

VDI

3rd International VDI Conference

# Digitization in the Process Industry

November 5-6, 2019, Amsterdam, The Netherlands

Keynote:  
LinkedIn

- "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](http://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 Mougain**, 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

**Dipl.-Ing. MBA Robert Feldmann**, Senior Expert, Digital and Analytics in Manufacturing, McKinsey & Company, Germany

**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

#### 10:00 Adversarial Machine Learning: How to fool industrial IoT and AI Systems

- What are adversarial attacks and how & why they work?
- What's so remarkable about these attacks?
- Potential risks to intelligent systems embraced in industrial settings
- Is it inevitable and how to develop defense?

**Veysel Kocaman**, Principal Data Scientist, yDataLabs, The Netherlands

10:30 ☕ Networking & Coffee Break

#### 11:00 Clean Algorithms in dirty Processes

- Application of data-based models in solids processing
- How to join „real“ process expert knowledge with „virtual“ plants
- Challenges, examples and success stories

**Dr.-Ing. Martin Weng**, Managing Director, aixprocess GmbH, Germany

### 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

12:00 🍴 Lunch

### 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 Dhollander**, CTO & Co-founder, TrendMiner, Belgium

##### 4. What works, what doesn't: New Practical Examples of Digitization

**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

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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

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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

# Registration

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## Terms and Conditions

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**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](mailto:Reservations.Amsterdam.Airport@Radissonblu.com)



You will find more hotels  
close to the venue at  
[www.vdi-wissensforum.de/hrs](http://www.vdi-wissensforum.de/hrs)

**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](http://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.

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# Digitization in the Process Industry



## Register online!

[www.vdi-international.com/05K0005019](http://www.vdi-international.com/05K0005019)



VDI Wissensforum GmbH  
P.O. Box 10 11 39  
40002 Düsseldorf, Germany  
Phone: +49 211 6214-201  
Fax: +49 211 6214-154  
Email: [wissensforum@vdi.de](mailto:wissensforum@vdi.de)  
[www.vdi-international.com/05K0005019](http://www.vdi-international.com/05K0005019)

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Yes, I will participate as follows:

### Participation Fee + VAT

**VDI Conference 05.-06.11.2019**  
(05K0005019) **€ 1690**

and

**Workshop 1 04.11.2019**  
(05ST905001) **€ 950**

or

**Workshop 2 07.11.2019**  
(05ST903001) **€ 950**

### Package Price

Conference + 1 Workshop **€ 2370**

### Package Price

Conference + 2 Workshops **€ 3220**

I am interested in sponsoring and/or exhibition

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