FIND YOURS.

Leveraging Industrial IoT to Automate Business Processes

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Objectives

• Industrial IoT – Current State

• Present Use Cases that overlap your Operations

• Do you have a Problem Industrial IoT can Solve? Time to Pilot?
Industrial IoT

Today
• Significant existing installed base of sensors

Opportunities
• Enhance traditional inspection techniques
• Ingest significantly more sensing data and analyze
Case for Industrial IoT

AUTOMATES/IMPROVES PROCESSES

Business Savings
↓ Labor
↓ Material (scrap/defects)
↓ Downtime
↑ Service Levels
↑ Customer Satisfaction

Sensing Inputs
Actuator Outputs

- Pattern Recognition
- Performance (KPI's)
- Process & Organize Data
- Accurate & Real Time
- Automates/Improves Processes
Convergence of Technologies

Bluetooth

Low Energy

Convergence of Technologies

Cloud Computing

LTE base station

M2M Gateway

H2H device

M2M device

Block Chain

Find Your WOW
IoT in Manufacturing

Specialized Tools & Equipment
• Location, shock, tilt, fluid levels, temp.
  - PREVENTATIVE
  - REDUCE TCO

Remote, Outdoor and Offsite Assets
• Location, fluid levels, temp, vibration
  - PREVENTATIVE
  - REDUCE TCO

In-process machine monitoring
• Vibration, temp., humidity, fan speed, vacuum, air pressure
  - QUALITY
  - DOWNTIME

Raw Materials Spoilage
• Location, Temp., humidity, UV exposure
  - QUALITY
  - SCRAP REDUCTION

Pipe & Tank Maintenance
• Pressure, leak, aux. equipment fluid levels, temp.
  - PREVENTATIVE
  - IMPROVE UPTIME

Hazards Environment Workers
• Wearable biometrics, leak, particle count, call button
  - SAFETY

Field Service
• Various sensing devices (temp., fluid levels, machine hrs., etc.)
  - REFILLS
  - REPLACE PARTS
  - CALIBRATION
  - KNO WHAT U ND

QUALITY
REDUCE TCO
IoT in Supply Chain

Transit Monitoring
Container/Pallet Loads (air, land, sea)
- Location, temp., humidity, shock, tilt, vibration, tamper

Fleet-Vehicle Tracking
- GPS, speed, route & turn-by-turn history
- Autonomous Vehicles

MHE Driver
- Location, speed, seat belt engaged, O2, tilt shock

Parts/Kits Replenishment
- Parts Bins - load cells (parts bins full/empty), and-on lights
- Returnable Units – full/empty, temp.

Smart Warehouse
- Automatic receiving & shipping (RFID)
- Automatic upstream replenishment orders (RFID)

Raw Materials Spoilage
- Location, Temp., humidity, UV exposure

QUALITY
LIABILITY
EFFICIENCY
SAFETY
REDUCED TIME OFF
SCRAP REDUCTION

FIND YOUR WOW
From Field to Store & Consumer
Game Plan - Partner with Experienced Providers
Start Small (Quick Wins)

IoT Service Providers
• Consultants – Process, Technology, Implementation, Analytics
• OEM’s – Software, Hardware
• Boutique Integrators
  • Endpoint data ingest & process
  • Workflow Eventing (Bus. Aps.)
  • Data analytics & intelligence
Key Takeaways

• IoT is Production Ready

• IoT is Pilot Ready - others ahead of you have carved paths and are gaining value (Measure, Automate, Report, Improve)

• Are You Ready?
For more information

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