



Call for Papers, Presentations, and Participation

# Customization 4.0

Elevating Mass Customization to a New Level

## About the MCPC 2017 Conference

**Mass customization and personalization (MCP)** strategies aim to profit from the fact that people & businesses are different. Their objective is to **turn customer heterogeneities into profit opportunities** by realizing “long tail” business models with near mass production efficiency.

Mass customization can go far beyond the sheer individualization of products and services. The MCPC 2017 wants to stimulate research and practice that see MCP as an opportunity to extend or even revolutionize current business models. The current trends of Industrie 4.0, digital manufacturing, and the rise of smart product ecosystems allow for a fresh perspective on MCP: **Customization 4.0**.

The conference also places a new set of values in the center of the debate. A world with finite resources, global population growth, and exacerbating climate change needs smart thinking to engage the most effective capabilities and resources. The MCPC 2017 wants to discuss **how Customization 4.0 fosters sustainable development and creates shared value** for companies, customers, consumers, and the society as a whole.

While the conference is devoted to sharing and discussing the latest research in the field, the MCPC 2017 has a **strong focus on real life applications**. This makes the MCPC truly unique. It strives to **connect thought leaders, technology developers, and researchers with corporate entrepreneurs** putting these strategies into practice. We organize the MCPC 2017 as a multi-track conference featuring a combination of high profile keynotes with expert talks, exhibitions, panel discussions, paper sessions, workshops, receptions, lab tours, and much more.

### Nov 19, 2017 Pre-Conference Day

PhD-Workshop at  
RWTH Aachen; Project  
Meetings; Workshops;  
MCPC Alumni Meeting

### Nov 20, 2017 1<sup>st</sup> Conference Day

Plenary Presentations;  
Networking Sessions;  
Exhibition; Research &  
Practice Tracks.  
Conference Dinner

### Nov 21, 2017 2<sup>nd</sup> Conference Day

Plenary Presentations;  
Exhibition; Research &  
Practice Tracks;  
RWTH Lab, Cluster,  
and Demofactory Tours

## Conference Venue

**RWTH Aachen University** is the proud host of the MCPC 2017. It is among the leading European scientific and research institutions. 45,000 students and more than 10,000 academic and supporting staff members build a vibrant community. Recent rankings and international assessments attest the RWTH graduates' ability to handle complex tasks, to solve problems constructively in teamwork, and to take on leadership roles.

Many new products and processes originate in Aachen. In the research laboratories and testing facilities of RWTH, for example, the first all-metal aircraft was developed, as was the diesel soot filter. This is where the first wind tunnel and the first particle accelerator stood.

This trend-setting innovative capacity has a long history in **Aachen, the City of Science**. With more than 1,400 start-ups from RWTH Aachen University, Aachen has become the city with the highest density of university spin-offs and engineering offices in Germany. The recent development of the RWTH Campus is facilitating this development strongly.

Aachen is Germany's westernmost major city at whose city boundaries three nations with three languages converge. The city has a population of 260,000, which includes about 55,000 students & academics from across the world. Its lively student community lends the city just as much character as its history. The historic city center and an abundance of bars, cafés and restaurants combined with the nearby nature parks make Aachen a wonderful place to visit.

Aachen's central location and direct access to the European high-speed rail network offers quick access to numerous European cities, such as Brussels, Köln and Düsseldorf, Amsterdam or Paris. Five international airports (CGN, DUS, BRU, MST, FRA) are within a 60-90min distance.

The venue for the MCPC 2017 is the **Pullman Aachen Quellenhof Hotel**, a first class hotel with its own hot spring and natural spa.

## Academic Conference Chairs

**Prof. Dr. Frank T. Piller**  
*Director of the TIME Research Area,  
RWTH Aachen University*

**Prof. Dr. Günther Schuh**  
*Director at the Laboratory for Machine Tools  
and Production Engineering (WZL), RWTH  
Aachen University*

## Organizing Committee

**Stephan Hankammer & Ning Wang**  
*Academic Track Chairs*

**Christian Gülpen**  
*Industry Track Chair*

Contact us at [hello@mcpc2017.com](mailto:hello@mcpc2017.com) and  
check the website [www.mcpc2017.com](http://www.mcpc2017.com) for all updated information!

## Call for Papers & Presentations

For the MCPC 2017, we are looking for **contributions in cutting-edge research** as well as **innovations and case studies from business practice**. We invite you to submit your work addressing the conference topics listed below. We will give priority to papers on the main theme, although we will also consider papers on related MCP topics. All papers must be written in English.

**To offer a balanced conference program, we equally invite papers from practical and academic backgrounds.**

- **Practice Experience, Company Presentations & Corporate Best Practices:** We invite entrepreneurs and domain experts from the practice to **present your experiences and learnings** on your way to **sustainable MCP**. Please **submit an abstract or speaking outline** of your presentation. Presentations should not contain any commercial messages, but need to focus on learnings and experiences of building and running a MCP enterprise or business unit. There is no special formatting or space requirement for this requirement, just submit thoughtfully what the program committee needs to know to evaluate your proposal.
- **Academic research for full presentations:** Submit a conceptual, empirical or experimental paper of approximately 5000 words. If the paper is accepted after a blind peer review process, you will be given a 15 minutes slot to present in a conference session. Accepted papers will be published (**optional**) in a Proceedings book published by **Springer** and will be fully indexed with ISBN, ISSN, and DOI).

Decisions to present in this category will be based on full short papers only. However, you are invited to submit a brief abstract (up to 1000 words) with the theme and method of your research to get an initial informal feedback whether your research fits the focus of this conference.

- **Academic research for short presentations:** Submit an extended abstract / short paper of approximately 1000 words. If the paper is accepted after a blind peer review process, you will be given, in addition to space in a research exhibition, a slot at a breakout session to pitch your key ideas in front of a large audience.

All **academic abstracts & papers** should include title, author(s), keywords and a short presentation of the manuscript text. Please use the **Springer's templates and guidelines** at <http://www.springer.com/computer/lncs?SGWID=0-164-6-793341-0>. Although these guidelines are prepared for LNCS, Springer recommends them for all conference proceedings.

Submit all abstracts, full (academic) papers and practice speaking proposals via the **Online Conference System (OCS)** made available by Springer.

The **submission system opens in April 2017**. Once the system is open, create your registration for login, enter the required data about your paper, and upload a PDF copy of your paper or proposal.

We will publish the **Proceedings in cooperation with Springer**. All full papers will be available on Springerlink, if their authors want to choose this option. Short papers and keynote abstracts will be published in a format available to conference attendees only.

## Conference Topics & Tracks

### Track I: Customization & Personalization via Smart Products

The rise of smart products enabled by advancements in ICT (e.g. integrated sensors, microprocessors, big data technologies, machine learning etc) lead to a new thinking for MCPC and offer great opportunities for meaningful customization and data-driven service personalization.

Topics in this track include, but are not limited to:

- Role and Value of Smart Products for MCP
- Co-Creation and User Innovation with Smart Products
- Smart Product Service Systems
- Technical Foundations of Personalization via Smart Products
- Data Analytics for Smart Services
- Product Platform/Ecosystem Development

### Track II: Digital Manufacturing

Digital manufacturing has the potential to fundamentally change the way we make things, challenging current modes of thinking and established theories and practices surrounding the manufacturing firm. Moreover, Digital manufacturing is becoming a core driver of flexibility and ultra-high variety in the firm.

Suitable topics include, but are not limited to:

- Technology Developments in Digital Manufacturing
- Business Model Innovation for Digital Manufacturing
- Glocalization
- Flexible Automation and Reconfigurable Manufacturing
- Process Modularity and Process Platforms
- Additive Manufacturing & 3D Printing
- Advanced Robotics

### Track III: Sustainability and Mass Customization

Environmental challenges around the world and the exacerbating climate change have sparked a global debate about ecological thinking and sustainable production and consumption.

Companies experience an increasing demand for developing so called "Win-Win-Win"- strategies, which are sustainable in terms of economic, social and environmental aspects. In accordance with this rising challenge, we invite contributions that work out the potential of MCP to be not only an economically but also an environmentally and socially beneficial business model.

Suitable topics include, but are not limited to:

- Economic, Social and Environmental Value of MCP
- Sustainable Supply Chain Management
- Co-Creation and Sustainable Consumption
- Societal Need Satisfaction through MCP
- Design for Adaptability and Upgradability
- Sustainable Product Service Systems (Sustainable PSS)

### Track IV: MCP Success Factors

In addition to the dedicated themes of the MCPC 2017, we invite **submissions also on the evergreen topics of MCP research and practice**. This large track also especially invites successful MC entrepreneurs to share their experiences.

Suitable topics include, but are not limited to:

- MCP Best Practices and Business Models
- MCP Strategy, Capabilities, and Organizational Culture
- MCP Marketing and Consumer Behavior
- MCP Operations Management & Logistics
- MCP Configuration Systems and Toolkits for Co-Design
- MCP in Diverse Cultural Settings

## Important Dates

- Abstract submission: **1 May 2017** (optional opportunity to get initial feedback with 3 weeks)
- **Academic Paper and Practice Proposals submission due at 01 July 2017**
- Acceptance decisions: 31 July 2017
- Deadline for Early Bird Registrations: 30 Sept 2017
- MCPC 2017 Conference: **19-21 November 2017**

## The MCPC 2017 Conference Policies

The MCPC is organized in form of an **academic community conference**. All **presentations are selected in a peer-review process** by a broad conference program committee, supervised by an Advisory Board of experienced experts in the field.

**We try to keep attendance fees as low as possible** to enable a broad conference experience for all participant groups at a reasonable price. This policy also demands that **every conference participant, being it a presenter, keynote, conference chair, or regular participant, has to register and pay the participant fee**, as it is common practice for conferences in the academic community. A few scholarships are available to support the participation of people with limited funds.

## The History of the MCPC

The MCPC conference series was initiated by Prof. **Mitchell Tseng** (at this time at HKUST, now at Feng Chia University in Taiwan) and Prof. **Frank Piller** (at this time at TUM, now at RWTH) in 2001 as a biannual, interdisciplinary community gathering for all persons interested in technologies, business models, strategies, and consumer behavior for mass customization and personalization. The conference always had a highly interactive character despite its size of up to 600 participants. Previous conferences have been hosted by HKUST, TUM, MIT, HEC, Aalto U, UC Berkeley, Aalborg U and UQAN. In 2017, RWTH Aachen will become the host of the MCPC.



MCPC 2015, University of  
Quebec  
Montreal, Canada



MCPC 2014, Aalborg  
University  
Aalborg, Denmark



MCPC 2011, University of  
California Berkeley  
Berkeley, California



MCPC 2009, Aalto University  
Helsinki, Finland



MCPC 2007, MIT & HEC,  
Cambridge/Boston &  
Montreal



MCPC 2005, HKUST,  
Hong Kong & Hangzhou



MCPC 2003, TUM  
Munich



MCPC 2001, HKUST,  
Hong Kong