

Univ.-Prof. Dr. Thomas Fischer
Chair of Business Information Science
and Information Management

Activity Report
September 1st 2014 – August 31st 2015

WHU
Otto Beisheim School of Management

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Einleitung

Auch das vergangene akademische Jahr brachte für den Lehrstuhl eine Reihe besonderer Ereignisse und Aktivitäten. Zuvorderst ist über die erfolgreiche Habilitation des Juniorprofessors Sven-Volker Rehm zu berichten. Er erhielt aufgrund einer ausgezeichneten Habilitationsschrift und nach einem erfolgreichen Habilitationskolloquium auf einstimmigen Beschluss der Fakultät die *Venia Legendi* für Allgemeine Betriebswirtschaftslehre. Auch wenn die Habilitation vor allem die Würdigung seiner wissenschaftlichen Leistung darstellt, so möchte ich an dieser Stelle doch nicht versäumen, ihm für die große Unterstützung, die er mir am Lehrstuhl zu Teil werden ließ, ausdrücklich zu danken – dies vor allem im Rückblick auf die Phasen im vergangenen akademischen Jahr, die mich aufgrund besonderer Umstände nicht immer in guter Verfassung sahen.



Der Lehrstuhl im Weitersburger Weg, Vallendar

Eine ganze Reihe von Veranstaltungen wurden vom Lehrstuhl ausgerichtet oder mitgestaltet.

In der akademischen Lehre fanden vor allem die Literaturseminare und die SAP-Seminare wiederum besonderen Anklang bei den Studierenden und wurden gut besucht.

Im Mai veranstaltete Dr. Rehm zusammen mit Melinda Jiang den Management Abroad-Kurs Indien mit 29 Teilnehmern aus dem Bachelor-Jahrgang 2017. Diese zweiwöchige Exkursion führte nach Bangalore, Mumbai und Pune und erlaubte den Teilnehmern Einblicke in die indische Kultur und Gesellschaft und durch mehrere Firmenbesuche insbesondere auch in das geschäftliche Umfeld in diesem ‚emerging country‘.

Zwei praxisorientierte Workshops, die unmittelbar mit abgeschlossenen oder nahezu fertigen Dissertationen am Lehrstuhl eng verknüpft waren, zogen zahlreiche Teilnehmer an und wurden von diesen hervorragend anerkannt. Zu einen hat Dr. Christian Coppeneur-Gülz mit einem Workshop über die Leistungsfähigkeit der von ihm auch der Hochschule zu Zwecken der Ausbildung zur Verfügung gestellten WWM-Service-Plattform demonstriert, wie über konsequente Serviceorientierung unter Nutzung einer geeigneten Software-Plattform das Konzept der Digitalen Transformation von Wertschöpfungsprozessen in einem mittelständischen Unternehmen zum Erfolg führt.

Tobias Sebastian Witte seinerseits hat in seinem Experten-Workshop “Business Intelligence Competency Center“ ein Organisations-Referenzmodell für Business Intelligence Application von profilierten Experten aus der Praxis kritisch prüfen und bewerten lassen – dies mit einem sehr positiven Ergebnis.

Auch die Zusammenarbeit mit der IHK-Koblenz im Rahmen des Forum Mittelstand an der WHU wurde erfolgreich fortgesetzt. Hier können wir mit großer Genugtuung und Freude feststellen, dass sich

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mit der jüngst berufenen Kollegin, Frau Professor Christina Günther, die seit April 2014 den „IHK-Lehrstuhl für kleine und mittlere Unternehmen“ innehat, eine besonders konstruktive und enge Zusammenarbeit bereits etabliert hat.

Frau Professor Günther hat im Frühjahr einen ersten, überaus erfolgreichen Forum Mittelstand-Unternehmernachmittag zum Thema „Strategische Personalentwicklung: Vom Recruiting bis zur Mitarbeiterbindung“ gestaltet, den der Lehrstuhl in Planung und Organisation unterstützt hat. Die künftigen Aktivitäten des Forum Mittelstand werden - aufgrund ihres Forschungs- und Lehrauftrags - maßgeblich von Frau Professor Günther mitgestaltet; auch unser Lehrstuhl wird dazu wieder beitragen, so etwa mit dem nächsten Unternehmernachmittag bereits im November 2015 zum Thema „Produktion und Dienstleistung – wie WHU-Absolventen erfolgreiche Beiträge zur digitalen Transformation der Wertschöpfung in kleinen und mittleren Unternehmen leisten“.

Über einige der von mir bis hierher angesprochenen Aktivitäten wird im weiteren Verlauf dieses Lehrstuhlberichtes noch detaillierter Auskunft gegeben.

Schließen möchte ich mit der Information, dass ich als Lehrstuhlinhaber im August mein 20-jähriges Dienstjubiläum an der WHU feiern durfte, ein Umstand, der mich mit großer Freude und Dankbarkeit erfüllt. Mit Freude vor allem aufgrund der herausragenden Entwicklung unserer Hochschule und mit Dankbarkeit im Rückblick auf die außerordentliche Unterstützung durch meine Mitarbeiter am Lehrstuhl, meine Kollegen in der Fakultät sowie die Mitarbeiter in der Verwaltung der WHU.



Prof. Dr. rer. pol., habil. Ing. Thomas Fischer

Vallendar, im September 2015

Introduction

The last academic year brought with it a series of special occasions and activities for the chair. First and foremost among these was the habilitation of Assistant Professor Sven-Volker Rehm. By virtue of his excellent post-doctoral thesis and following a successful colloquium, the faculty unanimously decided to award him the *venia legendi* (post-doctoral teaching qualification) in General Business Management Studies. Although it is above all the habilitation which represents the acknowledgement of his academic achievement, I would at this point, however, still like to take the opportunity to express my utmost thanks to him for the support that he has given me at the chair – above all when looking back over phases of the past academic year, during which, due to exceptional circumstances, I was not always at the top of my game.



The chair in Weitersburger Weg, Vallendar

The chair either organized, or was involved in the staging of a whole series of events.

In teaching, it was above all the literature and SAP seminars which were again particularly well received by the students and well attended.

In May, Dr. Rehm and Melinda Jiang put on the Management Abroad Course India with 29 participants, who were Bachelor students from the Class of 2017. The two-week study trip took the participants to Bangalore, Mumbai and Pune, and gave them an insight into Indian culture and society. In addition, several visits to companies provided the participants with an insight into the business environment of this emerging country.

Two workshops geared to finding real-world solutions and directly linked to theses that had been either completed or were nearing completion at the chair, attracted numerous participants and received outstanding recognition from them. One workshop focused on the myWWM software, a service provided by WWM GmbH & Co. KG. WWM's CEO Dr. Christian Coppeneur-Gülz – a WHU alumni – has made this service available to the business school for educational purposes. The event demonstrated how through a consistent commitment to service and using a suitable software platform, Digital Transformation of value creating processes can lead to success in medium-sized businesses.

In his workshop for experts entitled, "Business Intelligence Competency Center", Tobias Sebastian Witte's *Organisations-Referenzmodell für Business Intelligence Application* (a reference model for organizations for using business intelligence applications) was critically examined and evaluated by some distinguished experts from the business world and with a resoundingly positive outcome.

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The cooperation with the Chamber of Commerce (IHK) in Koblenz as part of Forum Mittelstand – the Forum for Medium-Sized Enterprises at WHU – was also successfully carried forward. In this regard, we note with great satisfaction and pleasure that the recently appointed colleague Professor Christina Günther, who has held the IHK-Chair of Small and Medium-Sized Enterprises since April 2014, has already established a particularly constructive and close cooperation with the Chamber of Commerce.

In the spring, Professor Günther organized a first and exceedingly successful afternoon event for entrepreneurs through the Forum for Medium-Sized Enterprises entitled, “Strategic personnel development: From recruiting through to employee retention strategy”, which the chair supported both the organization and planning of. Due to her tasks in research and teaching, Professor Günther will be significantly involved in shaping the future activities of the Forum for Medium-Sized Enterprises. Our chair will also again be making a contribution for instance by organizing the next event in November 2015 entitled, “Production and service provision – how WHU graduates are making successful contributions to the digital transformation of value creation in medium-sized businesses.”

We will provide further, more detailed information on several of the aforementioned activities at a later stage of this chair report.

I would like to finish with the news that as the current chair holder I was able to celebrate 20 years of service at WHU back in August, a circumstance which filled me with immense joy and gratitude. My sense of joy is above all by virtue of the outstanding development of our university; my debt of gratitude looking back is owed to the extraordinary level of support I have received from my staff at the chair, from my colleagues in the faculty as well as the employees in the administration at WHU.



Prof. Dr. rer. pol., habil. Ing. Thomas Fischer

Vallendar, in September 2015

Team



The chair team in September, 2014



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Teaching

Lectures

In the B.Sc. program, the chair contributed the concentration module ***Business Information Systems (BIS)***. Purpose of the two courses BIS I & II is to give an introduction to the role of information and communication technologies (ICT) in business and management. A core topic is the management of ICT in the context of changing economic boundary conditions and business networks.

Current issues such as Cloud Computing, Software-as-a-Service, or In-Memory-Computing are discussed in the course. Further topics include practical exercises in modeling of business processes, and presentations of professionals regarding the alignment of IT and business strategies.

The choice of topics is strictly aligned to the curricula recommendations of the German Informatics Society (Gesellschaft für Informatik e.V.). A combination of case studies from practice, and introduction of theoretical background enables the students to approach up-to-date subjects. This helps students acquiring basic knowledge in the field of Management Information Systems (MIS) and supports their understanding about the role of Information Systems and appropriate management structures for corporate success.

Experts from industry, telecommunication and ICT sectors illustrated the need of theoretical concepts and the relevance of practical problem solutions in the lectures. (For further information please consider the chapter “Contributions of External Professionals”).

A literature seminar entitled ***Concepts, Methods and Technologies for cooperative work in teams and networks*** was given to the Bachelor of Science class of 2015. 16 students selected the course and presented their thoughts on prominent issues discussed in recent scholarly literature, and practice research. The topics covered issues such as Servitization, Business Analytics, Transactive Memory, Social Media and others.

During summer, a PhD seminar on ***Systems Thinking in Research on Information Systems and Organizations*** was offered. The seminar investigated traces and approaches of systems thinking in current literature from the information systems, management and organizational theory fields. Starting from articles presenting recent research in these fields, in a first step the contribution of systems thinking was to be identified in each described case and its coupling to indigenous methods and concepts explicated. In a second step, the participants discuss in a colloquium how the underlying systems thinking conceptions contribute to management research.

For the Bachelor class of 2017, the ***Management Abroad Course (MAC) India*** was offered – an excursion which led 29 students to Bangalore, Mumbai and Pune, in order to discover the business context in emerging countries. (For further information please take a look at the report below).

Exercises and Tutorials

As part of the BIS module, exercises were offered in order to illustrate the practical relevance of **Business Process Modeling (BPM)** in the creation of a corporate IT strategy. Main subject is the Event-driven Process Chain (EPC), which is one of the most widely used methods for BPM. Exercises cover the analysis of representative use cases, and their formulation with help of the standard modeling language provided by the ARIS (Architecture of Integrated Information Systems) approach.

As an additional service, the **SAP ERP training environment** was offered to the Bachelor classes in the fall and spring semesters of the academic year. The SAP system is provided through a hosting service by the SAP University Competence Center (SAP UCC) at Otto-von-Guericke-Universität Magdeburg (Fakultät für Informatik). Thanks to financing by the **Schneider Foundation**, the chair is able to introduce students to this standard application software. 53 students successfully completed the online course that presents case studies of a multinational company, and tackles issues such as production planning, human resource management, and accounting.

Guided by the case studies, participants become acquainted with the SAP ERP system environment. Student instructors accompany the course in online forums, providing additional information on the system, and by giving practical advice with appearing problems. Participant feedback from recent years indicates that the self-guided course provides deep insights into the system in a realistic environment. Being held since 2009, the seminar has been rated with an average of 1,8 (on a scale of 1..5) by the participating students.

Overview of Courses and Exams

Courses

Business Information Systems I	Lecture, 3ECTS, B.Sc. Program, BSc2016	Fall Term 2014, 5 students
Business Information Systems II	Lecture, 3ECTS, B.Sc. Program, BSc2016	Spring Term 2015, 3 students
Concepts, Methods and Technologies for cooperative work in teams and networks	Seminar, 3ECTS, B.Sc. Program, BSc2015	Fall Term 2014, 16 students
Management Abroad Course India	Seminar/Excursion, 3ECTS, B.Sc. Program, BSc2017	Spring Term 2015, 29 students
SAP ERP Case Study Seminar	Seminar, 1ECTS, B.Sc. Program, BSc2015	Fall Term 2014 16 students
SAP ERP Case Study Seminar	Seminar, 1ECTS, B.Sc. Program, BSc2015	Spring Term 2015 37 students

Exams

Bachelor and Master Program	
Lectures and Seminars	6
Bachelor Theses	5
Master Theses	1

PhD Program	
First Supervision	4 (Prof. Fischer)
Second Supervision	2 (Prof. Fischer) 1 (Dr. Rehm)
Disputation	1
Deputy Head of Doctoral Committee	2 (Prof. Fischer)

Management Abroad Course

The Management Abroad Course (MAC) to India is part of the WHU Bachelor Program's focus on emerging markets. The course format combines a traditional campus-based seminar on international management with an excursion to India featuring on-site company visits. It offers students the possibility to discover and experience India with seminars, and in workshops given by company representatives as well as local politicians, entrepreneurs and academics.

Over a two-week period, students experienced and learned about the current business, political and cultural environment in India and what it takes for foreign businesses and entrepreneurs to succeed in Southeast Asia. The trip includes a mix of visits to leading multinational companies such as SAP, Infosys, Volkswagen; looking at the strategies adopted in order to compete in regional and global markets beyond their boundaries; local enter-



prises and incubators of start-ups, like Mphasis and NASSCOM, with a focus on business opportunities and how local entrepreneurs break down institutional and financial obstacles to create disruptive start-ups; or regional development agencies. Sightseeing tours to Gateway-Elephanta Caves, Dharavi Slum and others added cultural and social elements to the course.

During the excursion, students prepare case studies specific to the visited host companies, and the results are presented directly to the host representatives on the trip. In particular, during the course the participants have worked on actual business cases provided by visited start-ups in the NASSCOM start-up center, and by the global company INFOSYS, on the topic of Industry 4.0. The MAC course India was led by Dr. Rehm and assisted by research assistant Melinda Jiang. 29 participants could immerse themselves into the Indian context to explore and experience the opportunities, challenges and realities of doing business in India and Southeast Asia.

Contributions of Professionals

As in previous years the chair invited outstanding professional speakers who presented their thoughts on special topics as part of the lecture Business Information Systems. The speakers shared their insights from multiple years of practice and consulting in the ICT and communication businesses with the students.

The chair also involves WHU expert staff to the BIS lectures, involving for instance Mr. Dirk Jonach, Head of the WHU IT Department, or Mr. Thomas Martin, project manager of the WHU Campus Management initiative; who inform about the efforts in managing and developing a business school's ICT operations and IT strategy.

The chair team wants to express particular thanks to all professional, expert staff and former doctoral students who regularly support our chair or come back home to WHU. They are an essential ingredient to the success of our lectures through their speeches and presentations. The guest lectures are a prominent and fruitful source of inspiration for all, students, speakers and the chair members!

	Dr. Axel Emunds T-Systems GEI GmbH	Service Management based on ITIL November 18, 2014 April 8, 2015
	Dr. Christian Coppeneur-Gülz WWM System Service GmbH	Application Service Providing November 25, 2014 April 1, 2015
	Rob Copeland TRW SAP Global Competency Center	Delivering Value through Organizational Transformation March 20, 2015

Guest Teaching Assignments at other Business Schools and Universities

Advanced Methods of Organizational Cybernetics (Universität Stuttgart)

In the summer term 2015, Dr. Rehm again offered his course on *Advanced Methods of Organizational Cybernetics* at Universität Stuttgart, Germany. He has presented this course the fourth time since 2012, following an invitation of **Professor Dr. Meike Tilebein**, who is Director of the Institute for Diversity Studies in Engineering (IDS) at the Faculty of Engineering Design, Production Engineering and Automotive Engineering. The lecture presents methods and concepts from the area of cybernetics in Business, Management and Society, such as System Dynamics, the theory of hierarchical multi-level Systems, Viable Systems Model, approaches to the analysis and modeling of large-scale systems, methods for analysis of socio-technical systems, Complex Adaptive Systems, Systems Thinking, cybernetic constructivism, and others.

The area of Organizational Cybernetics is dealing with the description of information processing structures in organizations. It takes a systems theoretical perspective, and provides a broad set of theories, methods and approaches to design management interventions for shaping organizations within complex environments. Information systems play an important role in this effort, and the BIS chair has regularly been using approaches from Organizational Cybernetics in recent years.

Knowledge Management for Networked Innovation (Université de Strasbourg)

In January 2015, Dr. Rehm gave a one-day guest seminar at the University of Strasbourg, France, on invitation by **Associate Professor Catherine Ledig**. The seminar under the topic of *Knowledge Management for Networked Innovation* was directed to about 50 Master of Science students at the Faculty of Law and Management. Dr. Rehm has held the seminar since 2010.

Service to WHU

- Deputy Head of Doctoral Committee (Prof. Fischer) (until spring 2015)
- Academic Organizer of Forum Mittelstand at WHU (platform for the dialogue between science and industry) (Prof. Fischer; co-organized with Prof. Günther) (since January 2015)
- Associated member of Forum Mittelstand at WHU (Dr. Rehm)
- Member of the Advisory Board of the Campus Management System (CMS) (Prof. Fischer)
- Chairman of the working group “E-Learning and Blended Learning” (Prof. Fischer)
- Member of the working group „E-Learning and Blended Learning” (Dr. Rehm)
- Engagement in the selection processes for the B. Sc. program and the M.Sc. program (Dr. Rehm)

Research

Research Fields

During the academic year 2014 – 2015 the chair's research activities focused on the following core areas:

One focus was on **knowledge-oriented management**, especially the design and implementation of **Knowledge-Intensive Business Services (KIBS)** in dynamically networked enterprises. A particular research question is the development of ontology-based "Smart Services" that support knowledge exchange between cooperating companies. Research activities in this context follow the Design Science methodology that provides guidelines for analyzing practically highly relevant problems, and for elaborating solution concepts and (software) artifacts which base on the existing knowledge of scholarly research. The chair's research also comprises **action research** approaches, which attempt implementing solutions directly in practice, in close cooperation with companies.

The research activities of Dr. Rehm focus on the field of **Organizational Communication**. In 2014 and 2015 he has published several articles on the opportunities that arise from new information technologies, approaches to organizational networking, and cooperative research and development, to the innovation success of small and medium enterprises. The articles comprise both, an empiric perspective, as well as constructive (design science) approaches to arrive at insights about the role and functioning of information systems in organizations. As part of the SmartNets project which ran between 2011 and March 2014, he has conducted studies on the interplay between information systems and organizations within settings of inter-organizational innovation in European enterprise networks. From this project, various working papers have resulted. One of these was featured in the January issues of the renowned journal *Information and Organization*:

Rehm, S.-V., & Goel, L. (2015). The emergence of boundary clusters in inter-organizational innovation. *Information and Organization*, 25(1), 27–51. doi: 10.1016/j.infoandorg.2014.12.001

Link <http://www.sciencedirect.com/science/article/pii/S1471727214000414>



Habilitation of Dr. Rehm

In November 2014, Dr. Rehm has concluded his Habilitation in Business Administration at WHU with an academic presentation. His Habilitation thesis, submitted to the Dean of WHU in July 2014, is entitled:

Connecting Patterns: Information Systems, Communication and Knowledge in Networked Innovation. Essays based on Empirical Studies and Design Science Research in the Field of Organizational Communication and Information Systems.

In this thesis, Dr. Rehm combines essay from three lines of research, including (A) Organizational conceptions and IT strategies for information, knowledge and service management, (B) Principles, models and methods for coping with organizational complexity, and (C) IS conceptions and IS-enabled instruments which organizations can employ to empower innovative individuals, teams and enterprise networks. Referees of the habilitation process have been Professor Thomas Fischer and Professor Dr. Peter-J. Jost, Full Professor and Chair of Organization Theory at WHU.

Research Partnerships

The chair continued its long-term partnership with the *Center for Management Research of DITF Denkendorf (DITF-MR)*, directed by **Prof. Dr. Meike Tilebein**. Until 2011, Prof. Fischer had been Director of this internationally networked institution in the field of cooperative industrial research (Industrielle Gemeinschaftsforschung). This partnership results in a persistent exchange of knowledge. In the past academic year, in particular the research project SmartNets, a project supported by the European Commission in its 7th Framework Program which was successfully completed in March 2014 and coordinated by DITF-MR benefited from this close collaboration. The chair was responsible for issues of enterprise transformation in this project.

Link <http://www.ditf-denkendorf.de/mr/>

Furthermore, the chair continues cooperations with other chairs and Professorships of WHU to work on interdisciplinary topics and to share knowledge and research practices.

Project Overview

The table below presents projects of cooperative industrial research within Europe, which have been carried out by the Center for Management Research of DITF Denkendorf (DITF-MR). Since 2011, Prof. Fischer has acted as internal consultant of DITF-MR for various international projects. The chair team participated in these projects through regular exchanges of experiences and ideas.

Study on ICT Service Providers in the Middle Rhine Region

Together with the **Chamber of Commerce Koblenz** and the **University of Koblenz-Landau**, Dr. Rehm has started a study on the situation of regional ICT Service Providers of the Middle Rhine Region in 2014.

Manifold changes have impacted the economic and business boundary conditions of service providers in information technology, telecommunication and new media (ICT) sectors in recent years. Megatrends such as cloud computing and mobile computing, or social initiatives like smart cities, terms like Industrie 4.0, media coverage of topics as information security and privacy, and global changes in the competition on ICT, have also influenced the firms of the Middle Rhine region. Business models as well as value chain structures are consequently facing new challenges, and will have to adapt to these new influences and trends. Software markets shift from product- to service-oriented business. In this context, ICT Service Providers increasingly act as co-creators of value within the customer's value chain. The study investigates, to what extent the regional ICT Service Providers are prepared for these challenges, and which strategies and approaches they use to resolve related issues. The study will attempt to answer several questions such as: Which concepts are viable that support adoption of new technologies, that help creating new markets, or that facilitate the uptake of new types of partnerships? Which business models allow for the development and leveraging of innovation capacities?

As a first step in the study, the Chamber of Commerce Koblenz collected expectations, perspectives and problem fields of their ICT Service Provider member firms. In a second step, the chair has started to conduct qualitative interviews with selected firms in order to investigate specific challenges of regional ICT Service Providers. In 2015, expert interviews have provided first insights into the effects of current trends on ICT providers, including *Internationalization, Digital Transformation, Servitization, Mobile, Customization vs. Standardization, and Big Data*. Objective of the chair is to develop management guidelines to support firms in developing and implementing viable strategies.

Link <http://www.itk-rlp.de/news/> (Branchenreport ITK-Wirtschaft in der Region)

Presentations and Meetings

In the past year, Professor Thomas Fischer, Dr. Sven-V. Rehm and the doctoral assistants participated and contributed to in various events and research meetings, and held various guest lectures, seminars and presentations. The following list gives an overview of some selected activities.

Professor T. Fischer

Event	Function	Place	Date
Board Meeting of Schneider Foundation	Participant	Vallendar (DE)	25.11.2014
Forum Mittelstand an der WHU „Strategische Personalentwicklung: Vom Recruiting bis zur Mitarbeiterbindung“	Participant	Koblenz (DE)	23.04.2015
WHU-WWM Workshop	Key Note Speaker	Vallendar (DE)	09.09.2014
Expert Workshop Business Intelligence Competency Center	Organizer/ Participant	Vallendar (DE)	11.06.2015

Dr. Sven-V. Rehm

Event	Function	Place	Date
The 26th ISPIM Innovation Conference: MADONE – Methods and Technologies for Collaborative Networking (Tutorial)	Organizer	Budapest, Hungary	06/2015
Forum Mittelstand an der WHU „Strategische Personalentwicklung: Vom Recruiting bis zur Mitarbeiterbindung“	Participant	Koblenz (DE)	04/2015
IFIP WG8.2 Working Conference and OASIS Workshop	Speaker	Auckland, New Zealand	12/2014
International Conference on Information Systems 2014 (ICIS 2014)	Speaker	Auckland, New Zealand	12/2014
Board Meeting of Schneider Foundation	Participant	Vallendar (DE)	11/2014
PRO-VE'14—15th IFIP Working Conference on Virtual Enterprises: Model-based, Architecture-driven Design and Operation of Networked Enterprises (Workshop)	Organizer, Speaker	Amsterdam, The Netherlands	10/2014
WHU-WWM Workshop, Key note: “Service-orientation by enterprise application systems: From ERP to resource management in service systems”	Keynote Speaker	Vallendar (DE)	09/2014

Activities in the Scientific Community

Editorial and Reviewer Activities

Associate editor and reviewer activities were conducted by Dr. Rehm, for the European Journal of Information Systems (EJIS), the European Conference on Information Systems (ECIS), the Americas Conference on Information Systems (AMCIS), the Int. Conference on Wirtschaftsinformatik, the Academy of Management Annual Meeting, and others.

Memberships

Dr. Rehm is a member of the following organizations:

- Board Member of the *Association for Cybernetics in Economy and Society* / Gesellschaft für Wirtschafts- und Sozialkybernetik e.V. (GWS)
- Association for Information Systems (AIS), Special Interest Group (SIG) on Enterprise Systems (SIGEntSys),
- Academy of Management, Organizational Communication & Information Systems (OCIS) division,
- Gesellschaft für Informatik e.V. (GI) / German Informatics Society, SIGs Enterprise Modelling and Information Systems Architectures (WI-MobIS), and Computer Supported Cooperative Work (WI-CSCW)
- Verband der Hochschullehrer für Betriebswirtschaft e.V. (VHB), Wissenschaftliche Kommission Wirtschaftsinformatik (WK WI)/ German Academic Association for Business Research, SIG on Business Information Systems Engineering

Publications

Rehm, S.-V., & Goel, L., & Junglas, I. (2015). Innovating in networks: the empowering role of IS. MIS Quarterly Executive (forthcoming).

Rehm, S.-V., & Goel, L. (2015). The emergence of boundary clusters in inter-organizational innovation. Information and Organization, 25(1), 27-51; <http://dx.doi.org/10.1016/j.infoandorg.2014.12.001>.

Rehm, S.-V. (2015). Gestaltung komplementärer Beziehungen in Innovationsnetzwerken (Managing complementary relationships in innovation networks). Proceedings of the International Conference of the Association for Cybernetics in Economy and Society, forthcoming.

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Events Organized by the Chair

Forum Mittelstand an der WHU



The “**Forum Mittelstand an der WHU**” has been established as a platform for fostering dialogue between science and industry. Based at WHU in Vallendar, it informs medium-sized companies – in particular from the Middle and Upper Rhine regions – competently and regularly about new scientific findings which are relevant in practice. Hence, our mission is to:

**Prepare and communicate
highly qualified research results
for industrial practice.**

The Forum intends to provide a significant contribution to the economic and innovative power of companies in close cooperation with the **City of Koblenz Chamber of Commerce (IHK Koblenz)**: Within “Forum Mittelstand” events, representatives of regional economy meet each other in order to learn more about new management concepts and technological developments which will shape future innovations and markets.

Our 2014 event “**Innovation by Cooperation – Does my enterprise have Networking Capabilities?**” (*Innovation durch Kooperation – Ist mein Unternehmen netzwerkfähig?*) on March 12th, 2014, put the participants in the position to perform individual assessments of their company’s networking capabilities and to identify approaches for improvement. Therefor also results and experiences of the EU research project SmartNets were used. In this project, the chair participated in, the networking capabilities of SMEs in three innovation networks were examined and significantly improved in concrete innovation projects.

Based on this workshop a continuation of the dialog between companies and chair took place by on-site visits including assessments with several company represents.

Link forum-mittelstand.whu.edu

Dissertation Projects

Following dissertations projects are currently supervised at the Chair of Business Information Science and Information Management:

W. Kraus

New technology and new production processes are critical factors for organizational success. In a highly dynamic environment companies are reliant on finding and integrating specialized competences for individualized knowledge-intensive value chains. Here ICT is the major enabler not only of new business models but also is the major driver for organizational transformation. Thus, innovative service products need effective and efficient networks with the focus on specialized knowledge whereas production networks need to find appropriate co-manufactures and production capacity. In this context, the research of **Dipl.-Ing. Waldemar Kraus** focuses on new concepts and tools to:

- design appropriate knowledge-intensive business services
- enhance productivity in a service-oriented environment the reuse and integration of service products in various value chains
- establish appropriate interorganizational workflows
- evaluate business ecosystems and knowledge-intensive business services
- support dynamic service processes with a cloud-based Enterprise Resource Planning-Systems

Co-adviser is Prof. Dr. Peter-J. Jost, Chair of Organization Theory of WHU

M. C. Kühl

The dissertation of Mr. **Dipl.-Kfm. Morten C. Kühl** focuses on computer-aided knowledge management for example in due diligence processes. The contribution of the work aims to be in the improvement of the collaboration of heterogenous teams in complex, knowledge-oriented projects by the usage of semantic and ontology-centric technologies. Existing tools do not fulfil the requirements of real-world use cases, leading to interesting opportunities of scientific exploration especially by applying the design science method. Dynamic and complex projects with short duration appear to provide useful insights such as those merger and acquisition projects in a fast-growing US start-up that were actively participated in during 2012.

Prof. Dr. Christian Koziol, Chair of Risk Management and Derivatives, Universität Tübingen is the co-advisor of this dissertation proposal.

Mr. Kühl has been supported by a scholarship of the state of Rhineland-Palatinate until he changed to an external PhD candidate status.

S. Gross

Dipl.-Ing. Sven Gross investigates in his dissertation service-oriented structures for the collaboration of stakeholders in a dynamic environment analyzing the development of innovation networks in three dimensions: Knowledge Management, Organizational Structure and ICT Support. He develops a method that supports the introduction of service-oriented structures in corporate networks as well as the dynamic adjustment of enterprise architectures to dynamically changing requirements. The investigation is carried out methodically following Design Science approach. The EU research project SmartNets allows him a practical application and the validation of the concepts developed.

T. S. Witte

As a part of his dissertation, **Dipl.-Kfm. (FH) Tobias Sebastian Witte**, deals with the research area "organization of business intelligence", by creating a design science based approach for a process-oriented business intelligence specific organization model. One input for this model is a worldwide study in cooperation with the Business Application Research Center (BARC) in Würzburg which investigates the impact of a special organizational unit and important factors for an enterprise-wide integration of business intelligence. This model is designed to deliver advice for companies to change the today's often very technical IT-driven implementation of business intelligence towards a solution focusing more on business requirements.

X. Jiang

Servitization as a rising phenomenon has been gaining attention from both industries and scholars for decades. It has been considered as either an organizational strategy or a transition process that allows firms to conduct digital transformation and create value with customers. The use of information and communication technology is exceptional in implementing servitization strategy. Similarly, customer involvement also played the important role that cannot be ignored. Nevertheless, both of them are needed to be considered within the scope of business model in order to facilitate servitization process. In this context, **Ms. MSc. Engineer Xin Jiang** in her dissertation investigates deeply into servitization phenomenon with industrial partners, and develops company-based artefacts that provide tools, techniques, and models. The artefact is designed to deliver measurement and guidance for companies who intend to implement servitization strategy for digital transformation. The research is carried out methodically following Design Science approach.

Irmgard und Erich Schneider-Stiftung

The **Irmgard und Erich Schneider-Stiftung** (Schneider Foundation) is a longtime sponsor of WHU, in particular of the Chair of Business Information Science and Information Management. In 2012 and 2013, the Foundation supported student scholarships, research projects, numerous public and research activities of the school, and financed equipment of the IT laboratory **IT-Lab** at the chair.



IT-Lab of the Irmgard und Erich Schneider Foundation

Scholarships

A central goal of Schneider Foundation is the financial support of students by awarding **scholarships** to qualified and committed candidates of Bachelor and Master of Science programs. The team of the Chair of Business Information Science and Information Management is excited about the high number of scholarship fellows and the sustained close cooperation.

SAP Seminar

One major issue of the Irmgard and Erich Schneider Foundation is the practical preparation of students for their work as professionals. For this reason the Foundation sponsors the training system **SAP ERP IDES**, for interested students of the Bachelor and Master of Science as well as for the PhD program. SAP ERP IDES is an Enterprise Resource Planning (ERP) software



which allows students to work with realistic company data, and gather experience with core processes in organizations. The simulated business processes allow to use particular modules of SAP, and to experience production planning (PP), controlling (CO) and logistics (LO) contexts in realistic scenarios. For preparing and supporting the seminars, student tutors were engaged.

IT-Lab

In the past years, by help of Schneider Foundation, the IT-Lab has been equipped with high-level systems for communication, remote interaction and distributed cooperative work in order to simulate future work environments in management. The implemented devices and software systems enable telework also in the context of student seminars and collaborative research projects.



The IT-Lab's interactive whiteboard

An interactive whiteboard is a large interactive display in form of a classical white board. A projector projects a computer screen on the board's surface where users can interactively control software functionalities using a pen, finger, stylus, or other device.

Use of the IT-Lab

The following table provides an overview of some selected activities and initiatives that were held in the IT-Lab.

Activity	Topic
WHU projects	Working Group "Campus Management" Working Group "E-Learning / Blended Learning" SAP ERP Case Study Seminar
Further projects	Meetings of "FORUM MITTELSTAND at WHU" in cooperation with the Chamber of Commerce Koblenz (IHK Koblenz) Virtual meetings within the EU research project SmartNets Preparation meetings for EU project proposals Research meetings with fellow researchers