



10th R&D Autumn Conference 2016 · October 20/21, Ravensburg, Germany

Product Innovation in a Connected World

Thursday, October 20

Hotel Altdorfer Hof, Weingarten

12:30 Get Together and Standing Lunch

14:00 Afternoon Session

Welcome & Introduction

Martin PAPIING · Kontrapunkt Technology · Konstanz (Germany)

Sharing Best Practices

10 things to know about developing an IoT device

David GRIFFIN · 42 Technology Ltd · St. Ives / Cambridge (Great Britain)

Automotive

Connected Retail in the Automotive Industry

Alexander GRAGES · Audi AG · Ingolstadt (Germany)

Connectivity Solutions

Linking the World of Eco Systems

Joachim LYSZUS · Diehl Controls · Wangen (Germany)

Printed Electronics

The Next Level of Paper Communication

Friedrich EIBENSTEINER · Prelonic Technologies / Papertronic GmbH · Linz (Austria)

Printed Electronics

Connect Everyday Things with Interactive Devices by Printed Electronics

Karin WEIGELT · Prismade Labs GmbH · Chemnitz (Germany)

18:00 End of Afternoon Session

20:00 Dinner, afterwards: informal Get Together at the Bar

Friday, October 21

Ravensburger Spieleverlag, Ravensburg

08:30 Transfer to Ravensburger Spiele

09:00 *Games and Toys*

Technology in Board Games Needs Good Stories

Clemens TÜRCK · Ravensburger Spieleverlag GmbH · Ravensburg (Germany)

Gamification in Process Development

Beyond Boxes And Arrows: Tangible Process Development

Patrick BETZ · Schweizerische Epilepsie-Stiftung · Zürich (Switzerland)

Smart Home

Trends and Solutions in a Connected Kitchen

Marijn BOUWMAN · B/S/H/ Hausgeräte · Giengen (Germany)

Innovation in Manufacturing

3D Printing as a Key Technology to Digitalize Manufacturing

Marcel FÜHREN · Leader Research & Technology · Zürich (Switzerland)

12:00 Lunch

13:00 **Factory Tour**

14:00 End of Conference

The Contributions in Detail

Sharing Best Practices

10 things to know about developing an IoT device

42 Technology is a technology innovation and product development company that has been working with clients to create products and manufacturing processes in the medical, consumer and industrial sectors since 1998. In this talk David outlines some of the technical and commercial lessons 42 Technology have learnt in recent years while developing IoT devices for industrial, consumer and utility applications, working with clients ranging from startups to global multinational companies. It will focus particularly on what happens from the first idea through prototype stage to the first batch of truly representative products deployed into trials, and will include a combination of anecdotes, fundamental principles, and cautionary tales. And in such a fast moving area, it's sure to be out of date by the time David finishes talking ...

David GRIFFIN · 42 Technology Ltd · St. Ives / Cambridge (Great Britain)

Automotive

Connected Retail in the Automotive Industry

Audi is one of the world's leading premium brands for high-quality and technologically advanced cars, which are amongst the most sought after on the international market. The digitalization in the automotive retail world combines customer insights with new business models. A seamless customer experience in the automotive industry is no longer limited to sales or after sales. It is not only an opportunity to become more customer oriented but is also a risk, allowing new players to enter this field. Traditional industries are forced to compete with agile and technologically advanced startups in many ways. These cannot be ignored, and they help accelerate the speed of transformation. To introduce a seamless customer experience successfully, one which supports an omni-channel approach in the networked retail world, it is not only a question of new technologies but also a case of organizational or even cultural (r)evolution.

Alexander GRAGES · Audi AG · Ingolstadt (Germany)

Connectivity Solutions

Linking the World of Eco Systems

Diehl Controls is among the world's leading manufacturers of electronic components for the domestic appliance industry. Products include hardware and software for intelligent energy management systems, designed to reduce energy consumption, save costs and improve living environments in modern homes. In his talk Joachim will describe how Diehl Controls developed its Smart Home business into a broader offer - Diehl Connectivity Solutions. Special focus will be given to the experience Diehl made in B2C- and B2B-relationships and how Diehl managed to develop an Eco System.

Joachim LYSZUS · Diehl Controls · Wangen (Germany)

Printed Electronics

The Next Level of Paper Communication

Printed Electronics use printing technologies to produce electronic devices on film, paper or cardboard. Thin, lightweight, flexible and inexpensive, this technology promises to provide dynamic, interactive information and entertainment in magazines, leaflets and packaging. After many years of intensive research and development, this technology is now ready to combine single elements into functional modules which can be integrated into everyday products. In his talk, Friedrich will start from a practical perspective and share his experience in various customer projects: what Printed Electronics can deliver, what the critical success factors are, and where the pitfalls are during development and marketing. In conclusion, Friedrich will give an estimation of the huge market potential, showing the high expectations of the company, and fantastic possibilities of printing paper and films.

Friedrich EIBENSTEINER · Prelonic Technologies / Papertronic GmbH · Linz (Austria)

Printed Electronics

Connect Everyday Things with Interactive Devices by Printed Electronics

Prismade Labs GmbH is a technology development company based in Chemnitz, recently founded by Jan Thiele and Karin Weigelt - the inventors of the Touchcode technology. Touchcode is still one of the few successful printed electronics technologies. It is used globally in a variety of applications from gaming to marketing and brand enhancement. Leveraging 10+ years of experience in their field, the two founders continue to develop new technologies, now based on mass printing functionalities, enabling the Internet of Things even on everyday paper. Karin will talk about experience and lessons learned with new products, new application concepts and the latest developments in printed technologies, suggesting answers to the question: "How can everyday things connect with interactive devices all around us?"

Karin WEIGELT · Prismade Labs GmbH · Chemnitz (Germany)

Games and Toys

Technology in Board Games Needs Good Stories

Ravensburger is Europe's leading manufacturer of puzzles, games and activity products, as well as the leading publisher of children's and youth's books in the German-speaking world. Clemens Türck will describe how Ravensburger, which came from a world of mainly paper and cardboard products, gradually introduced electronics and digital devices into their products. Ravensburger now achieves 30% of its turnover in Germany with these so called hybrid products. For a content-driven company like Ravensburger however, it is very important that technology is seen as the vehicle, not the driver.

Clemens TÜRK · Ravensburger Spieleverlag GmbH · Ravensburg (Germany)

Gamification in Process Development

Beyond Boxes And Arrows: Tangible Process Development

For more than 100 years the Swiss Epilepsy Centre in Zurich has been dedicated to diagnosing, treating and caring for children, adolescents and adults suffering from all forms of epilepsy. In the meantime, it has developed into a modern interdisciplinary neurological centre. In its new services development, the use of tangible simulation or gamification tools has produced good results. Gamification has been used for some time. In product and service development however, tangible simulation or gamification tools are rarely used. In this presentation Patrick will show how people can be engaged in process development by simply letting them have fun. He highlights hands-on process analytics and improvement by teasing out the «inner child» in people.

Patrick BETZ · Schweizerische Epilepsie-Stiftung · Zürich (Switzerland)

Smart Home

Trends and Solutions in a Connected Kitchen

B/S/H/ Hausgeräte GmbH is the largest manufacturer of home appliances in Europe and one of the leading companies in the sector worldwide. With a portfolio of 14 brands, B/S/H/ covers a wide range of consumer needs. In her talk, Marijn will give insights about the latest developments in the connected kitchen.

Marijn BOUWMAN · B/S/H/ Hausgeräte · Giengen (Germany)

Innovation in Manufacturing

3D Printing as a Key Technology to Digitalize Manufacturing

3D Printing, also known as Additive Manufacturing, is advancing exponentially, and will certainly revolutionize the economy within the next few decades, both from a consumer and from an industrial perspective. In his talk, Marcel will provide an overview of the current status of the technology that is now transitioning from prototyping to series manufacturing stage, and elaborate on materials and design standards that are currently available. A special focus will be given to the IP/SW-centric business eco-systems that are enormously evolving, and how this form of digitalization could disrupt current business models and make customer-specific manufacturing - driven by economies of scope – quite attractive.

Marcel FÜHREN · Leader Research & Technology · Zürich (Switzerland)

How to Get to the Conference

On **Thursday, Oct 20**, the conference will be held in the **Hotel Altdorfer Hof** in **Weingarten**:

① **Hotel Altdorfer Hof**

Burachstraße 12
88250 Weingarten
+49 751 5009 0
www.altdorfer-hof.de



On **Friday, Oct 21**, we will transfer to **Ravensburg** after the breakfast:

② **Ravensburger Spieleverlag GmbH**

Robert-Bosch-Straße 1
88214 Ravensburg
+49 751 86 0
www.ravensburger.com

