Factory Operations Visibility and Intelligence (FOVI)

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Agenda

1. Fujitsu Participation in IIC

2. Factory Operations Visibility and Intelligence Testbed Overview

3. Demo
Fujitsu participation in IIC

- Large Industry Member
- Steering Committee Member
- Co-Chair at Security WG
- Co-Chair at BSSL (Business Strategy and Solutions) WG
- FOVI (Factory Operations Visibility and Intelligence) Testbed
FOVI Testbed Objectives

- Real-time visibility to involve on-site operation managers’ findings for further analysis
- More intelligence on our own manufacturing factories’ challenges and processes – gathering data for;
  - Use Case 1: Product return and repair process
  - Use Case 2: High-mix production line optimization
- A reusable, horizontal, industrial IoT platform for factory data processing, visualization and analysis
Use Case 1: Product return and repair process

1. Track repairing products status and location in the work area.
2. Recode testing procedures to reproduce the errors in repairing station.

Challenges:
- Avoid shipment delays
- Faster repair process

Visualization and Analysis:
- Track repairing products status and location in the work area.
- Recode testing procedures to reproduce the errors in repairing station.
Repair Station Status Visualization

8 products are in the area

(2) Alert Messages
- Delivery alert
- Behind schedule alert
- Beacon battery low alert
Use Case 1: Current Results

- **Achieved**: Tracking & visualizing repair product status
  - Visualized items
    - Product location in the repair work area
    - Work status including alert (behind schedule, shipping time, beacon sensor battery)
- **Result**: 30% shipping cost reduction
  - Cost reduction for single unit shipment
  - Faster shipment process
Use Case 2:
High-mix Production Line Optimization

Challenges:
- Prevent machine idle times, human errors
- Control the timeline

Visualization and Analysis:
1. Collect and consolidate production line data
2. Near real-time display and alerts
Use Case 2: Current Results

- Outages reduced 25 %
  - Parts complement procedure
  - Review operation procedures on error

- Faster cause analysis and countermeasures evaluation
  - Countermeasures implemented → Immediate efficiency assessment
  - Improve Kaizen process

- New findings
  - Concealed and hidden issues discovered
  - Countermeasures cost/benefit understanding
Wait a moment please…