TULIP

Jabil teams up with Tulip to increase yield and reduce quality issues on complex assemblies

JABIL

INDUSTRY

Electronics

CHALLENGE

Defects on High Variety Lines

SOLUTION

Digital Standardized Work

Guided Assembly

Electronic QA Forms

RESULTS

50% increase in throughput

10% increase in production yield

60% reduction in quality issues

THE CHALLENGE

Tulip teamed up with Jabil, a leading global contract manufacturer, to guide complex electronics assembly. Operators on Jabil's manufacturing line build over 40 different models of complex electronic assemblies, each with a unique combination of components.

Before Tulip, front-line engineers relied on paper-based work instructions and audit procedures to guide operators and identify process inefficiencies.

Jabil needed to maintain the highest quality and efficiency standards despite a high variety of assembly requirements. Operators needed the right information available at the right time to ensure the correct components were included in each assembly. Additionally, non-value-added steps had to be identified and eliminated quickly.

"We're creating tools that help us get the insights we need to continuously improve, much faster and with far fewer resources."

\-   Work Cell Manager

THE SOLUTION

Using Tulip's platform, Jabil's process engineers created manufacturing apps that helped guide operators through complex assembly processes in a high mix environment, with over 1500 unique assemblies per year.

Tulip allowed Jabil's process engineers to take an agile approach to their processes, integrating feedback from the production line without knowing how to code.

The data gathered from the shop floor was continuously analyzed with Tulip's analytics engine. This allowed Jabil's front-line engineers to visualize KPIs through dashboards tailored to meet their unique needs.
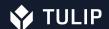
Guiding, tracking and analyzing both operator and machine data in real-time made root cause analysis and continuous process improvement easy despite low volume production runs.

"If we're going to help our customers get their new technologies to market faster than their competition, we have to improve our velocity in everything we do. With Tulip, our engineers don't have to have a background in writing code. They can be off to the races developing their own applications."

- Work Cell Manager

THE RESULTS

Using Tulip, Jabil saw a **50% increase in throughput** and a **10% increase in production yield**. In addition, **assembly-related quality issues were reduced by 60%** within four weeks of implementing Tulip.

◆ TULIP

AUGMENTING THE MANUFACTURING WORKFORCE WITH APPS

Companies like Jabil are using Tulip's manufacturing app platform to transform their operations and augment their workforce.

Manufacturing app platforms can be a critical tool for manufacturers undergoing digital transformation. They allow manufacturing engineers to easily build shop-floor applications to increase the productivity, quality and efficiency of their operations

Users build apps in manufacturing app platforms to turn their manufacturing processes into digital processes. They are quick to build, test and deploy. This lets their creators iterate and improve them quickly and make updates in real time. Manufacturing apps are *visual and interactive*, providing an intuitive user-friendly interface. They can connect with machines, tools, and sensors, to *leverage IoT*. They are *data-driven*, collecting real-time data as people use them. And they are *smart*, guiding workflows with dynamic logic. No-code platforms like Tulip empower manufacturers to do this without having to write any software, thus letting frontline engineers create apps to address their own shop floor needs.

Learn more at www.tulip.co

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