3rd International VDI Conference
Digitization in the Process Industry

November 5-6, 2019, Amsterdam, The Netherlands

- “Thinking Digital” to “Doing Digital” – Updates on Digital Transformation
- Applying Artificial Intelligence in the Process Industry
- Utilizing Virtual Reality Solutions – From Theory to Actions
- Becoming resilient to Digital Threats
- Use Cases and Lessons Learned from the Industry
+ Interactive Round Table Discussions
+ Workshop on Continuously Improve Operational Excellence
+ Workshop on Digital Leadership Excellence

Meet international Experts from:

An event organized by VDI Wissensforum GmbH
www.vdi-international.com/ 05K0005019
08:30  
Registration & Welcome Coffee

10:00  
Chair’s Welcome and Opening Address
Dr. Henrik Hahn, Chef Digital Office & CEO, Evonik Digital GmbH, Germany

10:15  
Speed Networking
Participate in these quick and effective 1-to-1 interactions – Get to know the other attendees and exchange your business cards

### I. Updates on Digital Transformation

10:30  
Assessing the Digital Plant Maturity – Challenges and Opportunities
- Importance of assessing the digital maturity of production sites
- Current approaches and tools
- Challenges related to the assessment process
- Interpretation and utilization of results
- Recommendations from industry perspective
Dr.-Ing. Florian Lindner, Expert Digital Manufacturing; co-author: Dr.-Ing. Steffen Nienke, Expert Digital Manufacturing, Bayer AG, Germany

11:00  
Regulatory Operations & QHSE – The Digital Way
- Impact of regulatory operations and QHSE readiness on product time to market
- World of manual processes and disconnected systems that do not keep pace with today’s business reality
- So, where do you start? How do you transform these critical areas, as part of your digital transformation journey?
Ed Van Siclen, VP, Vault Platform Strategy & Business Development, Veeva, USA

11:30  
Data Democratization as a Catalyst for Digital Transformation
- Role of data in digital transformation: A framework
- Three pillars of a data-enabled organization: Technology, processes, people
- On the road to data democratization: Lessons learned
Dr. Olivier Maugain, Corporate Analytics & Digital Technology Lead, Henkel, The Netherlands

12:00  
“Thinking Digital” to “Doing Digital” – Tackling the Transition from Tryout to Implementation
- Digital initiatives as a cluster of prototype tryouts
- Transition towards implementation mode; speed-up by collaboration
- Tomorrow’s customer benefits
- Challenges to leverage full digitization potential
Dr. Anne Bendzulla, Digital Officer, thyssenkrupp Industrial Solutions AG, Germany

12:30  
Lunch

### II. Applying Artificial Intelligence

14:00  
Applied Artificial Intelligence in the Process Industries
- Specific challenges and requirements
- Modelling, engineering, and operation use cases
- Autonomous systems and human-AI collaboration
Prof. Dr.-Ing. Leon Urbas, Head of Chair PCS & PSE Group, TU Dresden, Germany

14:30  
Self-creation of Artificial Intelligence for Process Optimization in Practice – Operating Use Cases & how to scale
- Fully autonomous closed loop solution in practice – Impact and learnings
- Self-creation of AI in-house – State of knowledge and methodology
- Scalability across assets, plants, sites globally – Roll-out acceleration
- Hints and tips from practical implementation

15:00  
Artificial Intelligence in the Process Industry – Learning from the State of the Art in Life Sciences
- Life Sciences are leading in AI applications – Other industries can benefit
- Extrapolate from today’s known AI use cases to introduce AI to the process industry
- Three “must-win battles” in AI for process industry leaders
Dr. Michaël Kolk, Partner & Global Practice Lead, Arthur D. Little and Dr. Michael Eiden, Associate Director, Arthur D. Little Digital Problem Solving, The Netherlands

15:30  
Networking & Coffee Break

16:00  
Panel Discussion
Artificial Intelligence & Machine Learning in the Process Industry – Criteria for Success

16:45  
The Digital Divide – What Skills do we need to transform the Industry?
The process industry is rapidly changing and digital skills are increasingly becoming a requirement for innovation. But what exact skills do we need? And how do we get the right talent to further develop our industry? LinkedIn provides insights into the development of digital skills, showcases current trends and gives advice on how to ensure we are future-ready.
Heike Burr, Account Director LinkedIn Marketing Solution, LinkedIn, Germany

17:15  
End of Conference Day One

17:45  
Get-together
At the end of the first conference day we kindly invite you to use the relaxed and informal atmosphere for in-depth conversations with other participants and speakers.
### III. Data Security & Cybersecurity

**09:00  Cyber Security in Process Industries**  
- Current state of cyber threats in the industrial sector  
- Upcoming changes in cybersecurity directives  
- Turning theories into practice  
- Asset management and cybersecurity  

**Patrik Olsson**, CSO, Head of Group Security, ÅF Pöyry, Finland

**09:30  Becoming resilient to Digital Threats: The ESTEP Approach for the Steel Industry**  
- The ESTEP Smart Factory Roadmap as a tool to provide the vision and the R&D lines for the European steel industry  
- Depicting a “good enough” approach to cybersecurity for the steel industry: The OT issue as an example  
- The ambition to quantitatively define the baseline and the evolution to cybersecurity: The ESTEP Questionnaire in cooperation with the key players  

**Prof. Ing. Costanzo Pietrosanti**, Chairman Smart Factory Focus Group, ESTEP, Belgium & Danieli Automation SpA, Italy

### IV. 5G as a Key Enabling Technology

**11:30  How 5G will accelerate Industry 4.0 Technologies**  
- 5G and its importance for industry applications  
- Current status and next steps in 5G development and integration into process industries  
- Identifying the pressing challenges as well as the greatest opportunities in implementing 5G  

**Speaker tba**

### V. Round Table Session

**13:00  Interactive Round Table Discussions in small Groups on different Topics**  
1. How can B2B Marketplaces improve the Sales & Marketing of industrial Goods?  
   **Patricia Moock**, Business Development Manager, CheMondis GmbH, Germany  
2. Utilizing VR Solutions in Process Industries – From Theory to Actions  
   **Kai Vikman**, COO Process Industries Division, ÅF Pöyry, Finland  
3. IIoT for Brownfield and Greenfield – Exploring the Use and Benefit  
   **Thomas Dholander**, CTO & Co-founder, TrendMiner, Belgium  
   **Götz Erhardt**, Managing Director, Client Service Group Resources Austria, Switzerland, Germany and Industry Consulting Lead Chemicals & Natural Resources, Accenture, Germany

**14:00  Networking & Coffee Break**

### VI. Real World Use Cases

**14:30  Can virtual Sensors improve Quality Output and Advance Process Optimization?**  
- Customer-proven use cases based on machine-learning models  
- Cost efficient and improved data availability without physical sensor installations  
- Determine product properties or process states with mathematical models based on data of other available physical sensors and previous measurements as reference points  
- Achieve stabilization of quality, reduction of raw material waste and energy, and simultaneously gain optimized reliability due to real-time analysis  

**Frank Hertling**, Director Business Development, Bilfinger Digital Next GmbH, Germany

**15:00  The Digitalization of the Maintenance Manual**  
- Importance of a CMMS (Computerized Maintenance Management System) solution  
- Data collection from sensors for an effective preventive maintenance  
- BIM (Building Information Modelling) integration in the facility management  
- Case studies and project applications with an open source software solution  

**Dr. Alessandro Pasqualini**, Sales Manager, Tecnoteca Srl, Italy

**15:30  Conference Chair’s closing Remarks**

**15:45  End of Conference**
International VDI Workshop 1

Digital Leadership Excellence – Challenging People to drive digital your Transformation successfully

Workshop Chair:
Dr.-Ing. Klaus Kindler,
Managing Director Performance & Success GmbH, Germany

Date and Venue:
November 4, 2019
Amsterdam, The Netherlands

Time:
10:00 -17:00

Content
Digitalization doesn’t only refer to implementing digital processes. It’s much more! It is a realistic opportunity to come out with new, innovative products, processes and services. One basic success factor is the applicable leadership-competence in your digitizing world. What you need is excellent Digital Leadership Competence. Do you have it? Familiarize yourself with pragmatic tools for leading and motivating people to move them into the digital economy. Deepen your knowledge of clear and substantial performance dialogs and daily feedback. Extend your team performance competence and learn more about the mechanism of agility and self-organizing-teams.

Welcome & Introduction
• VUCA-World in Tec-Industry and the Response
• Impact of Digitalization on your Company

Digital-Leadership-Competence
• Leadership-Requirements in the Digital Economy
• Culture-Model of Leadership
• The 4 Basic-Competencies

Individual Behaviors – Excellence in Self-Management
• Strength Based Leadership
• Communication-Skills

Communication-Forums
• Emotional Information-Exchange – Why?

Digital-Leadership-Specials
• Digital Empowerment

Hands-On Activities

International VDI Workshop 2

Continuously Improve operational Excellence through Democratization of advanced Analytics

Workshop Chair:
Jeroen Bouvin,
Black Belt and Product Owner, TrendMiner, Belgium

Date and Venue:
November 7, 2019
Amsterdam, The Netherlands

Time:
10:00 - 17:00

Content
Even if you don’t use the Six Sigma’s DMAIC cycle, it is a valuable approach for any continuous data driven improvement project. In the world of Big Data and Industry 4.0 new ways for data driven continuous improvement surface, allowing subject matter experts such as process engineers contribute continuously to operational excellence. In this workshop we will give an overview how time-series operational data can be leveraged in each stage of the DMAIC cycle enabling subject matter experts to continuously contribute to organizational operational excellence goals.

Introduction to Industrial Analytics

Typical Operational Excellence Issues

Core concepts of Self-service Advanced Analytics

The DMAIC Cycle – Overview how time-series operational Data can be leveraged in each Stage
• Definition of the problem and prioritization based on cause effect relationship
• Establish the baseline performance as well as objectives to reach
• Determine root cause(s) contributing to the project’s objective
• Test and confirm a solution
• Create easy configurable performance monitors to mark signature patterns available for real time monitoring and early warnings

Summary
• Requirements of a self-service analytics platform for continuous improvement
• Organizational and operational benefits
Exhibition / Sponsoring

If you want to meet with and reach out to the first-rate experts attending this VDI conference and to powerfully present your products and services to the well-informed community of conference participants, please contact:

Vanessa Schwarz
Project Consultant Exhibitions & Sponsoring
Phone: +49 211 6214 - 917
Fax: +49 211 6214-97 - 917
Email: schwarz@vdi.de

Become a speaker

Become a speaker at our international VDI Process Industry Conferences. Make yourself known in the industry and discuss best practice examples with other international experts. We are looking for speakers on: Digitization, Automation, Maintenance, Artificial Intelligence.

Please submit your topic to:
Dr. Maria Georgiou-Smith
Product Manager International Business
Phone: +49 211 6214-467
Email: georgiou-smith@vdi.de

Terms and Conditions

Registrations: Registrations for conference attendance must be made in writing. Confirmation of your registration and the associated invoice will be mailed to you. Please do not pay your conference attendance fee until you have received our invoice and its invoice number to be stated for transfer. Dutch VAT directives apply. Please state your VAT-ID with your registration.

Conference venue
Radisson Blu Hotel Amsterdam Airport
Boeing Avenue 2
1119PB Schiphol-Rijk, The Netherlands
Phone: +31 20 655 3131
Email: Reservations.Amsterdam.Airport@Radissonblu.com

Hotel room reservation: A limited number of rooms has been reserved for the benefit of the conference participants at the Radisson Blu Hotel Amsterdam Airport.

Please refer to “VDI Conference”. For more hotels: www.vdi-wissensforum.de/hrs

VDI Wissensforum service package: The conference package includes the conference documents (online), beverages during breaks, lunch and the get-together on November 5, 2019.

Conference attendance conditions and terms: By way of your registration you accept the conference attendance conditions and terms of VDI Wissensforum GmbH as binding. Any cancellation of your registration must be made in writing. We will charge you only an administrative fee of € 50.00 plus Dutch VAT if you cancel your registration earlier than 14 days ahead of the conference date. Any cancellation that reaches us after this deadline will entail the conference attendance fee as stated in our invoice to be charged in full. The date of the post office stamp of your written cancellation will be the decisive criterion. In that case, we will gladly mail you the conference documents on request. Subject to agreement, you may name a substitute participant. Individual parts and sections of conferences and seminars cannot be booked. You will be informed without delay if an event has to be cancelled for unforeseeable reasons. In that instance, you will be entitled only to a refund of your conference attendance fee if already paid. We reserve the right to exchange speakers and/or change the program sequence in exceptional cases. In any case, the liability of VDI Wissensforum GmbH is restricted exclusively to the conference attendance fee.

Data protection: VDI Wissensforum GmbH captures and processes the address data of conference participants for their own corporate advertising purposes, enabling renowned companies and institutes to reach out to participants by way of information and offers within their own marketing activities. We have outsourced in part the technical implementation of data processing to external service providers. If you do not want to receive any information and offers in the future, you may contradict the use of your personal data by us or any third parties for advertising purposes. In that case, kindly notify us of your contradiction by using the email wissensforum@vdi.de or any other of the contact options mentioned.
Yes, I will participate as follows:

**Participation Fee + VAT**

- [ ] VDI Conference 05.-06.11.2019 (05KO005019) € 1690
- [ ] Workshop 1 04.11.2019 (05ST905001) € 950
- [ ] Workshop 2 07.11.2019 (05ST903001) € 950

**Package Price**
- Conference + 1 Workshop € 2370
- Conference + 2 Workshops € 3220

- [ ] I am interested in sponsoring and/or exhibition

*For the price category 2, please state your VDI membership number*

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