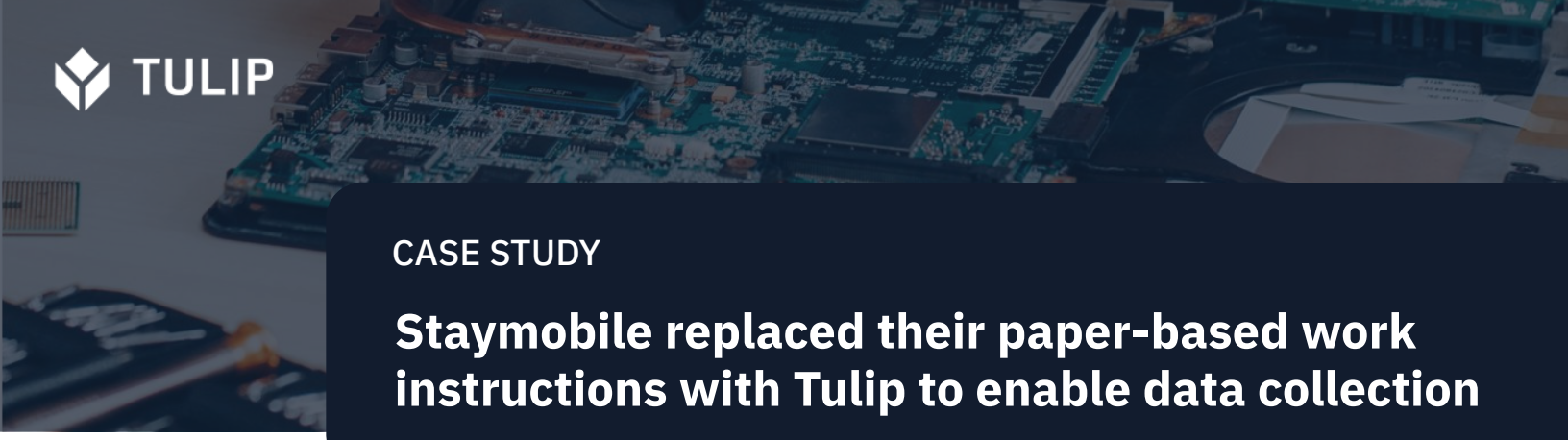

TULIP

CASE STUDY

Staymobile replaced their paper-based work instructions with Tulip to enable data collection

STAYMOBILE®

INDUSTRY

Electronics

CHALLENGE

Standardize Work Across Locations

SOLUTION

Automate and Centralize Data Collection

RESULTS

Standardized Procedures

Constant Stream of Data

Visibility into SOPs

Streamlined Technician Job Functions

THE CHALLENGE

As a national organization with a geographically distributed workforce, Staymobile struggled to standardize work across locations. Paper-based work instructions were difficult to follow, and made it difficult for engineers to verify technician compliance.

Often, multiple versions of the same work instruction were in use at different locations, leading to inconsistently executed procedures and avoidable mistakes. Paper made it impossible to collect the data they needed to optimize repair procedures.

Staymobile needed a solution that would enable them to automate and centralize data collection, configure location specific processes, and standardize procedures.

THE SOLUTION

To maximize data collection and configurability, Staymobile used Tulip's manufacturing application platform to design digital work instruction applications. Because these applications are built on Amazon Web Services (AWS) infrastructure and delivered through the cloud, they enable Staymobile to harmonize distributed operations while centralizing data collection.

"With Tulip, we can enable the workstation's capabilities to change by deploying new functionality to change systemically. We can do it almost overnight. And we can do this to meet changing customer demand."

- Rob Lennox, EVP of Staymobile

TULIP

WORK INSTRUCTION APPLICATIONS

Improved Flexibility

Using Tulip, Staymobile built work instruction applications that engineers could adapt to the unique needs of every location. Staymobile's business encompasses a large number of models, configurations, and services that can vary widely from site to site. Tulip's flexible application platform lets Staymobile customize applications for every device and variation, all without writing a single line of code. "The flexibility and ease of use of work instructions have been a game changer for us," began Rob Lennox, EVP of Staymobile.

With Tulip, Staymobile is able to manipulate work station layout to match their digital work instructions, enabling the company to reduce waste and stay agile. "With Tulip, we can enable the workstation's capabilities to change by deploying new functionality to change systemically. We can do it almost overnight. And we can do this to meet changing customer demand."

Streamlined Data Collection and Sharing

Staymobile's work instruction applications automatically collect data on every repair and service process. Each application is integrated with Staymobile's ERP, making inventory tracking and processing planning simple. Because these applications are delivered through the cloud, they let Staymobile centralize their data collection. "The Tulip apps are designed for collecting this data. It's almost completely geared toward what engineers need from an output perspective for actionable KPIs."

Before Tulip, Staymobile technicians struggled to collect the data necessary to optimize processes, and the quality of the data was often insufficient to create robust improvements. Now, Staymobile automatically tracks the chain of custody for thousands of devices, repair status, and other context dependent KPIs across model and configuration variations. "These are KPIs that have been historically immeasurable in my career," Lennox said, "If I didn't have a resource sitting on the line with a stopwatch, I couldn't collect that granular level of data."

WORK INSTRUCTION APPLICATIONS Cont.

Standardized Work and Procedures

Staymobile's engineers designed applications to guarantee that all procedures and processes are performed correctly. Each application contains schematics, diagrams, and in-line quality checks to ensure that technicians are realizing standard work.

Previously, technicians needed to page through images scattered across "potentially hundreds of thousands of pages of schematics," according to Lennox. Now, all of the information a technician needs is immediately available within the application. Staymobile runs applications on touch-screens and tablets at every workstation. As a result, technicians can interact with their dynamic work instructions without pausing or stopping to find information. "My technician can still hold a screwdriver in one hand while they look up which screw needs to come out first with the other," Lennox observed.

RESULTS

Staymobile realized significant ROI with Tulip, with Lennox noting that, "Results were tremendous in a relatively short period of time."

Staymobile tracks success in several areas, including cost, quality, delivery, and yield. Lennox reported that, "quality improved fast and stayed there." With Tulip, Staymobile's first time fix rate (the amount of serviced and repaired items that require no repeat work) fell to below 2%. This makes Staymobile's quality best-in-class, with a significantly greater success rate than the industry standard. Further, their improvements in quality and throughput have stayed stable since they began using Tulip.

Some of the benefits Staymobile has seen with Tulip include:

- **Streamlined technician job functions**
- **Standardized workflows across operators and locations**
- **Centralized collection, monitoring, and analysis**
- **Technicians can now view dynamic visual work instructions and log their work performed without ever leaving the tulip application environment**
- **Eliminated the need for paperwork and physical fillings**
- **Gained visibility into technician performance and compliance with standard operating procedures (SOPs)**