AIOTI Signature Event:
Industry 4.0 and Digital Transformation – where OT meets IT

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Data doesn’t drive the decisions. Decisions do.
IoT Analytics

What Do We Need

Data without Analytics has No Value!
IoT Analytics
What Do We Need

Analytics without Data is Not Possible!
The amount of industrial data in the world will **quadruple** in the next five years - and so will the opportunities that come with it.

...  
But the reality is that 80% of industrial data is still collected and never used. This is pure waste.
ACCELERATE
The Analytics Life Cycle
Use Case – Solvay: manufacturing 4.0
Digital transformation
**Approach** – from idea to scaled solution

**Phase 1**
Assess the potential

- **Step 1** – workshop to determine most relevant use cases (optional) and their potential

- **Step 2** – Readiness assessment
  - Data readiness check
  - AA use case definition
  - Approach
  - Timing
  - Team
  - Governance

- **Deliverable** – completed use case canvas and diagnostic plan

**Phase 2**
Diagnostic

- **Objective** - short term pilot
  - Find fast / Fail fast
  - Validate the potential
    - Data
    - Advanced analytics
  - How to industrialize
  - Joint customer – SAS team
  - Create insight into approach and potential of AA for engineers and operators

- **Deliverable** – validation of use case and potential

**Phase 3**
Industrialize

- **Objective** - Industrialize diagnostic
  - Industrialize data flows
  - Iterate the model into operational AA model
  - Create and embed user interfaces for operators
  - Setup Industrialized AA flow
  - Run AA model within operating window
  - Capability building

- **Deliverable** – generation sustainable impact on site 1

**Phase 4**
Scale

- **Objective** – Scale and deliver use cases across the organization
  - Accelerate across similar installations
  - Transfer learnings and best practices
  - Leverage AA capabilities across sites, BU’s and central
  - Manage AA models as assets and manage their lifecycle

- **Deliverable** – generate sustainable impact on site X

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*GO/NO-GO Diagnostic*
Our mission: Asking more from Chemistry by Leveraging Advanced Analytics

Context Solvay - SAS joint mission so far...

1. Spinetta – Case 1
- First Collaboration SAS-Solvay (teaming with McKinsey)
- Case 1 - Applying machine learning models to determine key variability drivers and optimize them to provide optimal setpoints to maximize yield
- Case 2 - Applying AA models to determine process drivers and optimize production schedule in order to maximize margins (link commercial)

2. Spinetta – Case 2
- Case 1 and 2 - Determine key process drivers and settings for golden batch production, optimize batch sequencing and predict variability and clashes.
- Insights available in Control Room Dashboard, largest SAS dashboard in the world.

3. Tavaux – Case 1
- First collaboration SAS - Soda Ash
- Yield optimization to increase OEE
- Apply Advanced Analytics models to explain process variability and optimize process drivers
- Insights available in continuously refreshed Control Room Dashboard

4. Tavaux – Case 2

5. Torrelavega – Case 1
- Continuous process
- Batch process
- Results Delivered

Accellerate and Scale Digital Roll-out

- Scaled Global Delivery
- Implementation Partner led roll-out
Thank You!

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