Lumada Manufacturing Insights is all about real-time collection, processing, and visualization of all relevant data of a manufacturing facility for the exchange of information between man, machine, and production processes on the shop floor.

Real-time process information ①
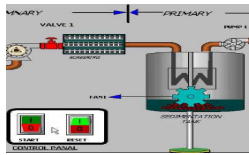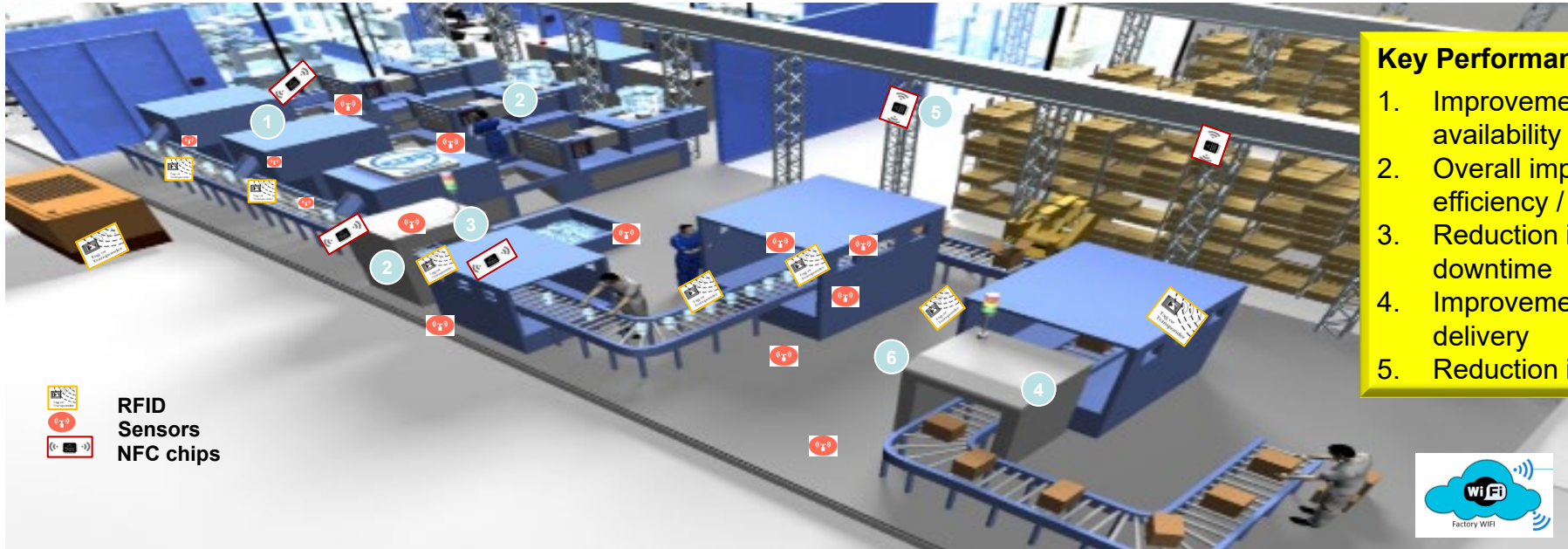
Real-time- OEE dashboard with downtime and MTBF ②

Data Storage Captured in real time on CIS secure online database

Cloud Internet Solutions

OEE 65%

Real-time rejections and defects ③

RFID
Sensors
NFC chips

Wi Fi
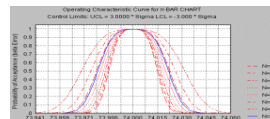Factory WIFI

Key Performance Indicators

1. Improvement in machine availability
2. Overall improvement in efficiency / productivity
3. Reduction in planned downtime
4. Improvement in on-time delivery
5. Reduction in scrap

Real-time inventory information ④

Inventory Management
Search

Name	Qty.	Model	Serial
iPhone 5	1	A-1349	x10822
iPhone 5	N/A	A-1322	x10823
iPhone 5	2	A-1855	x10825
iPhone 5	2	A-1855	x10825

Product and process capability analysis ⑤

Operating Characteristic Curve for BAR CHART
Control Limits: UCL = 3.0000 * Sigma LCL = -3.000 * Sigma

SEIFERT
TECHNOLOGIES, INC.

Auto Parts Manufacturer (Stamping)

The client is a Tier I automotive parts supplier with approximately $10M in revenue.

Context/Challenge

- Client lacked real-time visualization across machines. KPIs were tracked manually on whiteboards and rolled-up to spreadsheets

- Long downtimes during die changes

- Safety concerns / challenges

- Quality issues with high scrap rate (up to 3K bad parts in a single run)

- Scheduling was largely a manual process that was constantly adjusted to meet production goals

- Inventory tracking issues caused issues with raw material availability

Solution

- Seifert Technologies worked with the client team to develop a factory visualization solution using:

  - Data collection & visualization

  - Big data analytics including machine learning algorithms to provide predictive maintenance

  - Predictive quality solution using LiDAR sensors and video

  - Manufacturing process best practices consulting around processes & die changes

  - Inventory tracking system using RFID and barcode scanning

Foreseeable Benefits:

- ❑ 70% reduction in unplanned downtime

- ❑ Improved die change process from 4 hours to 1 hour

- ❑ 40% quality improvement

- ❑ Overall improvement in safety index (Less incidents per month)

- ❑ ROI achieved in one (1) month

Customer Impact | OEE Solution

SEIFERT TECHNOLOGIES, INC.

With manufacturing solutions from Seifert Technologies, Inc., you can quickly improve your shop-floor performance with a composable, scalable solution that is easy and fast to deploy. Start gaining benefits within weeks by reducing unplanned downtime, improving on-time delivery through cycle-time management, and reducing defect rates with data-drive pareto analysis. Further benefit from real-time monitoring of equipment to detect anomalies before they disrupt production.

Overview of Effort

- *Customer engagement process included an assessment workshop & development of implementation plan*

- *Return on Investment allowed customers to take a phased adoption approach while funding each phase based on savings*

- *Customer was able to mitigate the complexity (turn-key solution)*

- *Minor customization required*

New Resource Requirement

- *Limited customer resources were required during implementation*

- *No new personnel required to operate or manage the system. Machine operators needed small amount of training (~1 hour)*

- *No changes to existing business systems. Seifert has an integrate-first philosophy*

Long Term Care and Feeding of the Project

- *All changes to system are included in Seifert's subscription model. No effort needed to make changes*

- *Changes are covered under the subscription model so no additional charge to change views*

- *Scale-up can also be handled under the subscription model, allowing customer to add machines on a $ per month basis*