## DAY ONE

### WELCOME & CHAIRPERSON'S OPENING REMARKS FOR DAY ONE

**Dr. Don A. Kinard**, Senior Fellow, Lockheed Martin  
09.00 - 09.10

### World Class Manufacturing - How the Combination of Lean Productions Methods with I4.0 has Led to Cost Competitiveness of a German Semi-Automatic Assembly Plant

- Radical shift from classic policy deployment on department level to A3 on plant level
- I4.0 - from individual tools in the make area to integrated system solutions for the value stream
- Profitable in a German assembly plant - competitive with low-cost countries
- Lean Production Excellence in production and logistics
- Non-expert team leaders (“fresh-eye”) as key element

**Armin Schwab**, Vice President Plant Management and Site Responsible, Bosch  
09.10 - 09.45

### The Digital Thread and Industry 4.0

- The digital thread has allowed unprecedented improvements in aircraft design and manufacturing engineering
- Many advanced manufacturing technologies have been enabled by the digital thread include automated drilling, robotic spraying, and non-contact metrology
- IIoT, connecting factory equipment with IT, is enabling factory efficiency
- The next industrial revolution, referred to as Industry 4.0 is related data automation, analytics, AI, and enterprise architecture integration

**Dr. Don A. Kinard**, Senior Fellow, Lockheed Martin  
09.45 - 10.20

### IloT Applications

**Chaired by Dr. Don A. Kinard, Lockheed Martin**  
11.10 - 11.45

- Enhancing Product Safety > end to end traceability from silos to pallets
- Maintenance Optimization > sensor-fed support of autonomous and progressive maintenance practices
- Real-Time Data Capture > speedy, decentralized decisions optimize supply chain efficiencies
- Production Set-Up > quick replication of already-proven parameters across the entire network

**John M Walker**, Global Director – Manufacturing, Infrastructure and Supply Chain Investments, Mondelz International

### Big Data & Applications

**Chaired by**

Leveraging ecosystems to achieve real digital ROI
- Digital Economics 101
- Where Digital will create ROI in industrial applications
- A strategic and technology roadmap for your journey
- Outcome aligned ecosystems and achieving real ROI

**Stephen Carlson**, Director, Digital Science, Chemical Analysis Division, Thermo Fisher Scientific

### One to One Meetings

- Smart/Advance Manufacturing and Industry 4.0
- Digital Transformational Change
- IoT Platforms
- IloT Applications
- IloT Security
- IloT Analytics
- IloT ROI
- Big Data & Manufacturing Information
- Big Data Analytics
- Cloud Applications
- Edge Technology
- Integration
- M2M
- IoT Automation
- Manufacturing Technology
- Manufacturing Automation
- Robotics
- Additive Manufacturing
- Facility Management and Integration
- Workforce Development
- Supply Chain & Logistics

### COFFEE BREAK & MEETINGS

10.20 - 11.10

### NETWORKING LUNCH

12.50 - 13.40

Please note: agenda and speakers are subject to change
**Digital technologies for Lighting Industry (@Signify)**
- Innovative digital technologies for manufacturing and operations
- Future factory
- Vision based data capturing
- Big data and Artificial Intelligence examples

**Marc De Sambere**, Research Fellow and Senior Director, Signify

**How Connected Filtration is Bringing Value to Manufacturing**
- Why a 100-year-old company started its IoT journey
- One approach to uncovering connected offerings and value
- How a non-tech company executed these offerings
- What new value this is bringing to factories, customers and us

**Wade Wessels**, Director, Connected Solutions Strategy, Donaldson

**IoT & Smart Factory Journey at Orcho-Orchid**
- IoT & Smart Factory Journey
- Use Cases
- Financial I Benefits

**Brett Gopal**, Sr. Director – Innovation & Network Strategy, Orchid

**Predictive Maintenance & real IoT analytics & data usages**
- Ultrasonic and vibration data edge computed at 100k samples/sec
- Review data of a failure progression of a Fan bearing, and what vibration is missing
- A 2nd PdM case using existing infrastructure of cellular and smart phones
- Compare/contrast to traditional PdM vibration routes
- A series of mini-case studies supporting a hybrid Artificial Intelligence model, which outperforms machine learning, PdM baselines and anomaly detection

**Craig Truempi**, Director of IoT Reliability, ATEK Access Technologies, LLC

**IT in Manufacturing as Enabler for Connected Industry and Big Data**
- A highly standardized IT infrastructure is key to roll-out of features and solutions of connected industry
- How does this IT infrastructure look like currently?
- Shaping manufacturing IT and handling security

**Muthu Sabarethinam**, Senior Director – Data Science and Advanced Analytics, TE Connectivity

**One to One Meetings**
- Smart/Advance Manufacturing and Industry 4.0
- Digital Transformational Change
- IoT Platforms
- IoT Applications
- IoT Security
- IoT Analytics
- IoT ROI
- Big Data & Manufacturing Information
- Big Data Analytics
- Cloud Applications
- Edge Technology
- Integration
- M2M
- IoT Automation
- Manufacturing Technology
- Manufacturing Automation
- Robotics
- Additive Manufacturing
- Facility Management and Integration
- Workforce Development
- Supply Chain & Logistics

**From Zero to Hero; How Smart, Mini-Sensors Make the Industrial IoT Revolution Accessible for Everyone**
- Smart mini-sensors are changing IIOT
- Their ability to collect granular data previously not possible is opening up hundreds of new ways to optimize operations
- Attendees will learn about use cases including:
  - Providing critical data to help companies achieve operational excellence
  - Moving from inefficient, scheduled maintenance to predictive maintenance
  - Improving logistics and asset management
  - Reducing energy waste and cost
  - Meeting regulatory requirements

**Moderator:**

**Dr. Don A. Kinard**, Senior Fellow, Lockheed Martin

**Panelists:**

**Brett Gopal**, Sr. Director – Innovation & Network Strategy, Orchid

**Marc De Sambere**, Research Fellow and Senior Director, Signify

**Armin Schwab**, Director, Connected Solutions Strategy, Donaldson

**Getting more value from machine vision and bar code reading devices**
- Smarter Automation: Advances in Vision Guided Robotic
- Case Study: Bar Code Analytics Software
- Bridging the Information Technology / Operations Technology Divide
- Achieving Data Security and Data Integrity
- Why Artificial Intelligence Matters

**CHAIRPERSON’S CLOSING REMARKS AND END OF DAY ONE**

**NETWORKING DRINKS RECEPTION**
# DAY TWO

## CHAIRPERSON'S OPENING REMARKS FOR DAY TWO AND SUMMARY OF DAY ONE

**09.00 - 09.10**

**Chairperson's Opening Remarks for Day Two and Summary of Day One**

## Industrial Technology Horizons: Intelligent Industry of the Future

- Identifying existing manufacturing weakness and potential gains
- Developing a strategic transformation roadmap and key player roles
- Engaging executive support and securing budget
- Creating a conductive cultural environment for change, experimentation, risk-taking
- Dealing with IT Infrastructure and data governance and MES system integration

*Dr. Mark Maybury, Chief Technology Officer, Stanley Black & Decker*

## Journey of Connecting Power Generation Assets in Developing Countries – Challenges & Opportunities

- What are the key differences between emerging countries & developed countries in terms of customers’ priorities, value propositions, degree of acceptance & so on
- How to optimize right value feed based on customer's digital maturity level (without overwhelming customers)
- Ways managing expectations in the geographically challenged regions (accelerating time to value with right outcomes)
- How to create - fulfill winning digital transformation masterplan with right balance of Visibility – Insights – Actions
- The role of managed services (with industry & domain experts) for successfully driving greater adoption while navigating through changing business needs

*Ram Kothapalli, Head – IoT/AuM, GE Power*

## Using Edge Technologies to Eliminate Operations Blind Spots

- Evolving from Automation to IIoT architectures
- The role of Edge Computing in IIoT
- Enabling wireless technologies of the IIoT
- Eliminating Operational Blind Spots – the #1 ROI of the IIoT

## Predictive Maintenance & Real IoT Analytics & Data Usages

- How to start your journey?
- What are your maintenance and reliability challenges related to IoT Data?
- The benefits of switching from reactive to predictive maintenance strategies
- Making a business case and upfront costs
- Real time analytics and control systems

## Improving Legacy Control Schemes with an Industrial IoT Infrastructure

- Industrial ethernet networks out to the edge
- The importance of the physical layer
- New technologies that add value to the manufacturing infrastructure
- Choices that support future industrial network viability

## One to One Meetings

- Smart/Advanced Manufacturing and Industry 4.0
- Digital Transformational Change
- IIoT Platforms
- IIoT Applications
- IIoT Security
- IIoT Analytics
- IIoT ROI
- Big Data & Manufacturing Information
- Big Data Analytics
- Cloud Applications
- Edge Technology
- Integration
- M2M
- IoT Automation
- Manufacturing Technology
- Manufacturing Automation
- Robotics
- Additive Manufacturing
- Facility Management and Integration
- Workforce Development
- Supply Chain & Logistics

## IIoT Applications

**Chaired by**

**Becoming the Factory of the Future**

- How to prepare now for the IIoT?
- Start the alignment process now to be better positioned to take full advantage of intelligent technologies
- Embrace new technologies and change your infrastructure and processes in order to reap the benefits of the IIoT
- Manage the re-skilling and retraining of the workforce to swiftly adopt these technologies

## IIoT Roll Out - Case Studies

**Chaired by**

**Innovative IIoT Solutions for the Process Industries**

- Novel sensors are opening new opportunities in the process industries
- There's a huge opportunity for better analytics to take advantage of that data
- "Digital twins" need to give better insight into the financial impact
- This has to come with a change in capabilities for engineers and front line operations

*Larry Megan, Head of Digital Transformation, Praxair*
13.40 - 14.15 Digital Factories 2020 - Shaping the Future of Manufacturing
• Combine vertical and horizontal integration with digital products & business models
• How far industrial companies have come and what challenges they face?
• Make smarter decisions using predictive data analytics and machine learning
• Implement innovative technology and look for employees with fundamentally different types of qualifications

14.15 - 14.30 COFFEE BREAK

14.30 - 15.00 One to One Meetings
• Smart/Advance Manufacturing and Industry 4.0
• Digital Transformational Change
• IIoT Platforms
• IIoT Applications
• IIoT Security
• IIoT Analytics
• IIoT ROI
• Big Data & Manufacturing Information
• Big Data Analytics
• Cloud Applications
• Edge Technology
• Integration
• M2M
• IoT Automation
• Manufacturing Technology
• Manufacturing Automation
• Robotics
• Additive Manufacturing
• Facility Management and Integration
• Workforce Development
• Supply Chain & Logistics

14.30 - 14.50 Road Mapping the Digital Transformation for Improved Productivity in Primary Industries
• Getting started the digital transformation journey with an understanding of total size of prize and a roadmap
• Top-down and bottom-up approaches needed to structure a sound digital transformation journey
• Blend the technology portfolio together for a holistic vision of the current and future operations
• Do not focus on big data, harness the right data and follow good practices
• Collect, analyse and visualize data in as near real-time as required, to shift focus and make things actionable as efficiently as possible
• Manage operational risks and culture change with smaller scalable projects
Alvaro Rozo, Global Director, Smart Industries, Hatch Ltd

15.00 - 15.30 Panel Discussion: Creating a Roadmap to Successfully integrate Industrial IoT
• Learn about what other companies are currently doing to begin their integration
• What challenges and stumbling blocks could you be facing and how to get round these?
• Establish your company’s ambition and vision of the future
• Which strategy to adopt to implement connected asset management across your industrial machinery?

15.30 CHAIRPERSON’S CLOSING REMARKS

15.35 CLOSE

Please note: agenda and speakers are subject to change