiane Barz



Christiane Barz joined KSRI as guest professor from September to December 2013. She is an assistant professor of the Decisions, Operations & Technology Management group at the UCLA Anderson School of Management. Her main research interest is the solution of large-scale dynamic optimization problems using approximate dynamic programming techniques. She applies these methods in revenue management, resource allocation, healthcare services, and production scheduling. During her time at KSRI she mainly collaborated with Prof. Stefan Nickel's group. Christiane Barz was involved in the development of future interdisciplinary research at KSRI and will maintain her collaboration after her visit.

Prof. Jorge Cardoso



Prof. Dr. Jorge Cardoso is Associate Professor and joined the Information System Group at the University of Coimbra in 2009. He was a visiting professor from February until December of 2013 and supported KSRI with his current research interests in the areas of Service Networks, Internet of Services, and Service Science, Linked Data and Semantic Web, and Business Process Management. His visit was initiated by Prof. Rudi Studer and he worked closely with researchers from all of KSRI's groups during his stay. His collaboration at KSRI initiated several publications including a book on Fundamentals of Service Systems to be released in 2014. Prof. Cardoso was actively involved in the Summer School on Services as a teacher and the Service Summit as expert panelist.

Service Research at KSRI

Prof. Steven Kimbrough



Dr. Kimbrough is a Professor at The Wharton School, University of Pennsylvania. Steven Kimbrough was a guest Professor at KSRI for the 2012 summer term, the 2013 summer term and returned for a month during the Service Summer 2013 in which he was actively involved as a teacher for the summer school and speaker at the Service Summit. The collaboration between KSRI and Prof. Kimbrough was initiated by Prof. Christof Weinhardt. During 2012 and 2013 Steven Kimbrough co-wrote eight published scientific papers with members from the SIM and IM groups. The collaboration with Prof. Kimbrough is continuing after his visits to KSRI.

Prof. Veronica Martinez



Veronica Martinez is the Principal Research Fellow in the Centre for Business Performance at Cranfield School of Management, United Kingdom. She is the director of the Operational Performance executive course at Cranfield School of Management. Veronica was a visiting professor at Karlsruhe Institute of Technology from September to December 2013. Dr. Martinez mostly worked with Prof. Hansjörg Fromm's group and introduced the repertory grid method.

Prof. Charles Petrie



Charles J. Petrie, Ph.D., Senior Research Scientist (ret.) at Stanford CS Logic Group spent a research term at KSRI from February to July 2012. Prof. Rudi Studer invited Dr. Petrie to visit KSRI. Dr. Petrie held lectures in Service Oriented Computing, finished his book on 'Automated Configuration Problem Solving' and together with Sudhir Agarwal published the journal article 'An Alternative to the Top-Down Semantic Web of Services'. Together with Sudhir Agarwal he worked on a prototype for the SEEmail (semantic email addressing) project and also supervised a student thesis on SEEmail.

1.13. Academic Partners

The academic research partners KSRI is cooperating with are not only situated at KIT but also there are numerous national and international collaborators. These partnerships have developed in very different ways from professors along with their service-oriented research groups joining KSRI to guest professorships that sparked further collaboration with internationally renowned universities.

1.13.1. Research Group Economics and Technology of eOrganizations

The research group 'eOrganization / Services Computing' led by Prof. Dr. Stefan Tai was one of the founding research groups at KSRI until the end of 2010. Since then the group which is situated at AIFB has maintained its collaboration with KSRI. Their main projects at KSRI is the EU-funded COCKPIT project.

The fundamental idea of COCKPIT is that Web 2.0 social media constitute the emerging and de facto mass collaboration and cooperation platform between citizens themselves, and between citizens and public administrations. Therefore, Web 2.0 social media had very soon established themselves as a very effective means for creating, sharing and tracking knowledge about citizens' opinions and wishes on public service delivery.

COCKPIT adopts a highly synergetic approach towards the definition of a new governance model for the next-generation public service delivery decision making process by combining the research areas of citizens' opinion mining in the context of Web 2.0, Service Science Management and Engineering in the context of the public sector, and deliberative engagement of citizens for forming informed judgement on public services' delivery.

COCKPIT supports the notion of open Public Administrations with which citizens have higher confidence and trust among each other and with the Public Administration, resulting in better governance, lower disputes on services' delivery priority setting, higher degrees of public service adoption, lower public service delivery costs, better service innovation, and citizens loyalty to the public services.

Service Research at KSRI

1.13.2. Associated Institutes



KSRI's academic partnerships are based on the close collaboration with its associated institutes. These are the Institute of Applied Informatics and Formal Description Methods (AIFB), the Institute of Information Systems and Marketing (IISM), the Institute of Operations Research (IOR), the Institute for Industrial Production (IIP) at the Economics Faculty, the Institute for Program Structures and Data Organization (IPD) at the Informatics Faculty and the Institute for Material Handling and Logistics (IFL) at the Mechanical Engineering Faculty. Six professors at KSRI are leading research groups at these institutes.

- AIFB: Prof. Dr. Rudi Studer, Knowledge Management group
- IISM: Prof. Dr. Christof Weinhardt, Information & Market Engineering group
- IOR: Prof. Dr. Stefan Nickel, Discrete Optimization and Logistics group
- IIP: Prof. Dr. Wolf Fichtner, Energy Economics group
- IPD: Prof. Dr. Ralf Reussner, Software-Design and Quality group
- IFL: Prof. Dr. Kai Furmans, Value Stream Services group

1.13.3. FZI

The Forschungszentrum Informatik FZI (Research Center for Information Technology) was found more than 25 years ago as an institution for applied research in information technology and technology transfer at the Karlsruhe Institute of Technology. Its task is to provide businesses and public institutions with the latest research findings in information technology.

- There are several directors from KSRI that are involved in FZI research fields:
- Health Care: Prof. Dr. Stefan Nickel
 - Knowledge and Information Services: Prof. Dr. Rudi Studer, Prof. Dr. Christof Weinhardt
 - Production and Logistics: Prof. Dr. Kai Furmans, Prof. Dr. Stefan Nickel
 - Software Engineering: Prof. Dr. Ralf Reussner

1.13.4. Further Academic Partners



Service Research at KSRI

1.14. Industrial Partners

The strong collaboration with industrial partners is what makes KSRI unique at KIT. In 2008 KSRI was founded as a Public-Private-Partnership with IBM. Since then further partnerships have been established and KSRI is collaborating with numerous companies. In 2013 Bosch became the second industry-on-campus partner at KSRI.

1.14.1. IBM



The shift towards service-based economies in certain parts of the world has been bringing new business concerns to focus. Industry leaders call for guidance on how to innovate, manage, evaluate and optimize their service businesses. Therefore, IBM became one of the founders of Service Science. The company coined the term Service Science Management and Engineering (SSME), stimulated cross-disciplinary collaboration, and started working with the world-wide research and academic communities to help define related research directions. SSME is now a hot topic in books, articles and conferences worldwide.

In 2008 KIT (Karlsruhe Institute of Technology, at that time University of Karlsruhe) and IBM Germany (IBM Deutschland GmbH) founded the KSRI as a public-private partnership to further promote the establishment of service science as an independent field of research. An innovative industry-on-campus model was chosen for the institute, emphasizing the great importance of exchange between academia and industry. Therefore a joint and interdisciplinary research group on Service Innovation and Management (currently led by Prof. Dr. Hansjörg Fromm) consisting of KIT as well as IBM members was established.

Overall, IBM provides access to its wide business and research network to KSRI. This includes contacts to experts from a number of different countries and business units reporting on their practical experiences as well as opportunities for collaboration and exchange with IBM research centers around the globe. Both, KSRI researchers and students benefit from lectures enriched with first hand experiences, joint KSRI-IBM workshops, and visits to relevant IBM locations such as the research and development centers in Almaden and Yorktown Heights (USA), as well as Böblingen (Germany).

1.14.2. Bosch



Since May 2013 KSRI has been complemented by Bosch as another industry-on-campus partner. The research group Value Stream Services (VSS) headed by Dr. Helmut Wlcek focuses on methods and services to systematically improve the flow of material and information in value streams setting their research priority on a particular closeness to practical reality.

The Bosch Group is a leading global supplier of technology and services. In 2013, its roughly 281,000 associates generated sales of 46.1 billion euros. Its operations are divided into four business sectors: Automotive Technology, Industrial Technology, Consumer Goods, and Energy and Building Technology. The Bosch Group comprises Robert Bosch GmbH and its roughly 360 subsidiaries and regional companies in some 50 countries. If its sales and service partners are included, then Bosch is represented in roughly 150 countries. This worldwide development, manufacturing, and sales network is the foundation for further growth. In 2013, the Bosch Group invested some 4.5 billion euros in research and development and applied for some 5,000 patents. This is an average of 20 patents per day. The Bosch Group's products and services are designed to fascinate, and to improve the quality of life by providing solutions which are both innovative and beneficial. In this way, the company offers technology worldwide that is 'Invented for life.'

The company was set up in Stuttgart in 1886 by Robert Bosch (1861-1942) as 'Workshop for Precision Mechanics and Electrical Engineering.' The special ownership structure of Robert Bosch GmbH guarantees the entrepreneurial freedom of the Bosch Group, making it possible for the company to plan over the long term and to undertake significant up-front investments in the safeguarding of its future. 92 percent of the share capital of Robert Bosch GmbH is held by Robert Bosch Stiftung GmbH, a charitable foundation. The majority of voting rights are held by Robert Bosch Industrietreuhand KG, an industrial trust. The entrepreneurial ownership functions are carried out by the trust. The remaining shares are held by the Bosch family and by Robert Bosch GmbH.

Service Research at KSRI

1.14.3. ABB



In Mai 2012, ABB and the Karlsruhe Institute of Technology signed a framework agreement to facilitate future cooperation in research and innovation. Joint research activities will cover topics such as lifecycle management of industrial products and services, the development of scenarios for smart buildings and electric mobility, load and consumption management in smart electricity distribution grids and topics in other interesting fields of research.

Building on this agreement, ABB and the KSRI initiated a joint research project on industrial services in June 2013. Together the two partners will investigate and address current challenges in designing, providing and operating industrial services in different application domains. Beyond that ABB and the KSRI have established a constant exchange, e.g., through joint workshops, guest lectures or the application for publicly funded research projects.

1.14.4. BMW



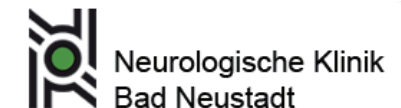
In 2012, the Karlsruhe Institute of Technology (KIT) and the BMW Group have entered a strategic partnership. In this context, joint activities in several research areas are facilitated; business management, engine, mobility concepts and supply chain management, among others.

In 2013, a research project in the area 'mobility behavior and concepts of mobility' has started at the Karlsruhe Service Research Institute (KSRI).

The project has a special focus on multimodal information systems and services.

The aim of the project is to develop approaches that enable the description, measurement and optimization of the quality of multimodal mobility services. Besides theoretical definitions of quality of mobility services, the subjective perception of quality by the customer will be included as well. Furthermore, use cases will be developed and their feasibility will be investigated.

1.14.5. Further Industrial Partners



Teaching



Teaching

2. Teaching

In an increasingly 'service-led economy' – with a rising services' share of overall value creation and faster cycles of new services and service-based business models – the demand of the market for interdisciplinary service specialists to fill professional and leadership positions with their broad knowledge spectrum in different disciplines and the ability to familiarize with different subject areas is also growing.

In this context KSRI's precisely tailored teaching program focusing on service systems and the close cooperation between different partners to deliver shared value ensures a focused education based on the aspects of service orientation in computer science.

KSRI offers a wide variety of lectures in the field of services, comprising both technical and economical courses. In 2012/2013 the institute's spectrum has been amplified by topics related to value stream services and logistics. The new research group VSS contributes through lectures like global production and logistic or governance of logistic networks.

Gaining practical experience in collaboration with industry partners is a central aspect of KSRI's highly practice-oriented teaching profile. Therefore selected seminars and lectures are organized together with our industry partners thus complementing the program further by excursions and workshops. The courses are integrated as modules in the Bachelor's and Master's degree programs of the study programs: Industrial Engineering and Management, Information Engineering and Management, Economics Engineering and Computer Science.

In addition KSRI offers the opportunity to take KSRI courses in other technical studies within the Department of Economics and Management or the Department of Informatics. These two KIT faculties enjoy a very good reputation, open excellent career prospects for their students and have both been regularly ranked among the top five in Germany.

Since the beginning in summer term 2008, KSRI lectures always rank among the top ten within the students' ranking of the Department of Economics. The KSRI lectures 'Business and IT Service Management', 'Service Innovation', 'eServices' and 'Internet Business Models' were particularly awarded with high ranking positions.

2.1 Lectures

The pillars of KSRI's teaching offers are general service-related topics, semantic technologies, energy economics, healthcare, value streams, software quality and information management. In the following, the KSRI curriculum is illustrated by providing descriptions of exemplary courses.

The course 'Service Oriented Computing 2' (Prof. Dr. Rudi Studer) requires knowledge about fundamental web technologies and provides an overview of how to use semantic technologies to manage and utilize web services. Prof. Dr. Stefan Nickel offers several healthcare-related courses. For example, 'Operations Research in Healthcare Management' presents OR methods that foster a sustainable improvement of inpatient treatment. The course 'component-based software architectures' (Prof. Dr. Ralf Reussner) gives insights into software modelling and the course 'energy system analysis' (Prof. Dr. Wolf Fichtner) gives insights into energy services. The interdependencies of economic, information and communication technologies and process-oriented structures is investigated in the course 'Business and IT Service Management' (Prof. Dr. Gerhard Satzger). In the course 'Industrial Services' (Prof. Dr. Hansjörg Fromm) the peculiarities of services in industrial settings are discussed. The course 'Management of Business Networks' (Prof. Dr. Christof Weinhardt) gives a brief introduction to the economics of business networks that includes organizational theory and game theory. In 'Global Production and Logistics' (Dr. Helmut Wlcek and Prof. Dr. Kai Furmans) discuss services in supply chains and how logistics are necessary for uninterrupted production.

2.2. Workshops for Students



Workshop Business and IT Service Management

The workshop is a collaboration with IBM Global Business Services and takes place in November of each year. 30 students who are participating in the lecture 'Business and IT Service Management' get to work on a case study and present their recommendations for a business model in servitization.

eServices Workshop

About 40 students annually attending Prof. Gerhard Satzger's eServices lecture also participated in the workshops at IBM Research & Development during summer terms of 2012 and 2013. The students gained insight of the challenges of outsourcing by analyzing and evaluating a large virtual outsourcing contract. Additionally they were introduced to newest technologies being developed in Böblingen.

Teaching

2.3. Seminars

The Service Science, Management & Engineering seminar has become a staple of the joint teaching efforts at KSRI. Each semester students prepare and present topics from the various backgrounds of all seven research groups. The preparation of the seminar is led by a different research group every semester. This seminar is aimed at undergraduate as well as graduate students giving them a broad overview of service science.

The social computing seminar is being held by Dr. Simon Caton and Margeret Hall from Prof. Weinhardt's Information & Market Engineering group.

Another interdisciplinary seminar on trust, exchange and collaboration in online communities is jointly being held by Dr. Simon Caton, Margeret Hall, Christian Haas and Christof Dukat from Prof. Weinhardt's Information & Market Engineering group and its associated groups.

In cooperation with research-oriented hospitals the practical seminar Health Care Management is organized by Prof. Nickel's Discrete Optimization and Logistics group.

2.4. Support Programs for Students

At KSRI students are supported according to individual abilities and interests with several support programs:

Female talents@KIT: IBM mentoring program for female KIT students

Advance! Program: Program for advancement and mentoring of particularly dedicated students (f/m) coined by Prof. Rudi Studer

Industrial internship at IBM: Industrial internship placement at IBM at home and abroad (f/m)

Consulting internship at IBM: Consulting internship placement at IBM in the area of Strategy & Transformation

Theses at IBM: Placement of Diploma- and Master-Theses at IBM

IBM ExtremeBlue: 10-week intensive internship, offered at 10 Research and Development Centres worldwide

EMEA Best Student Recognition Event: EMEA-wide 3-day-event on IBM, future technologies and innovation

zSummer University: Information on IBM System z and IBMs Research and Development projects

2.5. Involvement in KIT Hector School



KIT further expands its professional development program with the Hector School Master programs for the advanced education of young professionals and junior managers. The HECTOR School concept and the related master programs were designed in close cooperation with the International Department and four KIT Departments including the Department of Economics and Management and the Department of Informatics. The Hector School offers seven part-time master programs in English for the advanced education of engineers, computer scientists, and economists including the Hector School program Service Engineering and Management with KSRI participation in teaching and training. The contents of this interdisciplinary program focus on IT-based services highlight the importance and significance of ICT for the services market of the future and aim at improving the participants' technical knowledge and skills concerning the use of these technologies.

As in previous years, members of KSRI gave lectures in the area of Service Science and illustrated over the course of several days, various topics and concepts of Service Science to the students. KSRI participants were Prof. Rudi Studer (and Maria Maleshkova) with the lecture 'Information and Knowledge Management', Prof. Christof Weinhardt (and Christian Haas) with 'Information Pricing', Prof. Gerhard Satzger, Johannes Kunze von Bischhoffshausen and Björn Schmitz with 'Business & IT Service Management', Prof. Stefan Nickel with 'Supply Network Management', Dr. Helmut Wlcek with 'Production and Logistics Controlling', Dr. Valentin Bertsch with 'Energy System Analysis', Dr. Patrick Jochem (and Dr. Russell McKenna) with 'Integration of Energy Systems and E-Mobility', Dr. Patrick Jochem (and Dr. Stefan Pfahl) with 'CO2 Balances: Well to Wheel', as well as Prof. Gerhard Satzger, Andreas Neus, Niels Feldmann, Marc Kohler and Carola Stryja with 'Service Innovation'.

Staff



Staff

3. Staff

Since its foundation in 2008 KSRI's staff has continually increased. By the end of the year 2013 there are 8 directors as well as almost 30 scientists at KSRI.

3.1. Service Innovation and Management

Prof. Dr.-Ing. Hansjörg Fromm



Hansjörg Fromm obtained a Diploma in Computer Science at the University of Erlangen-Nuremberg. In 1982 he was awarded a Doctor's degree for his research in the field of modeling and performance analysis of computer systems. After a research stay at IBM Thomas Watson Research Center, Yorktown Heights, New York he joined IBM Germany in 1983, where he held different positions in the sectors software development and productions research.

In the mid-1990s Hansjörg Fromm forged the business area Supply Chain Management within IBM Global Business Services. 2006 he was appointed European Head of the IBM Centers for Business Optimization (CBO) where innovative solutions based on mathematic methods and optimization procedures are developed and implemented on an industrial scale.

Hansjörg Fromm has been lecturer at the University of Nuremberg-Erlangen and holding lectures on modeling of Supply Chain Management, e-logistics and e-marketplaces since 1985. In 1993 he was appointed honorary professor and elected member of the IBM Academy of Technology (an international circle of about 200 IBM scientists) and appointed IBM Distinguished Engineer.

In July 2011 Prof. Fromm became director of KSRI and head of the research group Service Innovation and Management succeeding Prof. Dr. Gerhard Satzger.

Research focus:

- Service Innovation and Transformation
- eServices, Peoples Services, Industrial Services
- Service Quality and Productivity, Service modeling, Service Level Engineering
- Service Analytics, Customer Analytics, Customer Intimacy

Prof. Dr. Gerhard Satzger



Gerhard Satzger has obtained a diploma in Business Engineering from the University of Karlsruhe and an MBA from Oregon State University/USA. He completed a Ph.D. program at the University of Giessen and earned his 'Habilitation' from the University of Augsburg. In 1989, Satzger joined IBM and initially held several consulting and financial management positions in Germany and abroad.

In 2008, Satzger co-founded the Karlsruhe Service Research Institute, a joint institution of IBM and the KIT, and until 2011 led its research group 'Service Innovation & Management'. In 2011 he was appointed Director of Business Performance Services Europe and remains involved in KSRI as an honorary professor.

Research focus:

- Service Innovation
- Service Management
- Service Systems
- Service Analytics

Niels Feldmann



Niels Feldmann graduated from Technical University of Darmstadt, Germany with a Master's degree in Business Administration and Information Systems. He subsequently started his professional career as a consultant at IBM, focusing on strategy and innovation management projects at clients from various industries and around the globe. Before he joined the KSRI, Niels was responsible for innovation management consulting engagements within the consulting arm of IBM Germany. Since April 2012 he is conducting his research in the Service Innovation and Management group at KSRI.

Research focus:

- Idea Assessment in service firms
- Applying crowdfunding mechanisms for idea assessment inside companies, aka Enterprise Crowdfunding
- Serious Games for idea assessment
- Collective Intelligence in service innovation management

Staff

Marius Goldberg



Marius Goldberg graduated in Information Engineering and Management at the KIT and at the Carlos III de Madrid. Since 2012 Marius Goldberg is an IT Management Consultant with IBM Global Technology Services and a researcher with the Service Innovation and Management Group.

Research focus:

- IT Service Management (ITSM)
- Cloud Computing, IT Outsourcing, Multi-Provider Outsourcing
- Retained Organizations, Service Innovation
- Service Organization Design

Dr. Francois Habryn



François Habryn holds a Master degree in Computer Science from the University of Technology of Compiègne and a Master degree in European Business from ESCP Europe. He worked at the Karlsruhe Service Research Institute between 2008 and 2012 and obtained his Ph.D. in social and economic sciences in 2012 with a focus on customer intimacy based strategies and business performance measurement. Prior to this, François Habryn worked between 2002 and 2008 as an IT consultant for IBM in Stuttgart, Germany.

Research focus:

- Business Process Management - Service Oriented Architecture
- Innovation in Enterprise Transformation
- Service Computing

Peter Hottum



Peter Hottum graduated in Information Engineering and Management at the Universität Karlsruhe (TH), now KIT. In July 2009, Peter joined the Karlsruhe Service Research Institute as a member of the Service Innovation & Management research group. From March to June 2012, he worked with Professor Stephen Kwan during a research stay at San José State University (USA).

Research focus:

- Service Systems and Value Co-Creation
- Customer Contribution Management (CCM)
- Customer Involvement and Service Quality
- Service Productivity
- Service Science Management and Engineering (SSME)

Marc Kohler



Marc Kohler has studied Business Engineering (B.Sc.) at Karlsruhe Institute of Technology (KIT) and Strategic Entrepreneurship (M.Sc.) at the University of Southampton, UK. In October 2011 He joined KSRI to conduct research in the area of Service Innovation.

Research focus:

- Service Innovation Management
- Service Innovation Capabilities and Performance
- Design Thinking
- Open Innovation, Customer Integration and Collaborative Innovation

Dr. Robert Kern



Robert Kern graduated in Applied Physics and Computer Science at the University of Augsburg, Germany, in 1998 and joined the IBM Development Lab in Boeblingen/Germany in the same year. He was a researcher at KSRI from 2008 until finishing his PhD in late 2013.

Research focus:

- Human computation
- Crowdsourcing
- Quality considerations in crowdsourcing scenarios
- Service science

Axel Kieninger



Axel Kieninger studied Information Engineering and Management at the Universität Karlsruhe (TH). He joined the Group Service Innovation and Management in 2009.

Research focus:

- Service Level Engineering (SLE)
- Business-Driven IT Management (BDIM)
- IT Service Management (ITSM)
- IT Outsourcing (ITO)
- Service Science Management and Engineering (SSME)

Staff

Dr. Peter Korevaar



Peter Korevaar studied Physics and Mathematics at the university of Utrecht (Netherlands), where in 1989 he also achieved his doctor degree. Since May 2012 Peter Korevaar is a Senior Research Associate at the Karlsruhe Service Research Institute and he supports KSRI Director Prof. Dr. Hansjörg Fromm in teaching and research for Service Analytics, as well as with building up cooperation with industry companies in the area of Industrial Services.

Research focus:

- Application of Data Mining to Industrial Services
- Logistics Network Planning for Service Parts and Service Technicians
- Assortment and Inventory Optimization for Service Parts

Johannes Kunze von Bischoffshausen



Johannes graduated from KIT with a Bachelor and Master degree in Information Engineering and Management. Johannes Kunze von Bischoffshausen is a research associate and member of the graduate program "Service Research" at the Karlsruhe Service Research Institute (KSRI) since September 2011. Johannes collaborates with several IBM business units in the context of his research.

Research focus:

- Business Analytics for Business-to-Business Marketing and Sales
- Sales Force Analytics and Optimization

Dr. Andreas Neus



After studying Psychology in Bonn, Dr. Andreas Neus was co-founder of a Start-Up before joining IBM in 1999. As strategy consultant, he lead innovation projects for international clients and served as the European Media & Entertainment Lead at the IBM Institute for Business Value in Amsterdam. He joined KSRI at its start in 2008 and completed his PhD in 2014. As the University Cooperation lead for GfK Verein, he is responsible for developing market research education using an international network of universities.

Research focus:

- Service innovation
- User-driven innovation and business models
- Open innovation and the cognitive surplus

Björn Schmitz



Björn Schmitz studied Industrial Engineering and Management at the Karlsruhe Institute of Technology. Since July 2013 he is working as a research associate in the group Service Innovation & Management. Björn conducts research in the area of industrial services where he closely collaborates with the German corporate research center of ABB.

Research focus:

- Industrial Services
- Service Business Models and Contracts
- Risk Gain Sharing
- Service Level Engineering

Carola Stryja



Carola Stryja studied Business Engineering at the University of Karlsruhe (TH), now KIT. In 2013 she joined KSRI as a research associate in the Service Innovation & Management team.

Research focus:

- Collaboration in Service Networks
- Formalization and Analysis of Service Networks
- Application of Network Theory to E-Mobility Networks
- IT Architectures for E-Mobility Services
- E-mobility Services and Business Models

Staff

3.2. Discrete Optimization and Logistics

Prof. Dr. Stefan Nickel



Stefan Nickel obtained his PhD in Mathematics at the Technical University of Kaiserslautern, Germany in 1995. From 1995 to 2003 he was first assistant and then associate professor in mathematics at the Technical University of Kaiserslautern. After a full professor position at the Saarland University (Chair of Operations Research and Logistics) from 2003 to 2009 he became one of the directors of the Institute for Operations Research at the KIT in April 2009. In 2011 he became director at Forschungszentrum Informatik (FZI) and Karlsruhe Service Research Institute (KSRI).

Stefan Nickel is also member of the scientific advisory board, as well as the management board, of the Fraunhofer Institute for Applied Mathematics (ITWM) in Kaiserslautern, Germany. He has authored or co-authored four books as well as more than 80 scientific articles mainly in the area of location, supply chain management, health care and logistics. In addition he had numerous research contracts with well-known industrial companies (e.g. BASF, Lufthansa, Miele, SAP). Stefan Nickel is editor-in-chief of Computers & Operations Research since October 2006 and member of the editorial board of Health Care Management Science.

He has coordinated the Health Care working group within the German OR society (GOR) and is now president of the GOR. Moreover he was the speaker of the EURO working group on locational analysis.

Research focus:

- Location planning
- Area planning
- Health care
- Online optimization

Ines Arnolds



Ines Arnolds obtained her Master's degree in Logistics at Hof University of Applied Sciences. She is a research associate with Discrete Optimization and Logistics since 2009 and with KSRI since 2011.

Research focus:

- Discrete Optimization
- Discrete Event Simulation
- Hospital Layout Planning
- Healthcare Logistics

Melanie Reuter



Melanie Reuter studied Econometrics at TU Kaiserslautern with a focus on mathematical optimization. She joined the Discrete Optimization and Logistics group in 2010 and is at KSRI since 2011.

Research focus:

- Operations Research
- Healthcare Logistics
- Health Services Research
- Emergency Medical Services (main focus on Germany)

Anne Zander



Anne Zander studied Mathematics at KIT and obtain her diploma degree in Spring 2013. In June 2013 she was granted a PhD-scholarship from KSRI. Since then she is associated to the research group 'Discrete Optimization and Logistics'.

Research focus:

- Application of Operations Research methods in Health Care
- Appointment Systems

Staff

3.3. Software Design and Quality

Prof. Dr. Ralf Reussner



Ralf Reussner finished both his Diploma in Informatics and his Doctor's degree at Karlsruhe University (now KIT). After this, he was a Senior Research Scientist and project-leader at the Distributed Systems Technology Centre (DSTC Pty Ltd), Melbourne, Australia. From March 2003 till January he held the Junior professorship for Software Engineering at the University of Oldenburg, Germany, and was awarded with a 1 Mio EUR grant of the prestigious Emmy-Noether young researcher's excellence program of the National German Science Foundation before becoming a professor for Software Engineering

at the Karlsruhe Institute of Technology in 2006. Prof. Reussner is a director at Forschungszentrum Informatik (FZI) and since 2011 when his research group Software Design and Quality joined KSRI he became a director here as well.

Prof. Reussner is one of the editors of the Software-Architecture handbook and founder of the software architecture group of the German Society of Informatics (GI).

Research focus:

- Software Components
- Software Architecture
- Model-based Performance Engineering and Prediction
- Long-living Software Systems

Dr. Samuel Kounev



Samuel Kounev studied Mathematics and Computer Science at the University of Sofia (Bulgaria) and received his PhD degree, with a focus on 'Performance engineering of distributed component-based systems' at the Technische Universität Darmstadt. He was a senior researcher at KSRI from January 2011 to February 2014. Samuel was head of the Descartes Research Group which is mainly funded by the Deutsche Forschungsgemeinschaft (German Research Foundation) within the Emmy Noether Program.

Research focus:

- Software and Systems Engineering
- Services Computing, Cloud Computing and Virtualization
- Systems Modeling and Simulation

3.4. Knowledge Management

Prof. Dr. Rudi Studer



Rudi Studer is Full Professor in Applied Informatics at the Karlsruhe Institute of Technology (KIT), Institute AIFB. In addition, he is director at the Karlsruhe Service Research Institute (KSRI) as well as at the FZI Research Center for Information Technology. His research interests include knowledge management, Semantic Web technologies and applications, data and text mining, Big Data and Service Science.

He obtained a Diploma in Computer Science at the University of Stuttgart in 1975. In 1982 he was awarded a Doctor's degree in Mathematics and Informatics at the University of Stuttgart, and in 1985 he obtained his Habilitation in Informatics at the University of Stuttgart. From 1985 to 1989 he was project leader and manager at the Scientific Center of IBM Germany.

He is involved in various national and international research projects, among others the Software-Cluster of the Leading-Edge Cluster Program of the Federal Ministry of Education and Research (BMBF), the EU Network of Excellence on Large-Scale Data Management (PlanetData) as well as the EU projects XLike (crossLingual Knowledge Extraction) and XLime (crossLingual crossMedia Knowledge Extraction).

He is former president of the Semantic Web Science Association (SWSA) and former Editor-in-chief of the Journal Web Semantics: Science, Services, and Agents on the World Wide Web. He is an STI International Fellow.

Dr. Sudhir Agarwal



Sudhir Agarwal studied Informatics at TU Dortmund University and finished his PhD in 2007 at AIFB on 'Formal Description of Web Services for Expressive Matchmaking'. Agarwal was project lead at AIFB and KSRI from 2008 to 2013.

Research focus:

- formal description of web services
- automated deduction techniques for the characteristics of web services
- applications and conclusions for ranking web services

Staff

Julia Hoxha



After her graduation in Computer Science and Mathematics at the American University in Bulgaria, Julia moved to Germany to pursue her graduate studies, initially at RWTH Aachen from where she received a Master degree on Software Systems Engineering. Since 2009, Julia is working as a Research Associate at Karlsruhe Institute of Technology (KSRI/AIFB), where she is currently finishing her doctoral degree in Cross-domain Recommender Systems.

Research focus:

- Recommender Systems
- Semantic Web and Services
- User Behavior Modeling
- Machine Learning
- Knowledge Discovery

Dr. Martin Junghans



Martin Junghans received a Diploma in Computer Science with distinction in 2008. During his Ph.D., Martin Junghans has been working on topics in the area of Semantic Web Services. In particular, his research is focusing on the formal modeling and discovery of processes and services. He conducted further research on ranking, composition, and execution within the area of Web-mediated services, end user browsing processes, traditional Web services, and Web APIs. Martin Junghans has been involved in several research projects including SOA4All, WisNetGrid, InterLogGrid, and iZeus. Currently, he is a senior researcher in the group of Rudi Studer at the institute of Applied Informatics and Formal Description Methods (AIFB).

Research focus:

- Semantic Web Services, APIs, and Processes
- Service-Oriented Computing
- Semantic Web Technologies
- Service Science, Management & Engineering

Nico Stieler



After graduating with a Diploma in Business Informatics Nico Stieler worked at AIFB on the NeOn project. From 2011 to 2012 he was part of the interdisciplinary graduate program at KSRI.

Research focus:

- Semantic Business Process Management SBPM
- Linked Services
- Logistical Processes

Maria Maleshkova



Maria Maleshkova is a senior researcher at the KSRI and the Institute of Applied Informatics and Formal Description Methods (AIFB) at the Karlsruhe Institute of Technology. Her research work covers Semantic Web Service topics, in particular focusing on the semantic description of Web APIs, RESTful services and their joint use with Linked Data. Prior to that she was a Research Associate and PhD student at the Knowledge Management Institute (KMii) at the Open University, where she worked on the SOA4ALL (EU FP7 IP) project in the domain of SOA and Web Services. Maria has worked in several international research projects including RENDER, EUCLID and SOA4ALL. She is actively involved in teaching activities, including university lectures and presenting at several conference tutorials and summer schools, the Service and Software Architectures, Infrastructures and Engineering (SSAIE) Summer School in 2009 and 2010 and the Karlsruhe Summer Schools on Service Research 2010 and 2013.

Research focus:

- Web APIs und RESTful services
- Service-oriented architectures and Web services
- Linked Data and Semantic Web Services
- Data representation and integration
- Information extraction

Steffen Stadtmüller



Steffen Stadtmüller studied Information Engineering and Management at the Karlsruhe Institute for Technology (KIT) in Germany, where he achieved his M.Sc. with distinction in 2009. Since 2010 he is working as PhD student of Prof. Rudi Studer at AIFB and KSRI. He is author of several peer-reviewed publications and has worked in several national and international projects, where his work focused on the application of semantic technologies to Web APIs, especially in industry scenarios. He is also a member of the Software Campus executive management mentoring program of the German Ministry of Education and Research, where he leads an IT project for the development of semantic web service technologies.

Research focus:

- Service Science, Management & Engineering
- Semantic Technologies
- Linked Data
- Web Services and APIs
- Large Scale Data Analysis

Staff

3.5. Information & Market Engineering

Prof. Dr. Christof Weinhardt



Christof Weinhardt received his diploma in Business Engineering as well as his PhD in Economics in 1989 at Universität Karlsruhe (TH). Until 1994 he served as an assistant professor at the University of Giessen. After his professorships in Bielefeld and Gießen he was co-founder of and became head of the Institute of Information Management and Systems (IISM) at the School of Economics and Business Engineering at University of Karlsruhe (now KIT) in 2000.

Since 2004 he is speaker of the 'Information Management and Market Engineering' graduate school funded by DFG. Since 2006 he is director of Forschungszentrum Informatik (FZI) and since 2010 he is member of the German Parliament's Enquete Commission on 'Internet and Digital Society' for 2,5 years counseling the German Parliament in this area. Since 2009 he is the elected spokesperson for the KIT Competence Area 'Technology, Culture and Society'.

In his research, Christof Weinhardt focuses on combining innovative research questions from the areas of Information Management and Engineering, Service Sciences and Market Engineering with scenarios in:

- eCommerce
- eLearning
- Energy Industry
- Financial Services
- Grid computing
- Logistics

Dr. Simon Caton



Simon Caton graduated from Cardiff University with a Bachelor in Computer Science in 2004. Subsequently he obtained his PhD from Cardiff University in 2010 in Computer Science with the subject 'On-Demand Distributed Image Processing Over An Adaptive Campus-Grid'. Dr. Caton joined KSRI in 2009 as project lead. Since 2012 he leads a KIT Young Investigator Group researching on social clouds.

Research focus:

- Social cloud computing
- Market reengineering
- Social media analysis
- Service Level Agreements
- Distributed computing
- Autonomic computing

Dr. Henner Gimpel



Dr. Henner Gimpel studied Business Engineering at KIT. He was a PhD student at IISM from 2003 to 2006, spent 5 years as consultant at McKinsey & Company and joined KSRI in 2012 as senior researcher. In addition, he is managing director of the Karlsruhe School of Services (KSOS). In 2014 he was appointed as Professor of Management Engineering at the University of Augsburg.

Research focus:

- Social Media
- Enterprise 2.0
- IT-supported collaboration
- Crowdsourcing and -funding

Christian Haas



Christian Haas studied Business Engineering (Diploma) at the Karlsruhe Institute of Technology. He joined KSRI in 2010 as a Research Assistant and PhD Student with the group Information and Market Engineering.

Research focus:

- Social Clouds
- Incentive Mechanisms
- Service Science
- Two-Sided Matching and Preference-based Resource Allocation

Staff

Margeret Hall



Margeret Hall studied International Relations (Master of Arts) at Webster University, Geneva Campus. She joined KSRI in 2012 as a Research Assistant and PhD Student with the group Information and Market Engineering.

Research focus:

- Participation and coordination in the public sector
- Well-being
- Evidence-based policy
- Transformative Service Research
- Text Analysis of Online Social Media

Christopher Lisson



Christopher Lisson studied Business Engineering (Master) at the Karlsruhe Institute of Technology. He joined KSRI in 2014 as a Research Assistant and PhD Student with the group Information and Market Engineering.

Research focus:

- Quality in Service Networks
- Multimodal Mobility Services
- Data Analytics
- Industrial Services

Tim Straub



Tim Straub finished his studies with a Master of Science degree in Information Engineering and Management in March 2013. In May of 2013 he started his doctoral studies at KSRI.

Research focus:

- Collective intelligence
- Crowdsourcing
- Online labor markets

3.6. Energy Economics

Prof. Dr. Wolf Fichtner



Wolf Fichtner studied Business Engineering at the Karlsruhe Institute of Technology. In 1998, he received a Ph.D. in Economics from the department of Economics and Business Engineering of the Karlsruhe Institute of Technology.

From 1999 to 2004 he was head of the research group Energy and the Environment of the Institute for Industrial Production (IIP) and the French-German Institute for Environmental Research, Karlsruhe Institute of Technology. With his Habilitation in 2004 at the Karlsruhe Institute of Technology, he received the *venia legendi* (teaching authority) in Business Administration. In 2003 he was admitted to the young researchers promotion program "Interdisciplinary Environmental Research" of Volkswagen-Foundation.

From October 2004 to October 2005, he was project leader at Energie Baden-Württemberg AG, analyzing sustainable energy structures of (mega-)cities and the concept of emissions trading. He got appointments to professorships at the International University of Bremen, the University of Flensburg and the University of Leipzig. From October 2005 to November 2008 he was full professor and holder of the Chair of Energy Economics at the Institute for Energy Technology at the University of Cottbus. Since November 2008 he holds the Chair of Energy Economics at the Karlsruhe Institute of Technology (KIT) and is director of the Institute for Industrial Production (IIP) and the French-German Institute for Environmental Research (DFIU). His research group joined KSRI in 2012 firming as Energy Economics research group and he became director of Karlsruhe Service Research Institute.

Research focus:

- Energy System Analysis
- Energy and the Environment
- Energy Services

Dr. Valentin Bertsch



Dr. Valentin Bertsch studied Applied Mathematics at the University of Karlsruhe (TH) and the Université Joseph Fourier in Grenoble, France. Between 2004 and 2008 he worked as research associate at the Institute for Industrial Production and French-German Institute for Environmental Research, University of Karlsruhe, where he received his PhD in applied economics in 2007.

From 2008 to 2012 he worked as senior analyst for energy markets within EnBW Trading GmbH in Karlsruhe, where he was responsible for the coordination of the international markets analysis team.

Since 2012, he is head of the research unit 'Distributed energy systems and networks' at the chair of energy economics, Institute for industrial production (IIP), Karlsruhe Institute of Technology (KIT) and senior researcher at the Karlsruhe Service Research Institute (KSRI).

Research focus:

- Energy systems analysis
- Service levels in decentralized energy systems
- Decision making under uncertainty
- Risk management, security of supply and grid stability

Axel Ensslen



Axel Ensslen is a research assistant at KSRI since January 2014. He studied Business Engineering at the Karlsruhe Institute of Technology (KIT), Germany and the Ecole Nationale Supérieure des Mines de Nancy (ENSMN), France. His research activities focus on socio-economic aspects of electric mobility.

Research focus:

- Energy system analysis
- Acceptance analyses
- Electric mobility

Marian Hayn



Marian Hayn graduated in Business Engineering at the University of Kaiserslautern and the ENSGSI Nancy, France. He is working at the KSRI since March 2013.

Research focus:

- Decentralized energy systems
- Household's demand and load profiles
- Electricity tariffs

Dr. Patrick Jochem



Dr. Patrick Jochem studied Economics at the Universities of Bayreuth, Mannheim and Heidelberg. He received a PhD in transport economics from the University of Karlsruhe in 2009. Since 2009 he is head of the research unit 'Transport and Energy' at the chair of Energy Economics, Institute for Industrial Production, KIT. He joined the KSRI together with the Energy Economics group since April 2012 and acts as Senior Researcher at KSRI.

Research focus:

- Electric Mobility
- Environmental Economics, Climate Change and Road transport
- Modelling and Multi-Agent-Simulation
- Econometrics

Sabrina Ried



Sabrina Ried graduated in Business Engineering at the Karlsruhe Institute of Technology, former Technical University of Karlsruhe. She was a research associate at KSRI in 2013 and continues her research at IIP.

Research focus:

- Electric vehicles in commercial fleets: e-mobility services, user acceptance and business models
- Performance and profitability analysis of battery electric storage systems in energy systems

Staff

3.7. Value Stream Services

Prof. Dr. Kai Furmans



Kai Furmans is a professor for Logistics and Material Handling Systems at the KIT since 2003 and head of the Institute of Material Handling Systems and Logistics since 2005. He holds a Ph.D. in mechanical engineering and a habilitation with a *venia legendi* for logistics. Prof. Furmans joined KSRI in 2013 with the establishment of the Value Stream Services research group.

Research focus:

- Coordination of Decentralized Activities in Logistics Systems
- Warehousing and Value-adding Services
- Mechatronic Systems for Material Handling Systems

Dr. Helmut Wlcek



Helmut Wlcek studied Mathematical Economics at University of Augsburg. In 1998 he finished his doctoral thesis on commercial transport networks at the University of Augsburg. Since 2005 Helmut Wlcek is employed at Robert Bosch GmbH and acts as lead of logistics in the business area Power Tools since 2009, where he is also general manager. In 2013 he joined KSRI where he leads the newly established group Value Stream Services alongside Prof. Kai Furmans.

Research focus:

- Establishing Value Streams focused on flexibility and security of supply
- Inventory management in value streams
- Lean Transport Management
- Lean Management in Storage Keeping
- Information Transparency and Process Optimization in Value Streams with the use of RFID technology
- Controlling of Value Streams

Georg Nicola



At the University of Dortmund Georg Nicola obtained his German Logistics degree. Within his study abroad at the Georgia Institute of Technology in USA he graduated as a Master of Science in Industrial Engineering. Since the mid of January 2014 Georg is active in research at IFL and KSRI.

Research focus:

- Measuring Complexity of Standardized Processes in the Value Stream of Logistics
- Lean Logistics
- Simple Solutions in Work Design

3.8. Management, Public Relation and Administration

Management

Dr. Wibke Michalk



Dr. Wibke Michalk completed her studies in Business Informatics at the University of Karlsruhe, now KIT. From 2008 to 2011 she was a researcher at IISM and KSRI. Subsequently Dr. Michalk became general manager at KSRI from November 2011 to November 2013.

Dr. Roland Görlitz



Roland Görlitz majored at the KIT in Computer Technology/Computer Science. From 2009 until 2013 he worked at the Research Center for Information Technologies (FZI) where he mainly investigated inter-organizational information management, service engineering and eHealth. Since December 2013 Roland Görlitz is general manager at the Karlsruhe Service Research Institute (KSRI).

Staff

Public Relations

Iris Scheuermann



Iris Scheuermann received her Diploma in Radio-Journalism from the University of Music Karlsruhe in 2004. From February 2008 to January 2013 she worked at KSRI as public relations officer.

Jennifer Warzecha



Jennifer Warzecha studied Online-Journalism at Darmstadt University of Applied Sciences and received her Diploma in 2012. From February 2013 to January 2014 she was public relations officer at KSRI.

Julia Wiegel



Julia Wiegel received her Diploma in Meteorology from KIT in 2013. She worked briefly for KSRI during the Service Summer in 2013 and joined KSRI as public relations officer in February 2014.

Assistants

Helga Neher



Helga Neher is a certified administrative assistant working at KIT since September 2000. She worked as an assistant at AIFB before joining KSRI in March of 2008.

Maria-Theresia Simon



Maria-Theresia Simon graduated from Johannes-Gutenberg-University Mainz as graduate translator with the languages Spanish and English. Before joining KSRI in December 2008 she worked at Pfizer Pharma GmbH.

Technician

Alexander Scharfe



Alexander Scharfe completed an apprenticeship in data processing in 1996 and worked as systems administrator and IT service manager for several international companies. Since 2010 he is in charge of the IT infrastructure of both KSRI and AIFB at the department of economics.

Scientific Events & Activities



Scientific Events & Activities

4. Scientific Events & Activities

At KSRI we are dedicated to interdisciplinary research and collaboration with our national and international partners both from other research facilities as well as industrial partners. Since the foundation of KSRI several events have been well established. The Service Summit takes place every 18 months and is well received by service focused collaborators. The Summer School on Services took place for the second time in September 2013 and brought together PhD students from all over Europe.

Alongside events like the monthly Speaker Series and the 5th Anniversary at KSRI the staff and directors are involved in numerous national and international scientific and industrial events, committees and expert panels.

4.1. Service Summit 2012

Representatives from academia and industry met at the Karlsruhe Service Summit which was held for the third time and organized by KSRI. This event highlights the significance of the KSRI research topics for scientists and practitioners from industry.

About 150 participants obtained an informative insight in the current trends and developments pushing forward the services sector within industry and scientific research by keynotes from Rashik Parmar (President of the IBM Academy of Technology) and Dr. Paolo Traverso (Director at the Center for Information Technology at Fondazione Bruno Kessler). Subsequently two sessions focused on special fields within service research.

In his session 'Process Optimization and Analytics' by Prof. Dr. Dr. h. c. Martin Schilling (Director at the Saarland University Medical Center) pointed out the benefits of the introduction of clinical pathways in clinical practice and hospitals. Then Dr. Aya Soffer (Director at IBM Haifa Research Lab) provided an overview of the possibilities, chances and challenges when dealing with huge amounts of data (Big Data). In the following session 'Cloud Services' representatives from Google (Michael Blume, Enterprise Support EMEA), clickworker.com (Christian Rozsenich, CEO) and the University of Wellington (Dr. Kris Bubendorfer, Senior Lecturer) showed future trends in cloud computing.

Intensive discussions and networking between participants and speakers revealed the importance of the topics dealt with at the Service Summit thus reflecting the success of this event.

4.2. Service Summer 2013



Summer School on Service Research 2013

From September 23 -26, 2013 the 'Second Summer School on Service Research' held at KIT brought together international experts in the field of Service Research with PhD students, young scientists and practitioners from industry. The Second Summer School Service Research fostered interdisciplinary research and collaboration opportunities among international students and researchers interested in the disparate fields within Service Research. On the one hand the 50 international participants benefitted from the expertise of the lecturers and on the other by sharing experience with fellow attendees. Four days in September 2013 were devoted to lectures, interactive workshops and lab sessions aimed at covering diverse aspects of and perspectives of Service Research including: Cloud Computing, Semantics, Service Analytics and Optimization, Service Economics: Incentives, Service Innovation, Social Computing, Survey Design and Evaluation and the domains: IT Service Management, Mobility & Energy. For the first time KSRI organized a Service Fair on the last day of the Summer School which gave participants the opportunity to get to know companies in the service sector and gain insight into relevant branches, roles and job opportunities such as The Boston Consulting Group, Bosch and IBM among others. The Summer School in September 2013 was an inspiring forum for participants to discuss and learn about Service Research and furthermore enjoy the cultural and social life of the city during the welcome event and the guided tour through a local brewery. All Summer School attendees were invited to attend the 4th Karlsruhe Service Summit which took place on September 27.

Scientific Events & Activities

Service Summit 2013



The 4th Karlsruhe Service Summit took place on September 27th, 2013 at the Renaissance Hotel in Karlsruhe and concentrated particularly on Service Experience. After three successful Service Summits KSRI once again invited experts from industry and academia to join the talks and discussions about the latest developments and results

within Service Research and the hurdles in the scientific research of Service Experience. About 100 representatives from academia and industry were offered a multilateral and exciting program encompassing the top topics within Service Experience illuminating the various aspects and addressing them from different angles. The participants obtained an informative insight in the current trends and developments pushing forward the services sector within industry and scientific research by keynotes from Shaun Lawson from the University of Lincoln and Joachim Hauser (Head of Business Development in the Service Area Parking BMW). Prof. Shaun Lawson laid his focus on 'The application of social computing to real world problems' from an academic point of view whereas Joachim Hauser focused on the specific chances and challenges while 'Entering the Mobility Services Market'. Intensive discussion during the prominently manned Panel Discussion with Profs. Jorge Cardoso, Alexander Mädche, Shaun Lawson, Joachim Hauser and Stephen Kwan moderated by KSRI Director Prof. Dr. Hansjörg Fromm and networking between participants and speakers revealed the importance of the topics dealt with at the Service Summit thus reflecting the success of this event.

4.3. 5th Anniversary



5 years dedicated to services – KSRI celebrates its fifth anniversary and Prof. Dr. Hansjörg Fromm's inaugural lecture

Five years with KSRI (Karlsruhe Service Research Institute) this means five successful years in the sector of service research and five years of close cooperation between teaching and practice. Prof. Dr. Detlef Löhe, Vice President Research and Information, Karlsruhe Institute of Technology, defined KSRI's successful work as teaching which is the result of scientific research aimed at generating knowledge and promoting knowledge transfer. Around 100 invited guests from industry and academia celebrated this event in the Tulla-Lecture Hall at KIT together with the KSRI staff and their guests Martina Koederitz, General Manager IBM Germany, General Manager DACH IMT, Dr. Jim Spohrer, Director IBM University Programs World-Wide und Prof. Dr. Detlef Löhe, Vice President Research and Information, Karlsruhe Institute of Technology. Two talks and a presentation looking at the past and the future were followed by the inaugural lecture of Prof. Dr. Hansjörg Fromm, honorary professor and KSRI director, entitled 'Service Research In Motion: Analytics, Networks, Innovation'.

Prof. Dr. Detlef Löhe expressed his appreciation for Prof. Dr. Hansjörg Fromm's special commitment to IT-based and IT-supported processes and his extensive experience in industrial service research. On the one hand, Professor Dr. Fromm is the head of the research group Service Innovation and Management, on the other hand he and his colleagues focus their research on how to measure, support and improve the care of stroke patients by IT-based services in the framework of the joint project INSPIRE, which is financed by the Federal Ministry for Education and Research (BMBF).

Scientific Events & Activities

Prof. Dr. Detlef Löhe pointed out that KSRI's focus, the service research, which is a relatively young research area, is important for the KIT as a young organization. "The most important findings in KIT institutions find their way to practical application in the companies." Since May 2013 KSRI has been complemented by Bosch as another industry-on-campus partner. The research group Value Stream Services (VSS) headed by Dr. Helmut Wlcek focuses on methods and services to systematically improve the flow of material and information in value streams.

In his greeting address Dr. Wlcek emphasized the outstandingly successful cooperation with KSRI which pays tribute to the fact that industry and academia have recognized the strategic importance of Services and Industry 4.0. Thus KSRI is looking forward to a continued close and fruitful cooperation with current and future cooperation partners, industry partners and students.

4.4. IEEE CGC and IEEE SCA

Following the 2nd Karlsruhe Service Summer, two further scientific events organized by KSRI took place at the Akademie Hotel, Karlsruhe. The 3rd IEEE International Conference on Cloud and Green Computing (CGC), and the 3rd IEEE International Conference on Social Computing and its Applications (SCA) were held in Karlsruhe from Sept. 30th to Oct. 2nd 2013. The conferences were organized locally by Dr. Simon Caton and other members of the Information & Market Engineering group, while Prof. Christof Weinhardt acted as one of the CGC general conference chairs. Over the 3 days, 130 delegates attended the 2 conferences, along with 7 co-located workshops, and presented approximately 100 papers, and posters.

IEEE CGC (Cloud and Green Computing) was created to provide a prime international forum for researchers, industry practitioners and domain experts to exchange the latest advances in Cloud and Green computing as well as their synergy. The keynote on Managing Cost and Energy for Higher Throughput was held by Prof. Miron Livny from the University of Wisconsin.

IEEE SCA was created to provide a prime international forum for researchers, industry practitioners and domain experts to exchange the latest fundamental advances in the state of the art and practice of Social Computing and its broadly related areas. The keynote on User Profiling was held by Dr. Jennifer Golbeck from the University of Maryland.

4.5. Speaker Series

Each semester, as part of the KSRI Speaker Series, we welcome international Speakers from industry and academia who shed a light on selected topics in Service Research. Our guests spoke on topics of Service Science, Management and Engineering (SSME). Following guests visited us during the years 2012 and 2013:



Prof. Dr. Larry Leifer / Stanford University: Engineering Design Thinking - Lessons for Service Providers and Systems Innovators.

Dr. Martin Holderried / Universitätsklinikum Tübingen: IT-supported Team Learning with integrated Health Intelligence (iHI) - Move from Change Management to Improvement Management.

Dr. Walter Colombo / Cardiff University: Incentivise cooperation through self-similar Social Networks in multi-agent systems.

Dr. Fabrizio Maggi / Eindhoven university of Technology: Runtime Verification of LTL-based Declarative Process Models.

Jun.-Prof. Dr. Dimka Karastoyanova / Stuttgart University: Adaptation of Service-based Systems.

Detlef Straeten / IBM: Cloud Adoption 2011 - Service Oriented Infrastructures and Platforms - Lessons on industrialization and consumerization of IT.

Dr. Daniela Sangiorgi / Lancaster University: Design for Services.

Dr. Mehdi Snene / Geneva University: Shaping the Curve: Services for Innovation.

Prof. Dr. Omer Rana / Cardiff University: Enacting Data-intensive Adaptive Applications over Service-oriented Infrastructures.

Dr. Jesse O'Hanley / Kent Business School: Optimal Location and Scheduling of Blood donation sessions.

Simon French / University of Warwick: Expert Judgment, Meta-analysis, and Participatory Risk Analysis.

Scientific Events & Activities

Dr. Jeff Schneider / Carnegie Mellon School of Computer Science: Robot snakes, sensor networks, and cosmology: How machine learning is changing the world.

Prof. Dr. Jorge Cardoso / KIT: Ten years of service research from a computer science perspective.

Prof. Dr. Alexander Mädche / Mannheim University: Is all that glitters gold? - The Role of Design in Mobile Banking Services.

Dr. Christiane Barz / Anderson School of Management: An introduction to Approximate Dynamic Programming.

Dr. Kai Hufendiek / EnBW Energie Baden-Württemberg AG: Smart Grid, Smart Market, Smart Energy - wie könnte die energiewirtschaftliche Zukunft aussehen?

Dr. Veronica Martinez / Cranfield University: Assessing the Customer Value-in-Use: the application of the Repertory Grid.

4.6. Further Events

CeBIT Service Innovation Camp 2012



During the Service Innovation Camp at the CeBIT2012 KSRI members and KSRI director Prof. Fromm conducted talks with representatives from major German companies in the fields of banking, insurance and IT services as well as from the production industry. During the discussions on the current and future challenges in practice and research activities in the subject areas Service Innovation, Service Level Engineering und Customer Intimacy Analytics positive connecting factors for a further cooperation could be identified with all participants. The business representatives also expressed their interest in the KSRI and future KSRI activities. Thus the Service Innovation Camp contributed essentially to reinforce the dialogue between science and practice.

Play Camp - Serious Games

On December 1st, 2012 KSRI was hosting a PlayCamp with Silicon Valley Entrepreneur Luke Hohmann of Innovation Games in collaboration with Marc Kohler and Niels Feldmann. Interested students, researchers, and practitioners were faced with the challenge of how to solve business problems with the use of serious games - and have some fun in the progress!

KSRI students visit IBM Almadem Research Center

Upon recommendation and invitation of the IBM research group members at KSRI a group of outstanding students visited the IBM Almadem Research Center in San José, California. The group of 20 participants was welcomed by Dr. Jim Spohrer Director of IBM Global University Programs. In short presentations the students introduced themselves and their universities and gave a brief overview on the most recent project they are involved in the frame of this internationally networked teaching program. Afterwards several IBM researchers presented their projects. The students received an introduction on the Customer Experience Lab, an IBM initiative to bring together Research and GBS thus making sure that research results have real impact on consulting activities.

The 20 students also participated at the Kick-off of the global teaching program Sugar, which took place at the end of October at the Stanford University. SUGAR (Stanford University Global Alliance for Re-Design) is a teaching program based on the innovation method Design Thinking and established in 2007 by Professor Larry Leifer, the founder of this method and the University of St. Gallen. Starting this year KSRI is part of the SUGAR Network. The corresponding course "Service Design Thinking" at KSRI stands under the patronage of the dean of the KIT Department of Economics and Management Prof. Dr. Christof Weinhardt.

4.7. KSRI in the Press

Press and Media reported on several research activities at KSRI. The two main focal points in the press were Cloud Computing and People Clouds as well as KSRI's efforts in e-mobility. An article on the student program Service Design Thinking has been published in Süddeutsche Zeitung under the german title 'Labor für Geistesblitze'.

Articles about KSRI and its research were published in online and print publications such as VDI Nachrichten, BCS, Windkraft-Journal, and also in local newspapers such as Badische Neueste Nachrichten.

Press releases on People Clouds, DELFIN project and the establishment of the collaboration between KSRI and Robert Bosch GmbH were cited in several publications.

Scientific Events & Activities

4.8. Professors' Committee Work and other Involvements

Prof. Dr. Wolf Fichtner

- Director, Energy Solution Center e.V. (EnSoC)
- Director, Smart Grids-Platform Baden-Württemberg e.V.
- Director, Deutsch-Französisches Institut für Umweltforschung (DFIU, French-German Institute for Environmental Research)
- Assistant Speaker of Topic 7 'Energy Systems Analysis' at KIT Energy Center
- Head of Working Group OR on Environmental Protection, Gesellschaft für Operations Research e.V. (GOR, German Society for Operations Research)
- Member of the German Academic Association for Business Research (VHB)
- Member of the Association of German Engineers (VDI) with active involvement in expert committees
- Member of the Society for Energy Economics and Energy Politics (GEE), German Section of the International Association for Energy Economics (IAEE)

Co-Editor of Scientific Publications / Editorial Board (selected):

- Progress in Industrial Ecology, Member of the Editorial Board
- Energy Policy, Journal of Cleaner Production, Climate Policy, Referee

Commitment in Scientific Events (selected):

- VDI-Conference 'Optimization in Energy Economics', 2013, Cologne, Germany, Program Committee
- VDI-Expert-Forum 'How smart do we actually manage Energy?', 2013, Karlsruhe, Germany, Program Committee
- 25th European Conference on Operational Research, 2012, Vilnius, Lithuania, Stream Organizer

Prof. Dr. Hansjörg Fromm

Commitment in scientific events:

- 12th Conference of the IFIP Working Group 7.6 on Advanced Analytics, Aachen, Germany, 2012, Session Lead
- Informatik 2013, Koblenz, Germany, session lead
- 8th Workshop on Logistics and Supply Chain Management (BACLOG), Berkeley, USA, 2013, Session Lead

Prof. Dr. Stefan Nickel

- Member of the Board of Directors SimPlan AG
- Member of the Managing Board of the German Society of Operations Research (GOR)
- Member of the external Advisory Board of the Centro de Investigação Operacional da Fundação da Faculdade de Ciências da Universidade de Lisboa
- Member of the VDI Committee of Experts 'Simulation and Optimization' and 'Modeling'
- Member of the Management Board of the International Department at Karlsruhe Institute of Technology GmbH
- Director at Forschungszentrum Informatik (FZI)
- Member of the Scientific Advisory Boards of Fraunhofer Institute for Techno- and Econometrics (ITWM)
- Assistant Topic-Spokesman Health and Technology
- Member of College on Locational Analysis (COLA), German Society of Operations Research e.V. (GOR), Mathematical Programming Society (MPS)

Co-Editor of Scientific Publications / Editorial Board (selected):

- Health Care Management Science, Editorial Board
- Computers & Operations Research, Editor-in-chief

Commitment in Scientific Events (selected):

- Operations Research OR 2012, Hannover, Germany, Program Committee

Prof. Ralf Reussner

- Speaker of the Executive Board of the FZI Forschungszentrum Informatik
- Director at the Research Center for Information Technologies Karlsruhe — Forschungszentrum Informatik (FZI)
- Speaker of the Board of the Institute for Program Structures and Data Organisation at KIT
- Co-Coordinator of the DFG Priority 'Programme Design For Future - Managed Software Evolution' (SPP 1593)
- Reviewer at German Research Foundation DFG

Co-Editor of Scientific Publication / Editorial Board (selected):

- Springer Informatik-Spektrum, Editor
- NWO, IEEE TSE, IEEE Software, ICSE, acta informatica, JSS, Reviewer

Commitment in Scientific Events (selected):

- COMPARCH Conference Series, Co-Chair of the Steering Committee
- University Professors of the German Computer Science Society (GIBU), Member of the Board
- German Computer Science Society, Member of the Chairmanship
- Software Architecture Section - GI-Fachgruppe Software-Architektur of the German Computer Science Society, Chair of the Board and Founder

Scientific Events & Activities

- Working Group 'Handbook of Software Architecture' - GI-Arbeitskreis 'Handbuch der Software-Architektur' of the German Computer Science Society, Co-Speaker
- International Conference on Quality of Software Architecture (QoSA), Chair of the Steering Committee
- 'Software Engineering' conference of the GI, Chair of the Steering Committee

Prof. Dr. Rudi Studer

- Director of the Department Information Process Engineering at FZI
- Member of the Scientific Advisory Board at Know-Center, Graz, Austria
- Spokesman of the Board at FZI
- Member of the Scientific Advisory Board at FIZ Karlsruhe
- Member of the Extended Board at CyberForum e.V.

Co-Editor of Scientific Publications / Editorial Board (selected):

- Member of the Editorial Board of 'Data and Knowledge Engineering'
- Member of the Advisory Board of 'IEEE Intelligent Systems'

Commitment in Scientific Events (selected):

- 21st International World Wide Web Conference (WWW 2012), Lyon, France, April 16-20, 2012, Program Committee
- 12th International Conference on Knowledge Management and Knowledge Technologies (I-KNOW 2012), Graz, Austria, September 5-7, 2012, Program Committee
- 18th International Conference on Knowledge Engineering and Knowledge Management (EKAW2012) Galway, Ireland, October 8-12, 2012, Program Committee
- 11th International Semantic Web Conference (ISWC 2012), Boston, USA, November 11-15, 2012, Program Committee
- 7. Konferenz 'Professionelles Wissensmanagement' (ProWM), Passau, Germany, March 13-15, 2013, Program Committee
- Semantic Web Track at the 22nd World Wide Web Conference (WWW 2013), Rio de Janeiro, Brazil, May 13-17, 2013 13th, Program Committee
- International Conference on Knowledge Management and Knowledge Technologies (I-KNOW 2013), Graz, Austria, September 4-6, 2013, Program Committee
- International Conference on Web Intelligence (WI'13), Atlanta, Georgia, USA, November 17-20, 2013, Program Committee
- Dagstuhl Perspectives Workshop: Semantic Data Management, Dagstuhl, Germany, April 2012, Workshop Organizer
- Dagstuhl Seminar on Interoperation in Complex Information Ecosystems, Dagstuhl, Germany, June 2013, Workshop Organizer

Prof. Christof Weinhardt

- DFG (German Research Foundation) review board member
- Member of the Expert Group 'Business Economics' of the DFG
- Speaker of the competence field 'Interaction of Science and Technology with Society'
- Director of the 'Research Center of Information Technology' (FZI), Karlsruhe
- Member of the 'Münchener Kreis' - Supranational Association for Communications Research
- Member of the committee of enquiry 'Internet and the digital society'
- Director of KIT House of Participation and Project Lead for the KIT mission statement

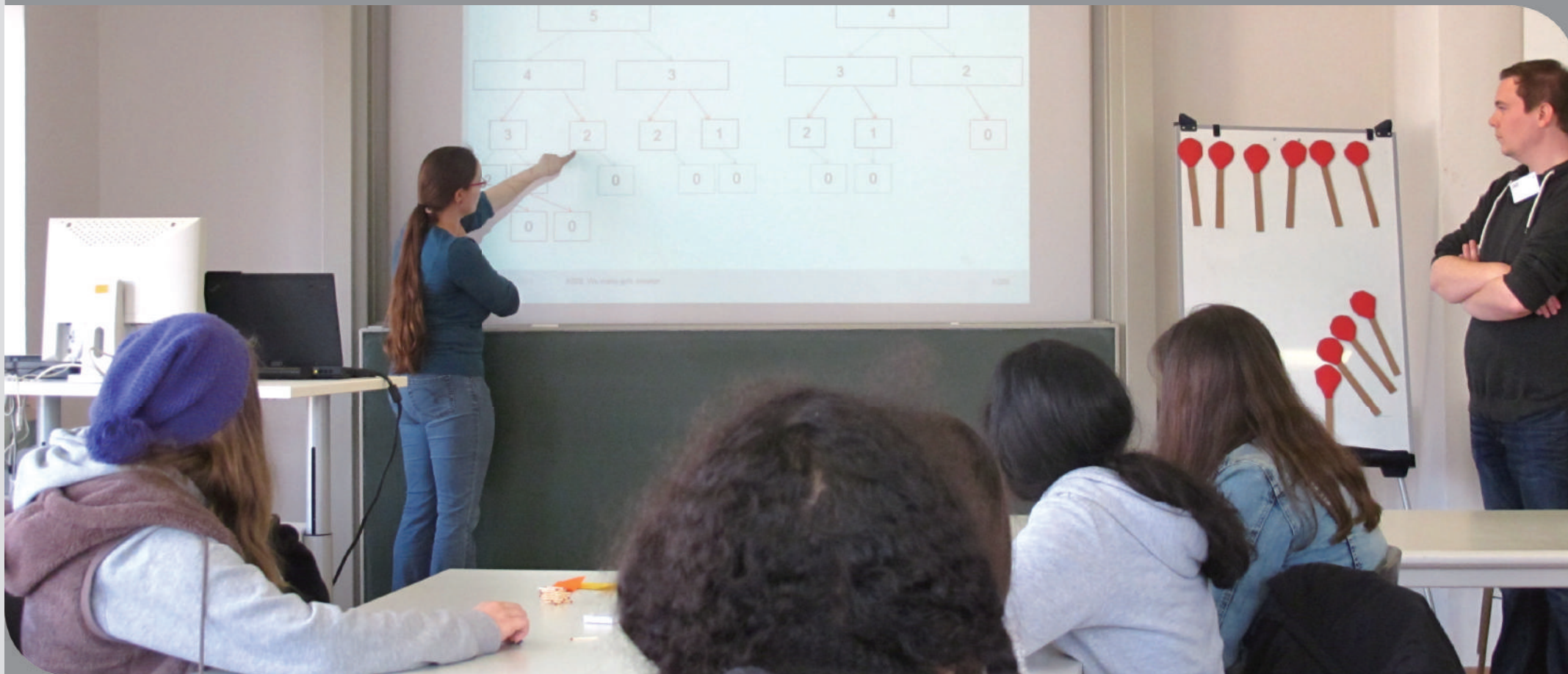
Co-Editor of Scientific Publications / Editorial Board (selected):

- Business & Information Systems Engineering, formerly Wirtschaftsinformatik
- Group Decision and Negotiation
- Information Systems and e-Business Management
- Journal of Electronic Markets
- BIT - Banking and Information Technology
- Book Series 'Studies on eOrganisation and Market Engineering'
- Service Science
- IEEE Transactions on Cloud Computing

Commitment in Scientific Events (selected):

- Conference: Multikonferenz Wirtschaftsinformatik, 2012, Braunschweig, Germany, Program Committee
- Conference: Energieinformatik, 2012, Oldenburg, Germany, Program Committee
- The International Conference on Electronic Commerce, 2012, Singapur, Program Committee
- International Symposium on Services Science, 2012, Leipzig, Germany, Program Committee
- Workshop: Analyzing and Improving Collaborative eScience with Social Networks, IEEE e-Science, 2012, Chicago, USA, Program Committee
- Wirtschaftsinformatik 2013, Leipzig, Germany, Program Committee
- European Conference on Information Systems, 2013, Utrecht, Netherlands, Program Committee (Track Chair)
- IEEE Conference on Business Informatics, 2013, Vienna, Austria, Program Committee (Track Chair)
- The International Conference on Electronic Commerce, 2013, Turku, Finland, Program Committee
- Energieinformatik, 2013, Vienna, Austria, Program Committee
- International Conference on Information Systems, 2013, Milan, Italy, Program Committee

Invited Talks, Publications, Theses



Invited Talks, Publications, Theses

5. Invited Talks, Publications, Theses

Numerous publications and articles in renowned journals and conferences are evidence of the inspiring research environment at KSRI. There were three researchers who successfully finalized their PhD studies. A broad variety of final theses completes the research at the institute.

5.1. Invited Talks

I. Arnolds, S. Nickel, M. Holderried. Analyse des Layouts auf Basis der Patientenströme in einem endourologischen OP-Trakt. Hospitalbuild Europe Fair, Hamburg, Germany. 2012.

I. Arnolds. An Iterative Simulation-Optimization Approach for Hospital Layout Planning. Symposium CHOIR in practice, Centre for Healthcare Operations Improvement & Research, University of Twente. 2012.

S. Caton. Social Cloud Computing. Invited talk at The Computation Institute, University of Chicago, Chicago, USA. 2012.

N. Feldmann. Presentation at Open and User Innovation Conference (OUI) in Brighton, UK. 2013.

R. Görlitz. Invited Talk 'Herausforderungen bei der Entwicklung von HealthApps am Beispiel der Stroke Manager App' at the WI Transfer Forum 2013 der FH Bielefeld, Herford, Germany. 2013.

R. Görlitz. Invited talk 'Auswirkungen von Web 2.0 und Health Apps auf das Gesundheitsverhalten' at the Telemed Conference 2012 in Berlin, Germany. 2012.

J. Hoxha. Semantic Formalization of Cross-site User Browsing Behavior. Invited Talk at Yahoo Labs Barcelona, Spain. 2012.

P. Korevaar. Invited Talk on Industrial Services at 3rd Kuwait Conference on e-Services and e-Systems, Kuwait. 2012.

P. Korevaar. Keynote on Wie Analyse- und Optimierungsansätze helfen können, den Kundendienst zu verbessern. KVD Service Today Conference, Hannover. 2013.

G. Satzger. Conference Performance management: From strategy to delivery Service analytics – contributions of service research to performance management. Keynote lecture at PMA 2012, University of Cambridge, UK. 2012.

G. Satzger. From Service Science to Service Analytics. Keynote lecture at International Conference on Exploring Service Science (IESS), Geneva, Switzerland. 2012.

C. Weinhardt. Networked Services: The Meeting Point for Economics and Computer Science. Invited talk at Third Australasian Symposium on Service Research and Innovation (ASSRI'13). University of New South Wales (UNSW), Sydney, NSW. 2013.

C. Weinhardt. Competition and Value Creation in Service Networks. Speech at the Münchner Kreis conference on Smart Business Networks. 2012.

C. Weinhardt. Networked Services - The Meeting Point of Computer Science and Economics. Keynote at the 6th IEEE/ACM International Conference on Utility and Cloud Computing in Dresden, Germany. 2013.

5.2. Dissertations

F. Habryn. Customer intimacy analytics : Leveraging operational data to assess customer knowledge and relationships and to measure their business impact. PhD thesis, economics faculty, Karlsruhe Institute of Technology (KIT). Supervisor Prof. Dr. G. Satzger, 2012.

M. Junghans. Methods for Efficient and Accurate Discovery of Services. PhD Thesis, economics faculty, Karlsruhe Institute of Technology (KIT). Supervisor Prof. Dr. R. Studer. 2013.

R. Kern. Dynamic quality management for cloud labor services. PhD thesis, economics faculty, Karlsruhe Institute of Technology (KIT). Supervisor Prof. Dr. G. Satzger, 2013.

W. Michalk. SLA Establishment Decisions: Minimizing the Risk of SLA Violations. PhD thesis, economics faculty, Karlsruhe Institute of Technology (KIT). Supervisor Prof. Dr. C. Weinhardt, 2012.

5.3. Book Chapters

S. Babrowski, P. Jochem, W. Fichtner. Verteilung und Bedarf elektrischer Speicher im deutschen Energiesystem, in: W. Breh, D. Sauer (Eds.), Impulse für die Zukunft der Energie, Doktorandensymposium, 13.06.2013, pp. 85-90, KIT Publishing, Karlsruhe, Germany. 2013.

B. G. Batchelor, S. J. Caton. QT-Prototyping Image Processing System. In: Machine Vision Handbook, pp. 903-979. Springer London, 2012.

V. Bertsch, H. Schwarz, W. Fichtner. Layout optimisation of decentralised energy systems under uncertainty, in: Operations Research Proceedings 2013, Springer. 2013.

H. Fromm, F. Habryn, G. Satzger. Service Analytics – Leveraging Data Across Enterprise Boundaries for Competitive Advantage. in: U. Bäumer, P. Kreutter, W. Messner (eds.), Globalization of Professional Services. 13. Pp 139–149. Springer. 2012.

M. Hall. Supply Chain Management in Humanitarian Logistics: KPIs of Effective Relief and Development Chains. Supply Chain, Logistics, and Operations Management: Sustainability and Collaboration in Supply Chain Management. Vol. 16. Hamburg, DE, Josef Eul Verlag. 2013.

L. Hillemacher, P. Jochem, W. Fichtner. Entscheidungsunterstützung beim Lastmanagement, in: F. Renatus, R. Kunze I. Karschin, J. Geldermann, W. Fichtner (Eds.): Entscheidungsunterstützung durch Operations Research im Energie- und Umweltbereich, pp. 21-39, Shaker, Aachen, Germany. 2012.

P. Hottum, R. Lorenz, A. Neus, C. Schultz. Innovation Patterns and Barriers. in: W. Ganz, G. Satzger, C. Schultz (eds.), Methods in Service Innovation: Current Trends and Future Perspectives. 3. 13–24. Fraunhofer Verlag, Stuttgart. ISBN: 978-3839603604. 2012.

P. Jochem, J. Schippl. Mobility 2.0: Antriebskonzepte im Zusammenspiel mit multimodaler Mobilität, in: P. Jochem, W.-R. Poganietz, A. Grunwald, W. Fichtner (Eds.): Alternative Antriebskonzepte bei sich wandelnden Mobilitätsstilen, pp. 163-182, KIT Publishing, Karlsruhe, Germany. 2013.

P. Jochem, T. Kaschub, W. Fichtner. How to Integrate Electric Vehicles in the Future Energy System?, in: M. Hülsmann, D. Fornahl (Eds.): Evolutionary Paths Towards the Mobility Patterns of the Future, Springer, Heidelberg, Germany. 2013.

S. Kounev, P. Reinecke, F. Brosig, J. T. Bradley, K. Joshi, V. Babka, A. Stefanek, and S. Gilmore. Providing dependability and resilience in the cloud: Challenges and opportunities. In Resilience Assessment and Evaluation of Computing Systems, K. Wolter, A. Avritzer, M. Vieira, A. van Moorsel, editors, XVIII. Springer-Verlag, Berlin, Heidelberg. 2012.

C. Pedrinaci, M. Maleshkova, M. Zaremba, M. Panahiazar. Semantic Web Services Approaches, in eds. Alistair Barros, Daniel Oberle, Handbook of Service Description: USDL and its Methods, Springer. 2012.

5.4. Journal Articles

S. Agarwal, C. Petrie. An Alternative to the Top-Down Semantic Web of Services. IEEE Internet Computing. Vol. 16, (5). September, 2012.

I. V. Arnolds, S. Nickel. Multi-period layout planning for hospital wards. Socio-Economic Planning Sciences. Volume 47, Issue 3, September 2013, Pp 220-237, ISSN 0038-0121. 2013.

Invited Talks, Publications, Theses

S. Babrowski, T. Heffels, P. Jochem, W. Fichtner. Reducing computing time of energy system models by a myopic approach – A case study based on the PERSEUS-NET model, *Energy Systems* 5(1). Pp 65-83. 2013.

K. Chard, K. Bubendorfer, S. Caton, O. Rana. Social cloud computing: A vision for socially motivated resource sharing. *Services Computing, IEEE Transactions on* 5.4. Pp. 551–563. 2012.

M. Droste, P. Jochem, C. Kahner, W. Fichtner. e-Mobility – Der Weg vom zukunftsweisenden Prototypen zum alltagstauglichen Volumenprodukt, *Automobil Industrie*, 57(10). Pp. 30-33. 2012.

H. Fromm, F. Habryn, G. Satzger. Service Analytics – Leveraging Data Across Enterprise Boundaries for Competitive Advantage. In: U. Bäumer, P. Kreutter, W. Messner (eds.), *Globalization of Professional Services*. Vol. 13. Pp. 139–149. Springer. 2012.

J. M. García, M. Junghans, D. Ruiz, S. Agarwal, A. R. Cortés. Integrating semantic Web services ranking mechanisms using a common preference model. *Knowledge-Based Systems*. Vol. 49. Pp. 22-36. 2013.

R. A. Görlitz, A. Rashid, C. Weinhardt. Stroke manager service for improved post-acute continuity of care. *Health Policy and Technology* 1(3). Pp. 145–154. 2012.

C. Haas, S. O. Kimbrough, C. v. Dinther. Strategic Learning by e-Service Suppliers in Service Value Networks. *Journal of Service Research* 16(3) pp. 259–276, 2013.

T. Hahn, M. Schönfelder, P. Jochem, V. Heuveline, W. Fichtner. Model-based Quantification of Load Shift Potentials and Optimized Charging of Electric Vehicles, *Smart Grid and Renewable Energy*, 4(5). Pp. 398-408. 2013.

L. Hillemacher, K. Hufendiek, V. Bertsch, H. Wiechmann, J. Gratenau, P. Jochem, W. Fichtner. Ein Rollenmodell zur Einbindung der Endkunden in eine smarte Energiewelt, *ZfE – Zeitschrift für Energiewirtschaft* 37(3). Pp. 195-210. 2013.

S. Janeschek, M. Kohler, J. Kramer. Increasing Value for Providers and Customers. *Service Today*. No. 01/2013. Pp. 47–48. 2013.

S. Janeschek, P. Hottum, F. Kicherer, B. Bienzeisler. The Dynamics of Service Productivity and Value Creation: A Service Life Cycle Perspective. *The Service Industries Journal* 33(3-4). Pp. 366–377. 2013.

R. Kern, H. Thies, C. Zirpins, G. Satzger. Dynamic and Goal-based Quality Management for Human-based Electronic Services. *International Journal of Cooperative Information Systems* 21(1). 3–29. 2012.

A. Kieninger, G. Satzger, D. Straeten, B. Schmitz, D. Baltadzhiev. Business Cost Budgets – A Methodology to Incorporate Business Impact into Service Level Agreements. *International Journal of Service Science, Management, Engineering, and Technology (IJSSMET)* 3(3). Pp 49–64. 2012.

M. Kohler, N. Feldmann, S. O. Kimbrough, H. Fromm. Service Innovation Analytics: Leveraging Existing Unstructured Data to Assess Service Innovation Capability. *International Journal of Information System Modeling and Design*. 2013.

S. Kounev, C. Rathfelder, B. Klatt. Modeling of Event-based Communication in Component-based Architectures: State-of-the-Art and Future Directions. *Electronic Notes in Theoretical Computer Science (ENTCS)*, 295:3-9, Elsevier Science Publishers B. V., Amsterdam, The Netherlands. 2013.

S. Kounev, N. Huber, S. Spinner, F. Brosig. Model-based techniques for performance engineering of business information systems. In *Business Modeling and Software Design*, Boris Shishkov, editor, volume 0109 of *Lecture Notes in Business Information Processing (LNBIP)*. Pp 19-37. Springer-Verlag, Berlin, Heidelberg. 2012.

A.-G. Paetz, T. Kaschub, M. Kopp, P. Jochem, W. Fichtner. Monetäre Anreize zur Steuerung der Ladelast von Elektrofahrzeugen – eine modellgestützte Optimierung, *Zeitschrift für Energiewirtschaft*, 37. Pp. 1-12. 2012.

W.-R. Poganietz, P. Jochem, J. Schäuble, W. Fichtner. Wandel der Mobilitätsstile durch alternative Antriebskonzepte, *Technikfolgenabschätzung – Theorie und Praxis* 21(2). Pp. 95-98. 2012.

S. Polzer, C. Schulz, P. Jochem, W. Fichtner. Anforderungen an die Logistik von Hochvolt Lithium-Ionen-Batterien, *Internationales Verkehrswesen*, 65(3). Pp. 32-35. 2013.

W. Seiringer, J. Cardoso, J. Kunze von Bischoffshausen. Service System Analytics: Cost Prediction. *Collaborative Systems for Reindustrialization. IFIP v408*. Pp 405-414. 2013.

S. Stadtmüller, B. Norton. Scalable Discovery of Linked APIs. *Int. J. of Metadata, Semantics and Ontologies*. Vol 8, (2). Pp 95-105. 2013.

T. Straub, M. Kohler, P. Hottum, V. Arrass, D. Welter. Customer Integration in Service Innovation: An Exploratory Study. *Journal of Technology Management & Innovation* 8(3). Pp 25–33. 2013.

R. Verborgh, A. Harth, M. Maleshkova, S. Stadtmüller, T. Steiner, M. Taheriyani, R. Van de Walle. Survey of Semantic Description of REST APIs. In *REST: Advanced Research Topics and Practical Applications* Editors C. Pautasso, E. Wilde, R. Alarcón. Pp. 69-89. Springer. 2013.

5.5. Conferences

M. T. P. Adam, H. Gimpel, T. Teubner. Emotions in Dynamic Bargaining with Humans and Computer Agents. *Gmunden Retreat on NeuroIS 2013 Proceedings*, Gmunden, Austria. Pp 9. 2013.

S. Agarwal, M. Junghans. Towards Simulation-Based Similarity of End User Browsing Processes. In: F. Daniel, P. Dolog, Q. Li, *Web Engineering - Proceedings of the 13th International Conference, ICWE 2013*, Aalborg, Denmark. Pp 216-223. Springer, LNCS, 7977. 2013.

I. Arnolds, S. Nickel. Praxis-Seminar Healthcare Management am Lehrstuhl für Diskrete Optimierung und Logistik (KIT) - Vorstellung von 2 Fallstudien. *Health Care Management group meeting, Society for Operations Research (GOR e.V.)*, Ulm, Germany. 2012.

I. Arnolds. Multi-period ward layout planning for hospitals. *Meeting of the EURO Working Group on Operational Research Applied to Health Services, ORAHS 2012*, University of Twente, The Netherlands. 2012.

I. Arnolds, S. Nickel, S. Shashaani, C. Wernz. Using simulation in hospital layout planning. *Proceedings of the Winter Simulations conference, ACM, Berlin, Germany*. Article 395. 2012.

I. Arnolds, S. Nickel. An Iterative Simulation-Optimization Approach for Hospital Layout Planning. *Proceedings of Informatics 2nd Conference on Healthcare*, Chicago, USA. 2013.

S. Babrowski, P. Jochem, W. Fichtner. Modeling the Ability of Thermal Units to Perform Load Changes in Energy Systems, *IAEE Conference, Proceedings of New York, USA*. 2013.

V. Bertsch, W. Fichtner. On the need for multi-criteria modelling in power systems analysis and planning, *22nd International Conference on Multiple Criteria Decision Making, Málaga, Spain*. 2013.

A. Brahaj, M. Razum, J. Hoxha. Defining Digital Libraries. *Proceedings of the 17th International Conference on Theory and Practice of Digital Libraries (TPDL 2013)*, Springer-Verlag. 2013.

E. Buchmann, S. Kessler, P. Jochem, K. Böhm. The Costs of Privacy in Local Energy Markets, *IEEE Conference on Business Informatics (CBI)*, Vienna, Austria. 2013.

J. Cardoso, M. Miller, C. Bowman, C. Haas, A. Sheth, T. Miller. Open Service Network Analysis. *1st International IFIP Working Conference on Value-Driven Social Semantics & Collective Intelligence (VaSoCo) at ACM Web Science 2013*. 2013.

Invited Talks, Publications, Theses

- S. Caton, I. Breskovic, I. Brandic. A Conceptual Framework for Simulating Autonomic Cloud Markets. 3rd International Conference on Cloud Computing, 2012.
- S. Caton, C. Dukat, T. Grenz, C. Haas, M. Pfadenhauer, C. Weinhardt. Foundations of Trust: Contextualising Trust in Social Clouds. 2nd International Conference on Social Computing and Its Applications. 2012.
- K. Chard, S. Caton, O. Rana, D. Katz. A social content delivery network for scientific cooperation: Vision, design, and architecture. High Performance Computing, Networking, Storage and Analysis (SCC), 2012 SC Companion. 2012.
- T. Comes, V. Bertsch, S. French. Designing dynamic stress tests for improved critical infrastructure resilience, in: T. Comes, F. Fiedrich, S. Fortier, J. Geldermann, T. Mueller (eds.) 10th International Conference on Information Systems for Crisis Response and Management (ISCRAM 2013), Baden-Baden, Germany. Pp. 307-311. 2013.
- S. Dill, R. Kern, E. Flint, M. Cefkin. The Work Exchange: Peer-to-Peer Enterprise Crowdsourcing. Proceedings of the First AAAI Conference on Human Computation and Crowdsourcing. 2013.
- C. Dukat, S. Caton. Towards the Competence of Crowdsources: Considerations on the Mismatching of Quality and Qualification Tests. International Workshop on Crowd Work and Human Computation, co-located with the 3rd International Conference on Social Computing and Its Applications (SCA 2013). 2013.
- A. Ensslen, P. Jochem, W. Fichtner. Experiences of EV users in the French-German context, Proceedings of EVS27-Conference, Barcelona, Spain. 2013.
- A. Ensslen, P. Jochem, J. Schäuble, S. Babrowski, W. Fichtner. User Acceptance of Electric Vehicles in the French-German Transnational Context, in proceedings of World Conference of Transport Research Society, Rio de Janeiro, Brazil. 2013.
- A. Ensslen, S. Babrowski, P. Jochem, W. Fichtner. Existe-il des différences d'acceptation des véhicules électriques entre la France et l'Allemagne? – Premiers résultats de l'analyse scientifique du test de flotte Cross Border Mobility for Electric Vehicles (CROME), 11ème séminaire francophone est-ouest de socio-économie des transports, Karlsruhe, Germany. 2012.
- N. Feldmann. Using Crowd Funding Mechanisms for Idea Assessment inside Service Organisations. 11th International Open and User Innovation Workshop, Brighton, UK. 2013.
- N. Feldmann, H. Gimpel, M. Kohler, C. Weinhardt. Using Crowd Funding for Idea Assessment inside Organizations - Lessons Learned from a Market Engineering Perspective. In Proceedings of the 3rd International Conference on Social Computing and its Applications (SCA). 2013.
- N. Feldmann, M. Kohler, S. O. Kimbrough, H. Fromm. Service Innovation Analytics: Towards an Approach for Validating Frameworks for Service Innovation Capabilities via Text Mining. in: H. Novoa, M. Snene (eds.), Exploring Services Science, Proceedings of the Third International Conference, IESS 2013. Springer. 2013.
- H. Fromm, P. Hottum. Productivity Measurement in Complex Service Systems - A White Paper on (Im-)Possibilities. Presented at Fifth annual EurOMA Service Operations Management Forum, Cambridge, UK. 2012.
- P. Gagnol, P. Jochem, M. Pierre, W. Fichtner. CROME: the French and German field demonstration of the interoperable Electromobility with EVs, Proceedings of EVS27-Conference, Barcelona, Spain. 2013.
- A. Giessmann, A. Fritz, S. Caton, C. Legner. A Method For Simulating Cloud Business Models: A Case Study On Platform As A Service. European Conference on Information Systems (ECIS), 2013.
- H. Gimpel, F. Teschner. Prediction markets with experts concerned in post-market information usage: Experimental evidence on collective intelligence. 2013 ESA World Meeting. 2013.
- H. Gimpel. Thinking Fast and Slow in Online Labor Markets: A Note on what to Expect when Conducting Economic Experiments on Amazon Mechanical Turk. Presented at the annual meeting of GfEW, Helmstedt, Germany. 2013.
- H. Gimpel, F. Teschner. Collective Intelligence in Market-Based Social Decision Making. ICIS 2013 Proceedings, International Conference on Information Systems, Milan, Italy. Association for Information Systems (AIS). 2013.
- H. Gimpel, M. Nißen, R. A. Görlitz. Quantifying the Quantified Self: A Study on the Motivations of Patients to Track Their Own Health. ICIS 2013 Proceedings, International Conference on Information Systems, Milan, Italy. Association for Information Systems (AIS). 2013.
- H. Gimpel, M. T. P. Adam, T. Teubner. Emotion regulation in management: Harnessing the potential of NeuroIS tools. ECIS 2013 Proceedings, Utrecht, The Netherlands. Pp 1-7. 2013.
- M. Goldberg, A. Kieninger, H. Fromm. Challenges of Retained Organizations in IT Outsourcing - An Exploratory Study. Abstract. 22nd Annual Frontiers in Service Conference, Taipei, Taiwan. 2013.
- J. J. Gomez Vilchez, P. Jochem, W. Fichtner. EV Market Development Pathways – An Application of System Dynamics for Policy Simulation, Proceedings of EVS27-Conference, Barcelona, Spain. 2013.
- G. Görlitz, R. Görlitz. How do stroke patients learn best? In: T. Bastiaens, G. Marks (eds.), Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education, Montreal, Quebec, Canada, AACE. Pp. 164-168. 2012.
- R. A. Görlitz. Das Stroke Manager Konzept - patientenzentrierte Unterstützung nach dem Schlaganfall. in: H. Marona, S. Petak-Opel (eds.) Leuchttürme, Praxisbeispiele und Erfahrungen aktiver Patientenbeteiligung - für Akteure im Versorgungsmangement. 5. Pp. 78-90. Deutsche Gesellschaft für bürgerorientiertes Versorgungsmanagement e.V. (DGBV): Ed. Winterworks. 2013.
- R. A. Görlitz. Patient-centered Coordination in Healthcare Service Networks. Proceedings of the Doctoral Consortium Wirtschaftsinformatik 2013. (Leipzig, Germany). Pp. 109-122. 2013.
- R. Görlitz, A. Rashid, D. Cavael, L. Bieberich, B. Rosales Saurer, V. Ziegler, B. Griewing, C. Weinhardt. Stroke Manager: Analyse einer koordinierenden Dienstleistung zur Unterstützung in der postakuten Schlaganfall-Versorgung. 6 Deutscher AAL-Kongress 2013, Berlin, Germany. Pp. 337-338. 2013.
- R. A. Görlitz, A. Rashid. Datensicherheit und Datenschutz in der prä- und postklinischen Versorgungsphase. 57. GMD5 Jahrestagung & 47. GI Jahrestagung, Braunschweig, Germany. German Medical Science GMS Publishing House. Doc12gmds220. 2012.
- R. A. Görlitz, A. Rashid. Stroke Management as a Service - a distributed and mobile architecture for post-acute stroke management. Proceedings of the 20th European Conference on Information Systems, ECIS, Barcelona, Spain. Paper 107. 2012.
- R. A. Görlitz, L. Müller, A. Rashid. An individual patient-oriented stroke manager architecture. In: G. Schreier, D. Hayn, A. Hörbst, E. Ammenwerth (eds.), Proceedings of the eHealth2012, Vienna, Austria. Pp. 116-121. 2012.
- R. A. Görlitz. Trends in Care 2.0 – Technologieinsatz zur Vernetzung von Pflegedienstleistern und Kunden im Internet. Tagungsband des 5. Deutschen AAL-Kongresses, Berlin, Germany. VDE. Poster 23. 2012.
- S. Haak, H. Gimpel. Individualized Quality-Differentiated Services: A Market Model and Comparison of Negotiation Mechanisms. in: R. Alt, B. Franczyk (eds.), Proceedings of the 11th International Conference on Wirtschaftsinformatik (WI2013). (Leipzig) vol. 1. University Leipzig. 2013.
- C. Haas, S. Caton, K. Chard, C. Weinhardt. Co-operative infrastructures: An economic model for providing infrastructures for social cloud computing. System Sciences (HICSS), 2013 46th Hawaii International Conference on. Pp. 729-738. 2013.

Invited Talks, Publications, Theses

- C. Haas, S. Kimbrough, S. Caton, C. Weinhardt. Preference-Based Resource Allocation: Using Heuristics to Solve Two-Sided Matching Problems with Indifferences. GECON 2013, LNCS 8193. Springer International Publishing Switzerland, Pp. 149–160. 2013.
- C. Haas, S. Caton, D. Trumpp, C. Weinhardt. A simulator for social exchanges and collaborations: architecture and case study. E-Science, 2012 IEEE 8th International Conference on. Pp. 1-8. 2012.
- F. Habryn, J. Kunze von Bischoffshausen, G. Satzger. A Business Intelligence Solution for Assessing Customer Interaction, Cross-selling, and Customization in a Customer Intimacy Context. In ECIS 2012 Proceedings. Pp. 1–13. AISel. 2012.
- M. Hall, S. Glanz, S. Caton, C. Weinhardt. Measuring Your Best You: A Gamification Framework for Well-being Measurement. Social Computing and its Applications, Karlsruhe, Germany. Cloud and Green Computing (CGC), 2013 Third International Conference on. IEEE. Pp. 277–282. 2013.
- M. Hall, S. Caton, C. Weinhardt. Well-being's Predictive Value: A gamified approach to managing smart communities. in: A. A. Ozok, P. Zaphiris (eds.), in Proceedings of the 15th International Conference on Human-Computer Interaction (HCI). LNCS 8029. Pp. 13–22. 2013.
- M. Hall, S. O. Kimbrough, C. Weinhardt. Applied well-being management services for transformative institutions. 13th International Research Symposium on Service Excellence in Management, Quality in Service, QUIS. 2013.
- M. Hall, S. O. Kimbrough, W. Michalk, J. Schneider, C. Weinhardt. Making Solution Pluralism in Policy Making Accessible: Optimization of Design and Services for Constituent Well-Being. Special Interest Group Computer Human Interaction, SIGCHI2013. Workshop on Engaging the Human-Computer Interaction Community With Public Policymaking Internationally. 2013.
- M. Hall, S. O. Kimbrough, C. Haas, C. Weinhardt, S. Caton. Towards the Gamification of Well-being Measures. 2nd Workshop on Analyzing and Improving Collaborative eScience with Social Networks, eSon, Proceedings of the 8th IEEE International Conference on eScience, eScience 2012, Chicago, IL, USA. Pp. 1–8. 2012.
- L. Hillemecher, C. Nolden, V. Bertsch, W. Fichtner. Lastverlagerungspotenziale durch variable Stromtarife – Ergebnisse eines Feldversuchs, Proceedings 8. Internationale Energiewirtschaftstagung, Wien. 2013.
- J. Hoxha, M. Maleshkova, P. Korevaar. Knowledge Discovery meets Linked APIs. International Workshop on Services and Applications over Linked APIs and Data, 10-th Extended Semantic Web Conference (ESWC 2013). CEUR Proceedings. 2013.
- J. Hoxha, P. Mika, R. Blanco. Learning Relevance of Resources across Domains to make Recommendations. Proceedings of the 12th International Conference in Machine Learning and Applications (ICMLA '13), IEEE, Florida, USA. 2013.
- J. Hoxha, A. Rettinger. First-order Probabilistic Model for Hybrid Recommendations. Proceedings of the 12th International Conference in Machine Learning and Applications (ICMLA '13), IEEE, Florida, USA. 2013.
- J. Hoxha, S. Agarwal. Semantic Formalization of Cross-site User Browsing Behavior. Proceedings of the 2012 IEEE/WIC/ACM International Conference on Web Intelligence, IEEE, Macao. 2012.
- J. Hoxha, M. Junghans, S. Agarwal. Enabling semantic analysis of user browsing patterns in the Web of Data. 2nd International Workshop on Usage Analysis and the Web of Data (USEWOD), 21st International World Wide Web Conference (WWW2012), Arxiv, Lyon, France. 2012.
- S. Janeschek, M. Kohler, A. Rößner, P. Hottum. Service Productivity – Measuring and Improving the Value created through Services. Presentation at the 22nd Annual Frontiers in Service Conference, Taipei/Taiwan. 2013.
- P. Jochem W. Fichtner. Integrating Demand Response in the Electricity Exchange Market, Mannheim Energy Conference. 2013.
- P. Jochem, T. Kaschub, A.-G. Paetz, W. Fichtner. Integrating Electric Vehicles into the German Electricity Grid – An Interdisciplinary Analysis, Presentation at the EURO conference, Vilnius, Lithuania. 2012.
- P. Jochem, S. Babrowski, W. Fichtner. CO2-emission reduction potential of electric vehicles and their impact on the transmission grid in Germany, Operations Research conference, Hannover, Germany. 2012.
- P. Jochem, S. Babrowski, W. Fichtner. Electric Vehicle Market Penetration and Corresponding CO2 Emissions: A German Case Study For 2030, Proceedings of IAEE-Conference, Düsseldorf, Germany. 2013.
- P. Jochem, J. J. Gomez Vilchez, W. Fichtner. The Impact of Electric Vehicles on the Global Oil Demand and CO2 Emissions, in proceedings of World Conference of Transport Research Society, Rio de Janeiro, Brasil. 2013.
- P. Jochem, T. Kaschub, A.-G. Paetz, W. Fichtner. Integrating Electric Vehicles into the German Electricity Grid – an Interdisciplinary Analysis, in proceedings of the Electric Vehicle Symposium 26 (EVS26), Los Angeles, CA, USA. 2012.
- M. Junghans. A Process-Oriented View of Website Mediated Functionalities. In C. A. Knoblock, K.-U. Sattler, R. Studer (eds.): Interoperation in Complex Information Ecosystems. Dagstuhl Seminar 13252. Pp. 105-107. Schloss Dagstuhl--Leibniz-Zentrum fuer Informatik. Dagstuhl Seminar Proceedings 3. Dagstuhl, Germany. 2013.
- M. Junghans, S. Agarwal. Efficient Search for Web Browsing Recipes. 2013 IEEE 20th International Conference on Web Services, Santa Clara, USA. Pp. 451-458. IEEE. 2013.
- M. Junghans, S. Agarwal, R. Studer. Behavior Classes for Specification and Search of Complex Services and Processes. In C. A. Goble and P. P. Chen and J. Zhang (eds.): 2012 IEEE 19th International Conference on Web Services, Honolulu, USA. Pp. 343-350. IEEE. 2012.
- T. Kaschub, P. Jochem, W. Fichtner. Interdependencies of Home Energy Storage between Electric Vehicle and Stationary Battery, Proceedings of EVS27-Conference, Barcelona, Spain. 2013.
- T. Kaschub, H. Heinrichs, P. Jochem, W. Fichtner. Modelling Load Shifting Potentials of Electric Vehicles, Proceedings of IAEE-Conference, Düsseldorf, Germany. 2012.
- T. Kaschub, A.-G. Paetz, P. Jochem, W. Fichtner. Feasibility of Battery Switch Stations for Local Emission Free Public Transport, Enerday Conference, Dresden, Germany. 2012.
- T. Kaschub, A.-G. Paetz, P. Jochem, W. Fichtner. Lastmanagement mit intelligenten Haushaltsgeräten und Elektrofahrzeugen – eine modellgestützte Analyse, in: Tagungsband VDE Kongress, Stuttgart, Germany. 2012.
- A. Kieninger, D. Straeten, S. O. Kimbrough, B. Schmitz, G. Satzger. Leveraging Service Incident Analytics to Determine Cost-Optimal Service Offers (Nominated for Best Paper Award). Proceedings of the 11th International Conference on Wirtschaftsinformatik (Leipzig, Germany). Vol. 2. 1015–1029. 2013.
- A. Kieninger, B. Schmitz, D. Straeten, G. Satzger. Incorporating Business Impact into Service Offers – A Procedure to Select Cost-Optimal Service Contracts. Proceedings of the Eighteenth Americas Conference on Information Systems (AMCIS). (Seattle, Washington, USA). 2012.
- A. Kieninger, F. Berghoff, H. Fromm, G. Satzger. Simulation-based Quantification of Business Impacts Caused by Service Incidents. in: J. F. e Cunha, M. Snene, H. Novoa (eds.), Proceedings of the Fourth International Conference on Exploring Service Science. (Porto, Portugal) LNBIP, no. 143. Springer. Pp. 170–185. 2013.
- M. Kohler, A. Neus, H. Fromm. Open Innovation in Service Firms – An Exploratory Study on Implementation and Potentials for Development. Proceedings of the 5th Annual Conference of the Academy of Innovation and Entrepreneurship - AIE 2012, Macau, China. 2012.

Invited Talks, Publications, Theses

- M. Kohler. Performance Management for Open Innovation in Services – Development of a Framework. 11th International Open and User Innovation Workshop, Brighton. 2013.
- M. Kohler, N. Feldmann, F. Habryn, G. Satzger. Service Innovation Analytics: Towards Assessment and Monitoring of Innovation Capabilities in Service Firms. Proceedings of the Forty-Sixth Annual Hawaii International Conference on System Sciences (HICSS 46), Kauai, Hawaii, USA. IEEE Computer Society. 2013.
- S. Kounev, S. Rizou, S. Zschaler, S. Alexakis, T. Bures, J.-M. Jézéquel, D. Kourtisis, S. Pantelopoulou. RELATE: A Research Training Network on Engineering and Provisioning of Service-Based Cloud Applications. In International Workshop on Hot Topics in Cloud Services (HotTopiCS 2013), Prague, Czech Republic. 2013.
- S. Kounev, S. Zschaler, K. Sachs, editors. Proceedings of the 2013 International Workshop on Hot Topics in Cloud Services (HotTopiCS 2013). ACM. 2013.
- S. Kounev, S. Spinner, P. Meier. Introduction to Queueing Petri Nets: Modeling Formalism, Tool Support and Case Studies (tutorial paper). In Proceedings of the 3rd ACM/SPEC International Conference on Performance Engineering (ICPE 2012), Boston, USA. Pp 9-18. ACM, SPEC, ACM, New York, NY, USA. 2012.
- K. Kugler, K. Chard, S. Caton, O. Rana, D. Katz. Constructing a Social Content Delivery Network for eScience. Analyzing and Improving Collaborative eScience with Social Networks (eSoN 13) co-located with the IEEE e-Science. 2013.
- J. Kunze von Bischoffshausen, J. Becker. Towards a Personal Relationship-Based Assignment of Client Representatives to Accounts. Exploring Services Science. LNIB v143. Pp 329-335. 2013.
- S. K. Kwan, P. Hottum. Maintaining Consistent Customer Experience in Service System Networks. Proceedings of the 2013 Naples Forum on Service, Napoli, Italy. 2013.
- S. K. Kwan, P. Hottum, C. A. Kieliszewski. Moving from B2X to B2X2Y value propositions in service system networks. Presentation at the 1st International Conference on Human Side of Service Engineering, San Francisco, USA. 2012.
- R. Lorenz, T. Burger, P. Hottum. Barriers to Service Innovation – Perspectives from Research and Practice. Proceedings of IEEE International Conference on Management of Information and Technology, Sanur, Bali. 2012.
- C. Nolden, V. Bertsch, W. Fichtner. Modellierung eines modellendogenen Netzausbaus in optimierenden Energiesystemmodellen, in: VDI-Berichte 2212, 10. Fachtagung Optimierung in der Energiewirtschaft, Pp. 265-276, VDI-Verlag Düsseldorf. 2013.
- A.-G. Paetz, T. Kaschub, P. Jochem, W. Fichtner. Load-Shifting Potentials in Households including Electric Mobility – a Comparison of User Behaviour with Modelling Results, proceedings of 10th International Conference on Energy Markets, Stockholm, Sweden. 2013.
- A.-G. Paetz, M. Pfriem, P. Jochem, W. Fichtner. Smart Charging – Results From an On-Road Test With Electric Scooters, International Association for Energy Economics (IAEE), Venice, Italy. 2012.
- A.-G. Paetz, T. Kaschub, P. Jochem, W. Fichtner. Demand Response with Smart Homes and Electric Scooters: An Experimental Study on User Acceptance, American Council for and Energy-Efficient Economy (ACEEE), Pacific Grove, CA, USA. 2012.
- A.-G. Paetz, P. Jochem, W. Fichtner. Demand Side Management mit Elektrofahrzeugen – Ausgestaltungsmöglichkeiten und Nutzerakzeptanz, 12. Symposium Energieinnovation, Graz, Austria. 2012.
- S. Pfahl, P. Jochem, W. Fichtner. When Will Electric Vehicles Capture the German Market? And why?, Proceedings of EVS27-Conference, Barcelona, Spain. 2013.
- M. Reuter, W. Michalk. Towards the Dynamic Relocation of Ambulances in Germany - The Risk of Being Too Late. Proceedings of the annual SRIL global conference, San Jose, USA. The SRIL. 2012.
- M. Reuter, S. Nickel. Planning the patient transport as part of the German EMS system. 38th annual meeting of the EURO working group on OR Applied to Health Services, ORAHS, University of Twente, The Netherlands. 2012.
- M. Reuter, A. Rashid, S. Nickel. Modellierung und Planung von Dienstleistungen im Rettungswesen mit Verfahren des Operations Research. Dienstleistungsmodellierung 2012, Eds. O. Thomas and M. Nüttgens. Pp. 291-304. Springer Gabler. 2013.
- M. Reuter. A practical course on modeling real world problems using IBM ILOG CPLEX. International Annual Conference of the German Operations Research Society, OR 2012, Hannover, Germany. 2012.
- S. Ried, P. Jochem, W. Fichtner. Chancen für IKT durch zukünftige Dienstleistungs-Geschäftsmodelle für Flotten mit Elektrofahrzeugen. Proceedings of the Computer Science Conference 'Informatik angepasst an Mensch, Organisation und Umwelt' in Koblenz/ Germany. Pp. 1548 – 1562. 2013.
- A. Rößner, J. Kramer, P. Hottum, M. Kohler. Steigerung der Dienstleistungsproduktivität durch Service Management: Optimaler Einsatz der Ressourcen und Auswirkungen auf die Dienstleistungsarbeit. Proceedings of the 3rd Rostock Conference on Service Research. Faculty of Economic and Social Sciences, University of Rostock, Germany. 2012.
- A. Rößner, J. Kramer, P. Hottum, M. Kohler. Steigerung der Dienstleistungsproduktivität durch Service Management: Optimaler Einsatz der Ressourcen und Auswirkungen auf die Dienstleistungsarbeit. Proceedings of the 3rd Rostock Conference on Service Research. Faculty of Economic and Social Sciences, University of Rostock, Germany. 2012.
- J. Schacht, M. Hall. Network Propagation – Chance or Design? Why do people share online content?. in: C. Stephanidis, (ed.), HCI International 2013 - Posters' Extended Abstracts, Las Vegas, USA. Vol. 374, no. 2. Pp. 392–396. 2013.
- A. Scheuermann, J. Hoxha. Ontologies for Intelligent Provision of Logistics Services. 7th International Conference on Internet and Web Applications and Services (ICIW 2012), XPS, Germany. 2012.
- M. Schönfelder, P. Jochem, W. Fichtner. Using an ANFIS based short term load forecasting model for the optimization of micro-CHP operating strategies in domestic households, in: Proceedings of the 2nd Stochastic Modelling Techniques and Data Analysis International Conference (SMTDA), Chania, Greece. 2012.
- F. Schulz, S. Caton, W. Michalk, C. Haas, C. Momm, M. Hedwig, M. McCallister, D. Rolli. Integrated Modeling of Technical and Business Aspects in Service Networks. Integration of Practice-Oriented Knowledge Technology: Trends and Perspectives, 2013.
- F. Schulz, W. Michalk, M. Hedwig, M. McCallister, C. Momm, S. Caton, C. Haas, D. Rolli, M. Tavas. Service Level Management for Service Value Networks. 5th International Workshop on Service Science and Systems (SSS 2012) at the IEEE Conference on Computer Software and Applications (COMPSAC 2012), 2012.
- S. Stadtmüller, S. Speiser, M. Junghans, A. Harth. Comparing Major Web Service Paradigms. Proceedings of the ESWC 2013 Workshop on Services and Applications over Linked APIs and Data, Montpellier, France. Pp 28-35, CEUR-W5, 1056. 2013.
- S. Stadtmüller, S. Speiser, A. Harth, R. Studer. DataFu: A Language and an Interpreter for Interaction with Read/Write Linked Data. Proceedings of the 22nd international conference on World Wide Web, International World Wide Web Conferences Steering Committee, Republic and Canton of Geneva, Switzerland. Pp. 1225-1236. 2013.

Invited Talks, Publications, Theses

S. Stadtmüller, S. Speiser, A. Harth. Future Challenges for Linked APIs. Proceedings of the ESWC 2013 Workshop on Services and Applications over Linked APIs and Data, CEUR-WS. 2013.

S. Stadtmüller, A. Harth, M. Grobelnik. Accessing Information About Linked Data Vocabularies with vocab.cc. Semantic Web and Web Science, Seiten: 391-396, Springer, Springer Proceedings in Complexity, New York. 2013.

S. Stadtmüller. Composition of Linked Data-Based RESTful Services. The Semantic Web – ISWC 2012, Seiten: 461-464, Springer, Lecture Notes in Computer Science, Berlin. 2012.

S. Stadtmüller, A. Harth. Towards Data-driven Programming for RESTful Linked Data. Proceedings of the ISWC 2012 workshop on Programming the Semantic Web. 2012.

C. Stryja, M. Kohler, H. Fromm. Assessing Service Innovation Capabilities - An Empirically Grounded Approach. Proceedings of the 6th Annual Conference of the Academy of Innovation and Entrepreneurship, Oxford, United Kingdom. 2013.

F. Teschner, H. Gimpel. Crowd Labor Markets as Platform for IS Research: First Evidence from Electronic Markets. ICIS 2013 Proceedings, International Conference on Information Systems, Milan, Italy. Association for Information Systems (AIS). 2013.

R. Verborgh, M. Maleshkova, S. Stadtmüller, T. Steiner, P. A. Szekely (Eds.). volume 1056 of CEUR Workshop Proceedings, CEUR-WS.org. 2013.

5.6. Other

R. Cuel, R. Kern, T. Schulze, M. Krause. Organization of 1st International Workshop on Crowd Work and Human Computation, co-located with the 3rd International Conference on Social Computing and its Applications, Karlsruhe, Germany. 2013.

H. Fromm, P. Hottum, A. Kieninger. IT-Enabled Services for E-Mobility. Workshop Chair at Informatik 2013, Koblenz, Germany. 2013.

R. A. Görlitz, R. Hagedorn. Stroke Manager App - Individual and Mobile Support for Stroke Patients and Their Caregivers. Medicine 2.0., London, UK. 2013.

P. Jochem, W.-R. Poganietz. Was treibt die Autos der Zukunft an?, KIT Energynews 2012(2). Pp. 18-19. 2012.

M. Kohler. Conference presentation. 11th International Open and User Innovation Workshop, Brighton. 2013.

P. Korevaar. Workshop 'Change Management für Analytics' at IBM BusinessConnect2013 Mannheim. 2013.

S. Kounev, K. Sachs, P. Rygielski. SPEC Research Group Newsletter, vol. 1 no. 2. Published by Standard Performance Evaluation Corporation (SPEC). 2013.

J. Kunze von Bischoffshausen, H. Fromm, T. Dekle. Investing in electronic B2B relationships: A predictive model for targeting the right customers. Presentation at the 22nd Annual Frontiers in Service Conference, Taipei, Taiwan. 2013.

5.7. Awards

S. Caton. Social Networks as a Mechanism for Collaborative Computing in: A. Ferscha (ed.), Pervasive Adaption Research Agenda for Future and Emerging Technologies. 2011.

P. Hottum. Visiting Researcher Scholarship awarded by Karlsruhe House of Young Scientists (KHYS). San Jose State University. 2012.

J. Hoxha. Visiting Researcher Scholarship awarded by Karlsruhe House of Young Scientists (KHYS). Yahoo Labs Barcelona. 2012.

Nominated for Best Paper Award, A. Kieninger, D. Straeten, S. O. Kimbrough, B. Schmitz, G. Satzger. Leveraging Service Incident Analytics to Determine Cost-Optimal Service Offers. in: R. Alt, B. Franczyk (eds.), Proceedings of the 11th International Conference on Wirtschaftsinformatik, Leipzig, Germany. Vol. 2. Pp 1015–1029. 2013.

J. Kunze von Bischoffshausen. Best Poster Presentation Award, KIT Ph.D. Symposium. 2012.

M. Reuter. Contact Scholarship awarded by Karlsruhe House of Young Scientists (KHYS). London, Cardiff and Norrköping. 2012.

B. Schmitz. IBM EMEA Best Student Recognition Award. 2012.

A. Zander. KIT Mathematics Faculty Award 2013 – best graduate award. 2013.

R. A. Görlitz, R. Hagedorn, C. Weinhardt. Mobile Support for Stroke Patients. Wirtschaftsinformatik, WI2013, Leipzig, Germany. Paper won best poster award WI2013. 2013.

5.8. Bachelor Theses

C. Aßmann. Literaturüberblick über OR-Modelle zur Terminplanung in Krankenhäusern. Institute of Operations Research (IOR). Supervisor I. Arnolds, M. Reuter, 2012.

B. Baltes. Erstellung eines Konzepts zur Nutzungs- und Akzeptanzanalyse von Elektrofahrzeugen im Flottenversuch. Institute for Industrial Production (IIP) together with KIT-FAST. Supervisor Dr. P. Jochem, 2012.

M. Behler. Gebietsplanung Arztpraxen. Institute of Operations Research (IOR). Supervisor I. Arnolds, M. Reuter, 2012.

M. Berger. Incentives and motivation to participate in a Social Cloud. Karlsruhe Service Research Institute (KSRI). Supervisor C. Haas, 2013.

A. Brunner. CO2-Freier Elektrizitätseinkauf für die Produktion. Institute for Industrial Production (IIP) together with industrial partner. Supervisor Dr. P. Jochem, 2013.

J. Bürgin. Einsatzmöglichkeiten von IT zur Unterstützung personalisierter Medizin. Institute of Information Systems and Marketing (IISM). Supervisor Dr. H. Gimpel, 2013.

F. J. Chou. Ermittlung der Zahlungsbereitschaft für Service-Bündel am Beispiel der Elektromobilität. Institute for Industrial Production (IIP). Supervisor S. Ried, 2013.

L. Diekhans. Anforderungen an einen unternehmensinternen Ideenmarktplatz. Karlsruhe Service Research Institute (KSRI). Supervisor M. Kohler, 2012.

T. Eck. Sales Force Analytics Data Warehouse. Karlsruhe Service Research Institute (KSRI). Supervisor J. Kunze von Bischoffshausen, 2013.

D. Egle. Service Spare Part Management as a Key Resource of Service-Based Business Models for Industrial Services. Karlsruhe Service Research Institute (KSRI). Supervisor Dr. P. Korevaar, 2012.

D. Fett. Ökonomische Vergleichsanalyse der Systemansätze für das Schnellladen von Elektrofahrzeugen. Institute for Industrial Production (IIP). Supervisor Dr. P. Jochem, 2012.

K. Feurer. Terminplanung für Arztpraxen. Institute of Operations Research (IOR). Supervisor I. Arnolds, 2013.

N. Fritz. Schaufensterprojektdesign. Institute for Industrial Production (IIP) together with KIT-FAST. Supervisor Dr. P. Jochem, 2012.

M. Großkinsky. Der Einfluss der Technologie auf künftige Mobilitätsstile. Institute for Industrial Production (IIP) together with KIT-ITAS. Supervisor Dr. P. Jochem, 2012.

S. Gschwendtner. Design Parameters of Equity-based Crowdfunding for Company-internal Settings. Karlsruhe Service Research Institute (KSRI). Supervisor N. Feldmann, 2013.

K. Hedding. Marktbasiertes Demand Side Management. Institute for Industrial Production (IIP). Supervisor Dr. P. Jochem, 2013.

Invited Talks, Publications, Theses

P. Heidel. Analysis of Quality in Business Process Models. Karlsruhe Service Research Institute (KSRI). Supervisor Dr. P. Korevaar, 2013.

M. Hild. Success factors in communication for technology transfer. Karlsruhe Service Research Institute (KSRI). Supervisor M. Kohler, 2013.

C. Hogrefe. A Cooperative Infrastructure For Social Computing: Examining User Incentives. Karlsruhe Service Research Institute (KSRI). Supervisor C. Haas, 2012.

S. Kirsch. Strategische Ausrichtung eines telemedizinischen Dienstleistungsunternehmens. Forschungszentrum Informatik (FZI). Supervisor R. Görlitz, 2012.

U. Köhler. Kosten-Nutzwert-Analyse für koordinierte telemedizinische Dienstleistungen. Forschungszentrum Informatik (FZI). Supervisor R. Görlitz, 2013.

A. Lapis. Semantic Technologies 4 Customer Intimacy Analytics. Karlsruhe Service Research Institute (KSRI). Supervisor J. Kunze von Bischhoffshausen, 2013.

S. Lehmann. Reupation bei der Endmontage von Lkw. Institute for Industrial Production (IIP) together with industrial partner. Supervisor Dr. P. Jochem, 2012.

W. Li. Kundenorientierte Planung des Öffentlichen Personennahverkehrs (Customer-oriented public transportation planning). Karlsruhe Service Research Institute (KSRI). Supervisor M. Hall, 2013.

N. Mildner. Einsatz von eMobility Diensten in Feldversuchen. Institute for Industrial Production (IIP). Supervisor S. Ried, 2013.

L. Miltner. Energiemanagementsystem in einem Industrieunternehmen. Institute for Industrial Production (IIP) together with industrial partner. Supervisor Dr. P. Jochem, 2013.

J. Mixdorf. Bewertung der Nutzerakzeptanz koordinierender telemedizinischer Leistungen - am Beispiel des Stroke Managers. Forschungszentrum Informatik (FZI). Supervisor R. Görlitz, 2013.

M. Paatsch. Sales Force Analytics Implementation. Karlsruhe Service Research Institute (KSRI). Supervisor J. Kunze von Bischhoffshausen, 2013.

K. Patzelt. Die Bedeutung von Social Media für das Berufliche Informationsverhalten im B2B-Bereich. Karlsruhe Service Research Institute (KSRI). Supervisor C. Haas, 2012.

B. Prell. Bewertung von Services für Elektromobilität anhand von TCO-Berechnungen. Institute for Industrial Production (IIP). Supervisor S. Ried, 2013.

L. Rau. Marktanalyse und Anforderungsanalyse für Workflowunterstützende Software im betreuten Wohnen. Forschungszentrum Informatik (FZI). Supervisor R. Görlitz, 2012.

M. Reisser. A Methodology for Evaluating Alternative Market Realities Created by Autonomic Market Reengineering. Karlsruhe Service Research Institute (KSRI). Supervisor Dr. S. Caton, 2013.

P. Romme. Simulationsmodell Layout (Implementierung Auswertungstools/Kennzahlen inkl. Literaturüberblick). Institute of Operations Research (IOR). Supervisor I. Arnolds, 2013.

O. Schamber. Meaning and Value of Well-being in Organizations. Karlsruhe Service Research Institute (KSRI). Supervisor M. Hall, 2013.

R. Schlotter. Sustainable Supply Chain Management – Proactive Risk Management with Supply Chain Planning Software. Karlsruhe Service Research Institute (KSRI). Supervisor Dr. P. Korevaar, 2013.

G. Schlüter. Analyse und Bewertung von Corporate Carpooling Portalen aus Anwendersicht. Institute for Industrial Production (IIP). Supervisor S. Ried, 2013.

S. Schneckenberger. Die Prinzipal-Agent-Theorie in Healthcare Service Networks. Forschungszentrum Informatik (FZI). Supervisor R. Görlitz, 2012.

L. Strecker. Nutzerverhalten für vernetzte Mobilität (Mobility 2.0). Institute for Industrial Production (IIP) together with industrial partner. Supervisor Dr. P. Jochem, 2012.

V. Viellieber. Entwicklung eines Kennzahlensystems für einen Telemedizindienstleister. Forschungszentrum Informatik (FZI). Supervisor R. Görlitz, 2012.

M. Vössing. Creating Personalized Software-as-a-Service Experiences Through Data-Driven Customer Lifecycle B30. Karlsruhe Service Research Institute (KSRI). Supervisor Dr. P. Korevaar, 2013.

D. Welter. Key Variables of Bootlegging and the Potential within Service Firms. Karlsruhe Service Research Institute (KSRI). Supervisor M. Kohler, 2013.

C. Will. Indexierung von Lastverschiebepotentialen in Smart Homes. Institute for Industrial Production (IIP). Supervisor Dr. P. Jochem, 2012.

P. Zborovskiy. Gamification auf Plattformen der Ideenbewertung. Karlsruhe Service Research Institute (KSRI). Supervisor N. Feldmann, 2013.

Y. Zhou. Einsatz von QR-Codes im Rahmen der Teilekennzeichnung als Marketinginstrument am Beispiel des Nutzfahrzeugsersatzteilmarktes. Karlsruhe Service Research Institute (KSRI). Supervisor Dr. P. Korevaar, 2013.

5.9. Master Theses

V. Arras. Einbindung von Kunden bei der Dienstleistungserstellung. Karlsruhe Service Research Institute (KSRI). Supervisor M. Kohler, 2013.

D. Baltadzhiev. Analyse des Störungsverhaltens von Dienst-Erbringungs-Umgebungen. Karlsruhe Service Research Institute (KSRI). Supervisor A. Kieninger, 2012.

D. Birkefeld. Layoutplanung: Modellvergleich. Institute of Operations Research (IOR). Supervisor I. Arnolds, 2012.

H. Boxler. Metrics for customer orientation and team orientation. Karlsruhe Service Research Institute (KSRI). Supervisor J. Kunze von Bischhoffshausen, 2013.

L. Brodbeck. Assessing Collaboration Readiness in Supply Chains. Karlsruhe Service Research Institute (KSRI). Supervisor Dr. P. Korevaar, 2013.

O. Ermantraut. Approaches and Barriers for the Quantification of Operational Risks Resulting from the Application of Services. Karlsruhe Service Research Institute (KSRI). Supervisor A. Kieninger, 2012.

P. Flößer. Social Collaboration im Projektmanagement. Karlsruhe Service Research Institute (KSRI). Supervisor Dr. S. Caton, Dr. H. Gimpel, 2013.

A. Fritz. Modelling and Analysing Cloud Business Models. Supervisor Dr. S. Caton with A. Giessmann (SAP St. Gallen), 2012.

S. Glanz. Measuring Your Best You: A Gamification Framework for Well-being. Karlsruhe Service Research Institute (KSRI). Supervisor Dr. S. Caton, M. Hall, 2013.

R. Hagedorn. Ein mHealth-Konzept zur Unterstützung von Schlaganfallbetroffenen durch Smartphones. Forschungszentrum Informatik. Supervisor R. Görlitz, 2012.

P. Hartmann. Capturing Value from Big Data through Data-Driven Business Models - Patterns from the Start-up world. Karlsruhe Service Research Institute (KSRI). Supervisor N. Feldmann, 2013.

M. Hauser. Text Mining In Finanznachrichten: Prognose Mittelfristiger Kursreaktionen Basierend Auf News Momentum. Supervisor Dr. S. Caton with Prof. D. Neumann (Uni Freiburg), 2013.

F. Hübner. Eigenschaften einer Software-Unterstützung zur Verbreitung eines Service Value Network. Forschungszentrum Informatik. Supervisor R. Görlitz, 2013.

Invited Talks, Publications, Theses

N. Kaltenbacher. Entwicklung eines Simulationsmodells zur Abschätzung des zukünftigen Marktanteils alternativer Fahrzeugantriebe in Deutschland. Institute for Industrial Production (IIP). Supervisor P. Jochem, 2013.

W. Kammerer. User Co-Creation for Developing New Service Ideas: An Experimental Investigation of Virtual Innovation Communities. Karlsruhe Service Research Institute (KSRI). Supervisor M. Kohler, 2012.

A. Kellerer. Team Performance – Wie gut arbeiten Teams und warum? Institute of Information Systems and Marketing (IISM). Supervisor Dr. H. Gimpel, 2013.

T. Knapp. Mobile Softwareassistenten in der vernetzten Pflege: Konzeption, Entwicklung, Evaluation. Institute of Information Systems and Marketing (IISM). Supervisor Dr. H. Gimpel, 2013.

M. Kociemba. Healthcare Service-Analytics: Data Mining auf realen Patientendaten. Institute of Information Systems and Marketing (IISM). Supervisor Dr. H. Gimpel, 2013.

D. Medland. Text Mining in Financial News: Improving a Sentiment Metric For Corporate News. Supervisor Dr. S. Caton with Prof. D. Neumann (Uni Freiburg), 2013.

S. Polzer. Technoökonomisches Logistikmodell für Hochvolt Lithium-Ionen Batterien. Institute for Industrial Production (IIP) together with industrial partner. Supervisor P. Jochem, 2013.

A. Reimold. Elektromobilitätskonzeptes für die Region Mainz. Institute for Industrial Production (IIP) together with industrial partner. Supervisor P. Jochem, 2013.

S. Rudolf. A Proposal for Service Innovation Performance Measurement based on an Exploratory Study of Professional Services Firms. Karlsruhe Service Research Institute (KSRI). Supervisor M. Kohler, 2013.

F. Scheller. Assessing impact of digital health on pharmaceutical industry. Forschungszentrum Informatik in cooperation with Arthur D. Little. Supervisor R. Görlitz, 2013.

R. Schmidt. Energiepreis und CO2-Emissionen des 'Fahrstroms' von Elektroautos. Institute for Industrial Production (IIP) together with industrial partner. Supervisor P. Jochem, 2012.

B. Schmitz. Risk-Oriented Definition of Service Offers. Karlsruhe Service Research Institute (KSRI). Supervisor A. Kieninger, 2013.

K. Semen. Produktivitätsmessung im teil-individualisierten Service-Umfeld. Karlsruhe Service Research Institute (KSRI). Supervisor P. Hottum, 2012.

T. Straub. Einbindung von Kunden bei der Dienstleistungserstellung. Karlsruhe Service Research Institute (KSRI). Supervisor M. Kohler, 2013.

R. Thal. Representing Agreements in Social Clouds. Karlsruhe Service Research Institute (KSRI). Supervisor Dr. S. Caton, 2013.

D. Trumpp. User Incentives and Behavior in Social Clouds. Karlsruhe Service Research Institute (KSRI). Supervisor Dr. S. Caton, C. Haas, 2012.

D. Wiczorek. Customer Intimacy Analytics Automation. Karlsruhe Service Research Institute (KSRI). Supervisor J. Kunze von Bischoffshausen, 2012.

K. Wittich. Umsetzung von Lademodulen für Plug-In-Hybrid-Elektrofahrzeuge. Institute for Industrial Production (IIP) together with industrial partner. Supervisor P. Jochem, 2012.

I. Wölfel. Geschäftsprozessrelevante IT-Dienstleistungen Karlsruhe Service Research Institute (KSRI). Supervisor P. Hottum and A. Kieninger, 2012.

D. Zipp. Messung der Anwenderzufriedenheit im kostenlosen Servicefall bei Elektrowerkzeugen. Karlsruhe Service Research Institute (KSRI). Supervisor P. Hottum, W. Michalk, 2013.

5.10. Diploma Theses

S. Behringer. Bestandsmanagement in Supply Chains. Institute of Operations Research (IOR). Supervisor I. Arnolds, 2012.

F. Berghoff. Quantifying the Impact of Service Incidents on the Customer Business. Karlsruhe Service Research Institute (KSRI). Supervisor A. Kieninger, 2012.

P. Brinkhoff. Service Episode Setting und Kundenzufriedenheit. Karlsruhe Service Research Institute (KSRI). Supervisor P. Hottum, 2012.

M. Droste. Marktstrategien OEM E-Mobility. Institute for Industrial Production (IIP) together with industrial partner. Supervisor P. Jochem, 2012.

R. Fatokun. Health-Economics of IT-supported care: Gesundheitsökonomische Bewertung von IT-Unterstützung und Prozessinnovation in der Pflege. Institute of Information Systems and Marketing (IISM). Supervisor Dr. H. Gimpel, 2013.

F. Marc. Nachhaltige Elektromobilitätsinfrastruktur für Unternehmen und Kommunen - Ein wirtschaftlich-rentables Geschäftsmodell. Institute for Industrial Production (IIP) together with industrial partner. Supervisor P. Jochem, 2012.

C. Hardt. Hedonomics Redux: Text Analysis and Machine Learning for Well-being Indices. Karlsruhe Service Research Institute (KSRI). Supervisor M. Hall, 2013.

B. Litz. Innovationsentscheidungen in Dienstleistungsunternehmen - Eine Bestandsaufnahme in Literatur und Praxis. Karlsruhe Service Research Institute (KSRI). Supervisor N. Feldmann, 2012.

F. Riedle. Fernverkehr und E-Mobility. Institute for Industrial Production (IIP) together with KIT-IfV. Supervisor P. Jochem, 2012.

S. Schulte. Predictive Analytics for Sales Partner Performance Management. Karlsruhe Service Research Institute (KSRI). Supervisor J. Kunze von Bischoffshausen, 2012.

N. Steinhoff. Patientenzentrierte Services – Ansatz zur strukturierten Beurteilung von Case Management Szenarien. Karlsruhe Service Research Institute (KSRI). Supervisor P. Hottum, 2013.

C. Stryja. Towards a Framework for Quantifying Service Innovation Capability. Karlsruhe Service Research Institute (KSRI). Supervisor M. Kohler, 2012.

A. Thome. Patient-centered support through mobile apps. Forschungszentrum Informatik (FZI). Supervisor R. Görlitz, 2013.

M. Zang. Advanced Analytics of Healthcare Data: Data Mining auf realen Patientendaten. Institute of Information Systems and Marketing (IISM). Supervisor Dr. H. Gimpel, 2013.