



Excellence in  
Management  
Education

# Activity Report 2015/2016

Chair of Business Information Science and Information Management  
[www.whu.edu](http://www.whu.edu)



# Table of Contents

	Page
Foreword	3
Obituary: Professor Dr. Thomas Fischer	4
1. Team	5
2. Teaching	7
2.1 Bachelor of Science Program	7
2.2 Doctoral Program	11
3. Theses	11
3.1 Bachelor of Science Program	11
3.2 Doctoral Program	12
4. Teaching Innovation	14
5. Research	14
5.1 Articles in Refereed Journals	14
5.2 Editorial and Reviewer Activities	14
5.3 Active Memberships to Scientific Organizations	14
5.4 Annual Conference of the Association for Cybernetics in Economy and Society at WHU	15
6. Executive Education & Corporate Connections	16
6.1 Review and Expertise	16
6.2 Presentation at IHK Koblenz Industrial Committee Meeting	16
7. Services Provided to the School	17
7.1 Irmgard und Erich Schneider-Stiftung	17
7.2 Other Services	17
8. Community Outreach	18
8.1 Forum Mittelstand on “Production and Services – How WHU Alumni successfully contribute to Digital Transformation in Small and Medium Sized Enterprises”	18
8.2 Forum Mittelstand on “Accounting and Data Protection for SMEs”	20

## Foreword



The past academic year brought a caesura for the Chair of Business Information Science and Information Management. In May, 2016, chairholder Professor Thomas Fischer passed away after a long struggle against his illness. A silent note in his honor is included on the next page.

In view of this mournful event, I am contented to say that Professor Fischer and the chair team within this year were able to prepare and carry out various successful events, and to provide numerous contributions to research and transfer, which are recounted in this activity report.

We are particularly glad about the continued positive reception of our teaching met by WHU students across the eight courses, lectures, excursions and seminars conducted by the chair, providing us with an excellent overall average evaluation of 1,5 (on a scale of 1 to 5). Five students decided for their Bachelor theses at the chair in spring 2016 on topics in the context of Digital Transformation. The latter has turned into a guiding theme, influencing the chair's research, teaching as well as community outreach activities. In January 2016, Dr. Waldemar Kraus has successfully finalized his dissertation thesis on the topic of knowledge-intensive services. Three further dissertation projects are ongoing at the chair, all of them as of today being well advanced towards completion.

The most significant event organized by the chair regarding the outreach to research and practice communities has been the Annual Conference of the Society for Cybernetics in Economy and Society (GWS e.V.) in October, 2015. The participants mainly from the German-speaking countries met for two days at WHU's Vallendar Campus to discuss current issues regarding the role of cybernetics, control and communication in organizations. Four key note speeches underlined the focus of the annual meeting as link between research and practice.

Two workshops have been held as part of the Forum Mittelstand event series, in November 2015 and April 2016 respectively. The first highlighted how WHU alumni successfully contribute to Digital Transformation in their family businesses. Opportunities and challenges of Digital Transformation were discussed with the participants. The second presented new regulations in the area of accounting and data protection, and showed ways to prepare for current and future challenges in this area as part of information management efforts. With about 80 participants, this event met with unanticipated positive response from regional businesses.

The close cooperation with the Department of Innovation, Environment and Energy at the Chamber of Industry and Commerce Koblenz (IHK Koblenz) was continued as part of the Forum Mittelstand events as well as through a newly founded initiative. The IHK Work Group Digital Economy intends to bundle research knowledge and resources on Digital Transformation in the Koblenz region, targeting at transfer of knowledge between research and industry.

A big thank you goes to all supporters of the chair in the past year in their various roles, be it the committee members of the GWS annual meeting, speakers at events and guest lecturers, and WHU staff and professors who have provided a substantial backing – particularly with respect to the commitment to chair activities that could not have been successfully carried out without them. As a personal note, we are happy to announce the marriage of the chair's research assistant Melinda Jiang and her husband which took place in January 2016. We wish the young married couple all the best for their future life!

Sven-V. Rehm for the chair team  
in September, 2016

## Obituary: Professor Dr. Thomas Fischer



Dear partners and friends of the chair,

after a long and admirable struggle against his illness, Professor Thomas Fischer has passed away on Sunday, May 8, 2016, in Stuttgart. We all experienced and appreciated him as an open, profound and wise conversationalist, as honest and caring personality, and as compassionate and strong associate.

As its founder, from 1984 to 2011, he was in charge of the Center for Management Research at the German Institutes of Textile and Fiber Research (DITF) in Denkendorf near Stuttgart. He held the Chair of Business Information Science and Information Management at WHU – Otto Beisheim School of Management for more than 20 years. Until summer 2011, he was also responsible for research and teaching in the field of management cybernetics at the Faculty of Engineering Design, Production Engineering and Automotive Engineering, University of Stuttgart.

In his academic career of more than 35 years, he guided more than 30 young scientists towards their doctorates, and a countless number of students to graduation. Each year he invited former students and colleagues to the Kesseldorffest at his Alsatian country house extending and maintaining his close personal relationships with co-workers throughout the years.

He was a researcher with heart and soul, and the personal relationships to his partners throughout Europe provided him momentum for his work.

His death fills us with deep sorrow, and our sympathy is directed to his family and all the people close to him. We have lost a sincere and special person in Thomas Fischer. We shall honor his memory in the gratitude of having known and worked with him.

In silent mourning, the team of the Chair of Business Information Science at WHU.

# 1. Team



*The chair team in September, 2014*



**Univ.-Prof. Dr. rer. pol., habil. Ing.  
Thomas Fischer †**

Chairholder



**Jun.-Prof. Dr.-Ing. habil. rer. pol.  
Sven-Volker Rehm**

Assistant Professor

Phone: +49 (261) 6509-364  
E-Mail: [sven-volker.rehm@whu.edu](mailto:sven-volker.rehm@whu.edu)



**Benita Otte**

Personal Assistant to  
Professor Fischer

Phone: +49 (261) 6509-361  
E-Mail: [benita.otte@whu.edu](mailto:benita.otte@whu.edu)



**Melinda Xin Jiang, M.Sc.**

Research Assistant  
(until April 2016) /  
External Ph.D. Student

E-Mail: [xin.jiang@whu.edu](mailto:xin.jiang@whu.edu)



**Dipl.-Ing. Sven Gross**

External Ph.D. Student

E-Mail: [sven.gross@whu.edu](mailto:sven.gross@whu.edu)



**Dr. rer.pol. Dipl.-Ing.  
Waldemar Kraus**

External Ph.D. Student  
(Disputation on January 21, 2016)

E-Mail: [waldemar.kraus@whu.edu](mailto:waldemar.kraus@whu.edu)



**Dipl.-Kfm. (FH)  
Tobias Sebastian Witte**

External Ph.D. Student

E-Mail: [tobias-sebastian.witte@whu.edu](mailto:tobias-sebastian.witte@whu.edu)

## 2. Teaching

### 2.1 Bachelor of Science Program

In the B.Sc. program, the chair offered 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 elements are practical exercises in modeling of business processes, and guest lectures by professionals focusing on the alignment of IT and business strategies.

The choice of topics is oriented at 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 and entrepreneurial success.

Experts from industry, telecommunication, ICT and research sectors illustrated the need for theoretical concepts and their relevance to practical problem solutions in the lectures. (For further information please consider the paragraph on "Guest Speakers"). A literature seminar entitled "Concepts, Methods and Technologies for Cooperative Work in Teams and Networks" was given to the Bachelor of Science class of 2016. 10 students selected the course and presented their thoughts on prominent issues discussed in recent scholarly literature. The topics covered questions such as how cross-functional teams handle surprising events, considering e.g. film crews or SWAT teams, or how fast-response teams, e.g. in health care emergency settings can coordinate, further issues discussed were practices and theories on knowledge exchange and communication in teams, coordination practices, or challenges to virtual organizing.

For the Bachelor class of 2018, the Management Abroad Course (MAC) India was offered – an excursion which led 30 students to Bangalore, Mumbai and Dahanu, 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. This hosting service is provided by SAP University Competence Center (SAP UCC) at Otto-von-Guericke-Universität Magdeburg (Fakultät für Informatik). Due to a financing of the Schneider Foundation, the chair is able to introduce students to this enterprise software. 30 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. Student participation is voluntary – we are thus particularly happy that regularly a good percentage of a class join the course in addition to their other obligations. Guided by the case studies, participants become acquainted with the SAP ERP system environment. Instructors accompany the course with additional information on the systems, 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.



## Management Abroad Course India

The Management Abroad Course (MAC) to India is part of the WHU's 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. 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 start-ups visited in the NASSCOM start-up center in Bangalore. The MAC course India was led by Dr. Rehm. 30 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.

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 firms of various sizes and contexts, involving leading multinational companies such as SAP, Infosys, or ERGO, but also local enterprises such as Grofers or Mirakle Couriers, and incubators for start-ups like NASSCOM. Students gain insights into the strategies adopted in order to compete in regional and global markets beyond firm boundaries, into business opportunities and into how local entrepreneurs break down institutional and financial obstacles to create disruptive start-ups. Sightseeing tours to Mumbai's Elephanta Caves and Bollywood's Film City or to local tribal villages added cultural and social elements to the course.



*The WHU BSC2018 Management Abroad Course India at the Grofers premises in Mumbai, India.*

### Course Overview

An overview of courses offered in the past academic year is provided in the table below.

<b>Business Information Systems I</b>	Lecture, 3ECTS, B.Sc. Program, BSc2017	Fall Term 2015, 20 students
<b>Business Information Systems I</b>	Lecture, 3ECTS, B.Sc. Program, BSc2017	Spring Term 2016, 17 students
<b>Business Information Systems II</b>	Lecture, 3ECTS, B.Sc. Program, BSc2017	Fall Term 2015, 20 students
<b>Business Information Systems II</b>	Lecture, 3ECTS, B.Sc. Program, BSc2017	Spring Term 2016, 16 students
<b>Concepts, Methods and Technologies for cooperative work in teams and networks</b>	Seminar, 3ECTS, B.Sc. Program, BSc2016	Spring Term 2016, 10 students
<b>Management Abroad Course India</b>	Seminar/Excursion, 3ECTS, B.Sc. Program, BSc2018	Spring Term 2016, 30 students
<b>SAP ERP Case Study Seminar</b>	Seminar, 1ECTS, B.Sc. Program, BSc2016	Spring Term 2016, 19 students
<b>SAP ERP Case Study Seminar</b>	Seminar, 1ECTS, B.Sc. Program, BSc2017	Spring Term 2016, 11 students

### Guest Speakers

As in previous years the chair invited outstanding professionals as guest 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, who inform about the efforts in managing and developing a business school's ICT operations and IT strategy.

The following table provides an overview of our guest speakers and their lecture titles.

	<p><b>Rob Copeland</b> Manager, SAP Global Competency Center, TRW Automotive</p>	<p>Delivering Value through Organizational Transformation Nov 26, 2015; April 19, 2016</p>
	<p><b>Dr. Christian Coppeneur-Gülz</b> CEO, WWM GmbH &amp; Co. KG</p>	<p>Application Service Providing Nov 19, 2015; April 7, 2016</p>
	<p><b>Mattia G.B. Crespi</b> CEO, Qbit Technologies Inc. and Foresight Practitioner, Institute for the Future (ITFF)</p>	<p>2025 Future Economy Ecosystems Nov 5, 2015; March 23, 2016</p>
	<p><b>Dr. Axel Emunds</b> Principal Consultant, T-Systems GmbH</p>	<p>Service Management based on ITIL Dec 3, 2015; April 4, 2016</p>
	<p><b>Thomas Martin</b> CEO, IT REVIEW GmbH</p>	<p>Project Management for Campus Management Systems Dec 3, 2015; April 20, 2016</p>

## 2.1 Doctoral Program

In early summer, a Ph.D. seminar on **Qualitative Research in Organizational Communication and Information Systems** was offered. The seminar participants evaluated their own dissertation projects from a qualitative research perspective: In a first step various qualitative methods were identified and discussed during a period of several weeks

in context of each thesis. In a second step, the participants presented and discussed in a colloquium how qualitative methods potentially contribute to their projects, and in what way the evaluation of their original approach has altered through considering qualitative methods.

## 3. Theses

### 3.1 Bachelor of Science Program

<b>Daniel Gadea</b>	Digital Transformation: Blockchain - Challenges and Opportunities for Business
<b>Ellen Mehrhoff-Roddewig</b>	Digital Transformation in Live Marketing
<b>Luca Neuendorf</b>	Development of the Knowledge Map – Empowering Small and Medium-sized Enterprises to Partake in Digital Transformation
<b>Raphael Meyke</b>	Digital Learning on a Corporate Level and its Implications on Learning Companies and Educational Institutions - What are the Blocking and Facilitating Factors for Learning Companies and Individuals to Keep Track with the Digital Transformation?
<b>Dennis Schweitzer</b>	Analyseansatz zur Identifikation von Wertbeiträgen neuer Technologien im Kontext Digitaler Transformation und Industrie 4.0. Analyseframework und Struktur eines Informationsportals

## 3.2 Doctoral Program

We are happy to announce that **Dr. rer. pol. Dipl.-Ing. Waldemar Kraus** has successfully finalized his dissertation thesis with the disputation on January 21st, 2016. His supervisors were Professor Thomas Fischer and Prof. Dr. Peter-J. Jost, Chair of Organization Theory at WHU. Title of Dr. Kraus' thesis is:

*The Smart Networking Blueprinting Method – Modeling for Integration of Knowledge-intensive Services into Value Added Networks*

*German title: „Die Smart-Network-Blueprinting-Methode – Modellierung zur Integration wissensintensiver Services in Wertschöpfungsnetzwerke“*

*Abstract:* New technology and new production processes are critical factors for organizational success. In a highly dynamic environment companies need to rely 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-manufacturers and production capacity. In this context, the thesis focused on new concepts and tools to:

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

Three further dissertation projects are ongoing at the chair:

**Tobias-Sebastian Witte** will defend his dissertation entitled

*Process-Oriented Organization Reference Model for Self-Service Business Intelligence*

*German title: “Ein prozessorientiertes Organisations-Referenzmodell für Self-Service Business Intelligence”*

in December 2016. Supervisors are Prof. Dr. Peter-J. Jost and Prof. Dr. Frauke Freifrau Marschall von Bieberstein, Director of the Institute of Organization and HRM (IOP), University of Bern, Switzerland.

*Abstract:* The thesis of Mr. 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.

**Sven Gross** has submitted his doctoral thesis to the school in August 2016. His supervisors are Prof. Dr. Peter-J. Jost and Assistant Professor Sven-V. Rehm. Title of his thesis is:

*Value creation with help of collaboration – Criteria of networking capability for innovation*

*German title: "Wertschöpfung über Kollaboration – Kriterien für Netzwerkfähigkeit zur Innovation"*

*Abstract:* 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 the Design Science approach. The EU research project SmartNets allowed him a practical application and the validation of the concepts developed.

**Melinda Jiang** is working on her thesis with the working title

*A Framework for Servitization: Enhancing Value Proposition through Customer Engagement*

Supervisors are Prof. Dr. Christina Günther, IHK-Chair of Small and Medium Sized-Enterprises at WHU, and Assistant Professor Sven-V. Rehm.

*Abstract:* 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. Jiang in her dissertation investigates deeply into Servitization phenomenon with industrial partners, and develops company-based arte-facts 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 the Design Science approach.

## 4. Teaching Innovation

Assistant Professor Rehm uses various dialogue-based teaching/learning approaches as part of lectures and seminars. Dialogue becomes the primary learning vehicle, enabling knowledge exchanges not only between lecturer and student, but between students who cooperatively discover relevant knowledge in dialogue between each other and eventually, experts from other domains. In the Management Abroad Course India for instance, students worked on Live Cases together with start-up founders. The founders, comprising experts from various domains such as Natural Sciences, Computer Science, Social Sciences, Work Organization and others, and focusing on business ideas in diverse industries, explained their business ideas in depth, including how the core business idea resonated with the Indian context as well as technical particularities of the target product/service and markets. Working towards the target objective to migrate the presented business idea to European or world markets, students of WHU managed to deeply dive into the given local and technical challenges, reflecting them with their previous business-related knowledge.

This iterative process takes place in several (on-site and virtual) conversations between students and founders, and eventually creates impetus on both sides: Founders being confronted with stimulating ideas and suggestions, and students trained in their comprehension and skills to respond to new and real challenges.

In the Ph.D. program seminar on qualitative research methods in Information Systems, a Re-confirmative Dialogue approach was taken. The established dialogue in this context involved the re-consideration of the students' own Ph.D. project as a qualitative research approach. Providing for a highly flexible framework to systematically create insights along established research methods, the configuration of the elements of a qualitative undertaking remains a core challenge and is trained during the seminar in an iterative cycle of discussions between the lecturer and student along several weeks. Even if in the end the student might not decide for a qualitative approach in his/her project, he/she is more assured on which elements of the research approach need further backing through qualitative considerations or argumentation.

## 5. Research

### 5.1 Articles in Refereed Journals

Rehm, S.-V., Goel, L., & Junglas, I. (2016). Information management for innovation networks – an empirical study on the “who, what and how” in networked innovation. **International Journal of Information Management**, 36(3), 348-359. DOI: 10.1016/j.ijinfomgt.2015.11.004.

Rehm, S.-V., Goel, L., & Junglas, I. (2015). Role of information systems in empowering innovation networks. *MIS Quarterly Executive*, 14(3), 87-103.

Rehm, S.-V., Goel, L., & Crespi, M. (2015). The Metaverse as Mediator between Technology, Trends, and the Digital Transformation of Society and Business. *Journal of Virtual Worlds Research*, 8(2), 1-6.

### 5.2 Editorial and Reviewer Activities

Ad-hoc reviewer activities were conducted by Dr. Rehm, among others, for the **European Journal of Information Systems** (EJIS) and the **Journal of Information Technology** (JIT).

### 5.3 Active Memberships to Scientific Organizations

Dr. Rehm is a Board Member of the **Association for Cybernetics in Economy and Society** / Gesellschaft für Wirtschafts- und Sozialkybernetik e.V. (GWS). In this role he has chaired the annual conference of the society in 2015 (see report below).

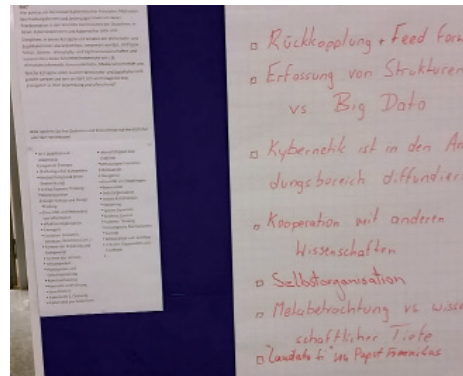
## 5.4 Annual Conference of the Association for Cybernetics in Economy and Society at WHU

This year's annual conference of the Association for Cybernetics in Economy and Society (GWS e.V.) took place on October 13 and 14 at WHU – Otto Beisheim School of Management in Vallendar, and was chaired and organized by the Chair of Business Information Systems and Information Management of WHU. The program entitled "Cybernetics – or control and communication in Organization and Society" comprised scientific and practice presentations. In an Open Space event, participants could discuss current topics and questions on the role of cybernetics in business, economy and society. Four key note speeches underlined the focus of the annual meeting as link between research and practice.

Professor Iris Junglas from Florida State University presented three studies that illustrated effects of new information technologies (IT) on businesses and how they also create societal challenges. Using examples from disaster management, crowdsourcing and IT consumerization she showed, which changes and opportunities result – but also, which urgent open questions are to be answered regarding our contemporary use of IT.

Dr. Werner Boysen, CEO of Dr. Boysen Management + Consulting GmbH, reported from an ongoing project in the context of business reorganization. In his presentation, he emphasized situations that bring about challenging management problems, and how they can be tackled through cybernetic approaches.

Dr. Kristina Lahl, Research Group Director at RWTH Aachen University, reported from her research in social cybernetics on the social aspects of Industry 4.0. Starting from Sigmund Freud's three insults of mankind, the cosmological (Copernicus, man is not center of the universe), biological (Darwin, man is the descendent of the apes), psychological (Freud, man is not master of his psyche), she developed her thesis of a fourth, intellectual insult. The latter originates from superior machine intelligence, which strongly influences communication, awareness and identity. In her presentation she underlined the resulting necessity to research the effects on anthropological, social and societal systems.



Board notes of participants in the Open Space area on GWS Annual Meeting at the WHU Vallendar Campus.

Professor Dr. Christian Scholz from Saarland University reported from a project on University governance and thus created a link to application of cybernetic methods in social systems, using a most recent education policy topic. His further explanations showed how alternative organizational structures of organizations can be described, simulated, and discussed. This involves identifying surprising and unexpected outcomes, which help identifying and potentially, preventing dysfunctional political decisions at an early stage.

The conference was chaired by Professor Thomas Fischer and Assistant Professor Sven-Volker Rehm of WHU. Annual meetings of GWS e.V. take place since 1982, conference proceedings are published with Duncker & Humblot, Berlin in their series *Wirtschaftskybernetik und Systemanalyse* (Management Cybernetics and Systems Analysis).

[www.gws-kybernetik.org](http://www.gws-kybernetik.org)

We would expressly like to thank the members of the GWS Conference Committee:

### from Science

- Prof. Dr. Stefan Grösser, Bern University of Applied Sciences
- Prof. Dr. Andreas Größler, Radboud University, Nijmegen School of Management
- Prof. Iris Junglas, PhD, Florida State University College of Business
- Prof. Dr. Peter Milling, University of Mannheim
- Prof. Dr. Bernd Schiemenz, Philipps-Universität Marburg
- Prof. Dr. Markus Schwaninger, University of St. Gallen
- Prof. Dr. Meike Tilebein, University of Stuttgart
- Prof. Dr. Falko E.P. Wilms, FH Vorarlberg University of Applied Sciences

### from Practice

- Dr. Edin Arnautovic, Robert Bosch AG
- Dr. Werner Boysen, Dr. Boysen Management + Consulting GmbH
- Dr. Thomas V. Fischer, Center for Management Research (DITF-MR)
- Dr. Susanne Krichel, Festo AG & Co. KG
- Dr. Armin Lau, Schaeffler Technologies AG & Co. KG
- Dr. Christoph von Mühlendahl, MAHLE Behr GmbH & Co. KG
- Dr. Tobias Winkler, Linde AG



## 6. Executive Education & Corporate Connections

### 6.1 Review and Expertise

As a co-founder of the MADONE network, in 2015 Dr. Rehm co-chaired several special sessions on academic and industry-related conferences. In the past academic year, one session was located at **MANUFUTURE**, taking place in Luxembourg, 23.-24.11.2015. MANUFUTURE is the premier event for the European manufacturing community, attracting around 900 participants. Manufuture is held every two years and aims to address topics of strategic importance for future challenges of the manufacturing industry and develop recommendations for national and European policy makers.

Another session entitled Holistic Design of Collaborative Networks was held at **PRO-VE'15 - 16th IFIP Working Conference on Virtual Enterprises**, in Albi, France in October 2015.

MADONE stands for Model-Based, Architecture-Driven Design and Operation of Networked Enterprises and brings together researchers from Universities such as the Norwegian University of Technology (NTNU) or the Silesian University of Technology, Poland, and various European companies. The network investigates and communicates novel approaches to creating and managing the future generation of enterprise networking. The network acts as a think tank that provides competencies and services regarding conceptions for enterprise networking, approaches to open IT infrastructures, methods for knowledge modelling and technologies to implement new types of context-rich digital workspaces. Its vision is to implement the future generation of work environments that allow creating cyber-physical systems and solutions offering novel value propositions for high-value added applications. MADONE acts as a mediator between research and practice and provides a breeding environment for cooperative research projects, in which real-life cases will be researched and demonstrated.

[www.MADONE-network.org](http://www.MADONE-network.org)



### 6.2 Presentation at IHK Koblenz Industrial Committee Meeting

On invitation by the Chamber of Commerce Koblenz (IHK Koblenz) Dr. Rehm gave a presentation as part of the IHK Industrial Committee meeting in June, on competences existing in the Koblenz and Mittelrhein region in context of Digital Transformation. In a preceding internet research supported by WHU students, regional key stakeholder of this trend have been identified. From this preliminary research, it could be shown that more than 100 professorships are active in related disciplines, 170+ companies potentially serve as solution providers regarding IT solutions, and more than 20 networks, web forums and event series actively promote topics related to this trend. About 15 organizations offer financial and organizational support for business development to interested companies.

The Work Group Digital Economy, coordinated by IHK Koblenz and Dr. Rehm, brings together researchers from three regional Universities, the University of Koblenz Landau, the Hochschule Koblenz University of Applied Sciences, and WHU – Otto Beisheim School of Management.

[www.top-wissenschaft.de](http://www.top-wissenschaft.de)



## 7. Services Provided to the School

### 7.1 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 the past academic year, 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

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.

As shown in the picture, a smartboard 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.



The IT-Lab's smartboard

#### 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 chair team is excited about the high number of scholarship fellows and the sustained close cooperation.

#### SAP Seminar

One major issue of the 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

### 7.2 Other Services

During the past academic year, various recommendations have been prepared for students, including letters of recommendations for Friedrich-Naumann-Stiftung, the German-American Fulbright Commission, and Stiftung Industrieforschung.

## 8. Community Outreach

The **Forum Mittelstand** is an event series of executive meetings on WHU's Vallendar campus typically involving entrepreneurs, Managing Directors and leadership staff of foremost regional small and medium sized enterprises (SMEs) who meet for an afternoon to discuss on recent or pressing topics to business and management. Regularly, key notes serve as impulse to foster exchange of views and insights, and concise hand-on workshops stimulate self-reflection of participants by evaluating their own corporate situation with help of guided analysis methods.



Objective of Forum Mittelstand is to inform regional SMEs on new scientific insights in order to contribute to the economic and innovation capability of the regional firms. Forum Mittelstand is co-funded and organized in close cooperation with the Chamber of Industry and Commerce Koblenz (IHK Koblenz). It is a cooperation of three chairs at WHU, the IHK Chair of Small and Medium Sized Enterprises (Prof. Dr. Christina Günther), the chair of Business Information Science and Information Management (Prof. Dr. Thomas Fischer), and the Chair of Sales Management and Business-to-Business Marketing (Prof. Dr. Ove Jensen).

[www.forum-mittelstand.whu.edu](http://www.forum-mittelstand.whu.edu)

Two events have taken place in the previous academic year with support from the chair:

### 8.1. Forum Mittelstand on “Production and Services – how WHU Alumni Contribute Successfully to Digital Transformation in Small And Medium Sized Enterprises”

As part of the WHU Forum Mittelstand event series, on November 11th, 2015, the second entrepreneurs' meeting in 2015 took place. Representatives of regional businesses, experts from academia and practice and WHU alumni discussed opportunities and challenges of Digital Transformation in SMEs.

Digitalization becomes increasingly relevant to our private and professional life. As part of this mega-trend, the topic Digital Transformation also gains significant relevance for medium-sized businesses. Currently, topical terms such as Big Data, IT Security, Privacy, Industry 4.0, smart factory or Cloud Computing dominate the public discourse. Only rarely is reported or discussed how now and particularly in future, the transformation processes show in SMEs and how they will actually influence individual business models. In this Forum Mittelstand event, young entrepreneurs – all of them WHU alumni and today responsible leaders in their family businesses – presented on basis of their own experiences in diverse industry sectors, how opportunities arising from Digital Transformation can be seized in order to gain resilience towards permanently changing technological possibilities in their respective markets.

After a welcome note by Ralf Lawaczeck of IHK Koblenz, Prof. Dr. Thomas Fischer gave some introductory remarks on the topic, thereby particularly stressing the inevitability of digitalization. The technological development, he remarked, penetrates all value-added processes and changes also society. He recommended to openly approach innovation, to learn from the competition and to actively involve customers into the own corporate innovation processes.

As the first speaker of the afternoon alumna Julia Kasper presented her company holzgespür. Having grown up in the family's carpentry business, during her studies at WHU, Kasper developed a business plan for their start-up project, an online platform for individual, custom-made furniture from local quality woods. Who orders a table from holzgespür can co-design the table in a web-based 3D-design software online. The manufacturing process is accompanied by Kasper's team with the camera, allowing customers to participate to the production process from tree to table. In this way, Kasper does not only intend to make her father's business fit for the future, but also to offer a digital platform to other carpenters in the future. "Changes are quiet, fast and sustainable," she explained and advised the audience to prepare for change as early as possible.

Also alumna Milen Volkmar is entrepreneur in her family's business. When her father founded the IT Provider Q-Soft in 1990, Digitalization and Big Data were still far away. Volkmar focuses today on development and integration of digital assistive systems, the Q/M/S mediasystem, which is intended to particularly help elderly people to sustain their self-defined life in their own home environ-

ment. The user-friendly system can be connected to any home television system on basis of a modular and platform independent architecture, and provides features such as medication alarms, calendar functions, automated status inquiry, in order to allow for age-based living as intended by AAL (Ambient Assisted Living). Missing integration options of the diverse products on the AAL market and lacking readiness of actors in the segment to cooperate with each other are some of the core challenges Milen Volkmar is facing.

Consequently, alumnus Dr. Christian Coppeneur-Gülz provided insights into his company WWM Live Marketing Solutions. Originally founded by his father in 1977 under the name of Werbewerkstätten Monschau as a firm in the exhibition booth business, after the millennium turn the challenge was to stay competitive in a market shrinking due to internet and globalization. Coppeneur-Gülz started an experiment and turned towards Digitalization of Live Marketing. First, he digitized individual graphics, print and marketing materials of his customers; after, virtualized the booth design process. Today his company is capable of delivering exhibition booths within 48 hours within previously defined margins and all requested marketing materials on the spot.

As a final element of the program, Professor Fischer presented the Ph.D. thesis of his research assistant, M.Sc. Melinda Jiang. Jiang develops an approach to evaluate the potential for Servitization of the company's value chain and its products/services, in order to support individual efforts for digital transformation. Various participating firms responded to the offer to partake in separate analysis meetings.



Ms Milen Volkmar at the Forum Mittelstand event in November 2015.

## 8.2. Forum Mittelstand on “Accounting and Data Protection for SMEs”

German event title: „Neue Grundsätze zur Buchführung – eine Herausforderung für das Informationsmanagement der Unternehmen“

In his opening remarks at the event on April 20, 2016, Professor Dr. Markus Rudolf, Dean of WHU – Otto Beisheim School of Management, mentioned the longstanding cooperation between WHU and the Koblenz Chamber of Industry and Commerce (IHK) as a good example of the linkages between science and practice. For Ralf Lawaczek of the IHK, the fact that the first Forum Mittelstand of the year 2016, with some 80 participants, was particularly well-attended also demonstrated the high practical relevance of the topic chosen: “New principles for accounting – a challenge for enterprises information management.” Representatives of SMEs in the region joined with experts to discuss the new principles of proper maintenance and preservation of ledgers, records and documents in electronic form and of data access (GoBD), the implications of these principles for businesses, and strategies for improving credit ratings in the SME sector.

“The rules under GoBD do not have the power of law and are nothing more than an expression of opinion on the part of the fiscal authorities,” noted Helmut Heimfarth of the auditing firm ETL-Heimfarth & Kollegen in his lecture on a new set of rules introduced on November 14, 2014, by the German Federal Ministry of Finance. Heimfarth emphasized that it is still important to deal with the provisions of GoBD as a matter of successful business management and as a way to protect one’s own business. While the taxpayer determines the form and content of the documents, it is in one’s own interest to ensure that postings and records cannot be modified after the fact; records need to be permanently stored, and the protective measures prescribed in GoBD must be met in that all documents are documented in the main ledger. The goal is to preserve the state of data in a way that will permit evaluation by third parties.

A practical guide to GoBD process documentation, now a test point in tax audits, was provided by Thomas Martin, CEO of IT REVIEW GmbH. The structures of SMEs were once characterized by separate departments and classical financial accounting. Today, however, there are complex ERP systems in place that interlink all corporate processes. This is why documentation procedures and processes need to be described in order to demonstrate that the GoBD principles of proper accounting have been met, Martin said. The procedure documentation includes a description of the business process, user documents, technical system documents and operating documents, and it has to be auditable by an expert in a reasonable amount of time. While this means more expense, “a person should view the GoBD as an opportunity to review his or her company in terms of IT security,” Martin pointed out.



*Mr. Helmut Heimfarth presents novelties arising from new regulations on accounting procedures and information systems.*



*Mr. Thomas Martin explains the requirements to prepare Accounting Procedure Documentations.*

Rüdiger Mönkhoff, Managing Director of RDG Management-Beratungen GmbH, ventured a change of perspective in his remarks, entitled “How does your bank tick? – Strategies for securing and improving creditworthiness among SMEs,” by approaching an assessment of business records from the point of view of a bank. “What is the central rating criterion when it comes to assessing creditworthiness?” Mönkhoff asked the audience. Aside from equity, net working capital, the personality of the businessperson, collateral and corporate strategies, banks were mainly interested in a company’s debt service capacity, which is determined on the basis of the most recent balance sheet. However, banks can derive debt service capacity from the outcome of a business assessment. This is why businesspeople should know the right result of their own business assessment in order to generate calculation of debt service capacity from the business assessment if the previous year’s debt service capacity is not sufficient, Mönkhoff said.





WHU - Otto Beisheim  
School of Management

Chair of Business Information  
Science and Information  
Management  
Campus Vallendar  
Burgplatz 2 · 56179 Vallendar  
Germany

Fon +49 261-6509-361  
benita.otte@whu.edu

[www.whu.edu](http://www.whu.edu)

Visit us:

