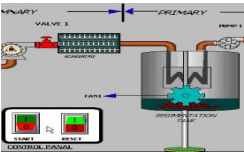


Lumada Manufacturing Insights is all about real-time collection, processing, and visualization of all relevant data of a manufacturing facility for the exchange of information between man, machine, and production processes on the shop floor.

Real-time process information



1

Real-time- OEE dashboard with downtime and MTBF



2

Real-time rejections and defects



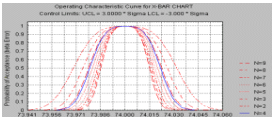
3

Real-time inventory information

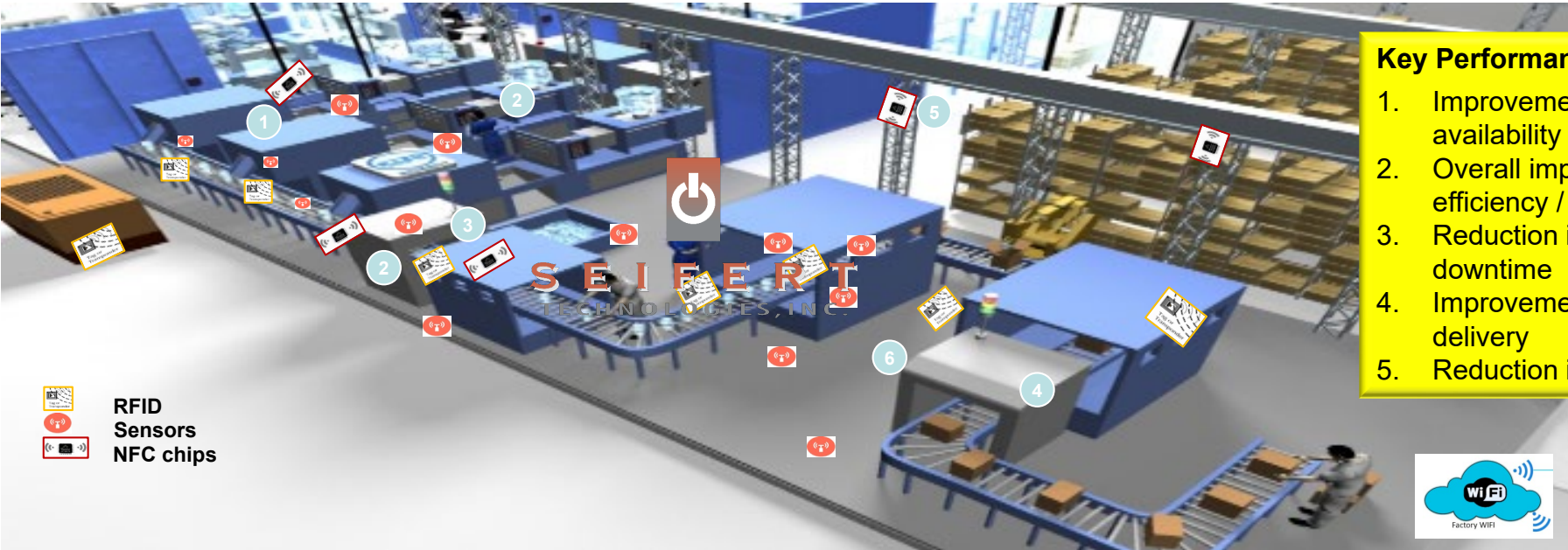


4

Product and process capability analysis



5



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

B Use Case | Steel Industry

Steel coil processing unit

The client manufactures and sells steel products for large and small OEMs, and custom fabricators. It engages in the processing, slitting, blanking, and sheeting of flat rolled steel.

Context/Challenge

- Lost production time due to misalignment of knives – manual knife setup is a complex & time consuming process
- Lost production time due to manual in-line width measurements – inefficient process to measure dimensions using micrometers
- Lost production due to poor production scheduling & equipment failures
- Lost quality and customer satisfaction – high % of mislabeled products causing customer frustration
- Poor safety due to inability of seeing internal crane cable fractures leading to cable failure

Solution

- Seifert Technologies worked with the client team to develop a factory visualization solution using:
 - In-line dimension check – through slitting cameras
 - Label application quality check – through label check cameras
 - Production scheduling
 - Predictive maintenance solution for the crane cables using sensors – string potentiometer and DVRT
 - Predictive maintenance solution for the slitting machine using sensors – temperature & vibration



Foreseeable Benefits:

- ❑ Reduced scrap by ~15%
- ❑ Improved labor productivity by ~10%
- ❑ Improved safety
- ❑ Reduced product return due to increased labelling accuracy
- ❑ Increased OEE by ~15%
- ❑ Increased asset availability by ~35%



Customer Impact | OEE Solution



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*