



2ND ANNUAL

UX INNOVATION & CABIN DESIGN FORUM FOR NRMM

19th – 20th September 2019, Bonn, Germany

VENUE



FEATURED

- How to create a connected workspace
- New cab trends and disruptive design principles
- Hear insights on the evolution of HMI under the push towards autonomous machinery

INCLUDING

ON-SITE INTERVIEW WITH END CUSTOMER FROM FARMING

SPEAKER PANEL

CHAIR:
Christoph Müller
CEO
MobileTronics

Hannu Karvonen
Senior Scientist –
Ecosystem Lead for
Autonomous Systems
VTT Technical
Research Centre
of Finland

Neil Mylet
Farmer, Mylet Farms
Chairman, MyletX

Rebecca Cooke
Senior Human Factors
Engineer
JCB

Tom Brodersen
Director of Advanced
Engineering
Sears Seating

Michael Jendis
Executive Director,
Commercial Vehicles
Preh

Eemeli Haverinen
Lead HMI Designer
Sandvik Mining &
Rock Technology

Jürgen Keller
Product Manager,
Mobile Port Machinery
Sany Europe

Achim Kramer
Chief Engineer, Off-
Highway
RWTH Aachen
University

Wanja S. Steinmaier
Managing Partner
Lumod – Design |
Strategy | Consulting

NEW AGE DESIGN & USABILITY

08.30 Registration, Morning Coffee

09.00 Opening Address from the Chair **Christoph Müller**,
MobileTronics

09.15 Evolution or Disruption: Different Roads to Autonomous & Interconnected Mobile Machinery

- What are the main drivers & challenges for automation?
- Introducing the FutureSite test center of RWTH Aachen University
- Understanding the construction site as a system of systems
- Using a model-based system engineering approach to derive disruptive concepts

Achim Kramer
Chief Engineer, Off-Highway
RWTH Aachen University

10.00 How to Profit from Industrial Design

- Understanding the true value of industrial design
- Creating innovation by cooperation
- Lowering costs and enhancing success
- Delivering full scale user experience

Wanja S. Steinmaier
Managing Partner
Lumod – Design | Strategy | Consulting

10.45 Networking Break – Business Card Exchange

END CUSTOMER'S POV

11.15 Making Your Innovation Strategy More Relevant

- Is innovation taking the operator out of the machine too soon?
- Making your brand more relatable: Are you still taking into account the consumer's bottom line?
- Building machinery that drives both technology and consumer happiness

Neil Mylet
Farmer, Mylet Farms
Chairman, MyletX

12.00 INTERVIEW WITH END CONSUMER

OEM interview with farmer & innovator. Hear the consumer's perspective on new cabin trends, operator safety concerns, information flow on the job, and concerns for autonomous machinery

Neil Mylet
Farmer
Mylet Farms

Jürgen Keller
Product Manager, Mobile Port Machinery
Sany Europe

12.30 Luncheon

13.30 Enhancing Operator Environment

- Testing methods and technology to improve rider experience and long term health
- Sitting more intelligently; making a smarter seat for more comfort and reduced transmitted vibrations
- Optimizing the operator's experience

Tom Brodersen
Director of Advanced Engineering & Market Intelligence
Sears Seating

14.15 Human-centric Design Evolution

- Emerging user behavior; is new machinery changing the user or are new users changing the machines?
- How will the increased level of connectivity & automation influence future design trends?
- New ways to gain an understanding of the user's needs

Eemeli Haverinen
Lead HMI Designer
Sandvik Mining & Rock Technology

15.00 Coffee Break

15.30 The Next Level of HMI Development

- Doing more with less: how is the next generation of operator interfaces going to be shaped?
- Balancing more connectivity with intuitive understanding; what's the best approach?
- Bringing next level HMI into cabin design

Michael Jendis
Executive Director, Commercial Vehicles
Preh

GROUP SESSION

16.15 – 17.15

Exchange feedback with your peers on the topic:

STRIKING THE RIGHT BALANCE

- Leveraging operator engagement in highly-automated machinery; Too little tasks = operator boredom/fatigue

Moderator: **Conference Chair**

17.15 Closing Word from Chair. End of Day One.

17.30 Networking Drink Reception

BUSINESS DEVELOPMENT OPPORTUNITIES

Does your company have services, solutions or technologies that the conference delegates would benefit from knowing about? If so, you can find out more about the exhibiting, networking and branding opportunities available by contacting our sponsorship division. Check our website for more details www.tbmgroupp.eu

ON THE WAY TO AUTONOMOUS MACHINES

08.45 Morning Coffee

09.00 Human Factors Challenges in Autonomous Machines

- Relevant human factors issues and challenges of autonomous machinery
- Some human factors approaches to tackle the challenges
- Human factors engineering implications to be taken into account in the development of autonomous machines
- Design process implications of autonomous machines from the human factors POV

Hannu Karvonen
Senior Scientist
Ecosystem Lead for Autonomous Systems
VTT Technical Research Centre of Finland

09.45 User Interaction of Highly Automated/ Driver-Assisted/Remote-Controlled Mobile Machines

- How interaction should be structured? What should communication look like?
- 2 sides of the coin; the machine interaction side of HMI
- A look at digital UI in practical use
- What possibilities do humans have to interact? Examples from the aviation industry

Christoph Müller
CEO
MobileTronics

10.30 Coffee Break

PANEL DISCUSSION

11.00 Facing the Reality of Failure

- What can we learn from the airline industry and the recent tragic failures of highly automated aircrafts?
- Is the inherent trust in the intelligence of computers taken for granted in UI design? In the event of a system failure, is the operator given a real opportunity to take over?

Hannu Karvonen
Senior Scientist
VTT Technical Research Centre of Finland

Christoph Müller
CEO
MobileTronics

12.00 Luncheon

PANEL DISCUSSION

13.00 The Joy Stick or the Steering Wheel? Consumer Fear of Advancement

- There have been many examples of innovative ideas being rejected by consumers; what is the best strategy for building trust in new technology before market release?
- In the event of consumer backlash, what is the cost effective way of moving forward (i.e. equipment recall/replacement, new marketing strategy, enhancing consumers through training)?

Rebecca Cooke
Senior Human Factors Engineer
JCB

Jürgen Keller
Product Manager, Mobile Port Machinery
Sany Europe

Moderator: Conference Chair

13.45 Coffee Break

GROUP SESSION

14.15 – 15.15

Exchange feedback with your peers on the topic:

GETTING THE RIGHT FEEDBACK

- Integrating consumer feedback is critical in design phase; how to structure questions to get valued feedback? How to pool operators from varying levels of expertise? (i.e. the part-time worker vs. owner/supervisor, the fully engaged vs. the task-oriented, the imaginative vs. the realist)

Moderator: Conference Chair

15.15 Debrief Session. Summarizing the Takeaways.

15.30 Closing Word from Chair. End of Conference.



TBM evolution group

FOLLOW US ON SOCIAL MEDIA FOR LIVE UPDATES OF OUR EVENTS:



LinkedIn: TBM Evolution Group



Twitter: @TBMEvolution

#tbmconferences

#tbmevolutiongroup

For more information on our upcoming events visit us at:

www.tbmgroupp.eu