RADAR

Real-time **A**utomated **D**ata **A**nd **R**eporting

What is RADAR?

RADAR is a custom, real-time, automated data and reporting application designed to reduce scrap costs by identifying manufacturing quality issues early.

A high volume of data is continuously logged as parts are created and tested. Analytics are computed in real time on the big data and the results are presented to quality engineers.

A Customer's Story

At a major automotive company's engine plant, engine parts are die cast 24/7. When quality engineers begin their day, their main concern is validating the quality of parts manufactured within the last few hours. If parts are failing tests and are at risk of being scrapped, the root issue must be identified and resolved early to prevent additional parts failing for the same reason.

Prior to RADAR, the quality engineers had access to raw manufacturing log data but this data was verbose, time consuming to review and nearly impossible to identify patterns.

How many parts failed a quality test? How many of those parts were successfully repaired? How many parts failed repair and must be scrapped? Have we met our target of quality parts manufactured today?

Those questions and more needed answers – and fast. PREMIER partnered with the customer and decided a custom solution was a great fit for their needs. Enter RADAR!

With RADAR installed, quality engineers are now able to quickly pull up any of over 40 custom built metrics designed specifically for their manufacturing process.

High-level reports provide a percentage of parts that passed or failed each test along with the total number of parts and re-test metrics. Drilling into a metric displays the lot numbers, the list of parts and details including judgements, birth data, test station, repair station and statistics.

Customer Benefits

Previously, an engineer was spending most of his shift to compile and generate a quality report for the first shift engineers to make intelligent decisions. Now, actionable data is accessible in a few clicks or even waiting in the engineer's email inbox. Additionally, live data is analyzed for trends; if the success rate drops below a specified threshold, an alert is sent to the applicable engineers.

Shortly after installing RADAR, a consistent quality defect was discovered that was not apparent to quality engineers when manually reviewing log data. By a combination of data and reports from RADAR, they identified the issue and resolved it.

Why RADAR?

We tailor analytics to each customer by first gaining an appreciation for and understanding of their specific needs and processes. This includes each manufacturing line and plant to be included in RADAR's data analysis.

The benefits are measurable: discover quality defects, spend less time analyzing data and reduce scrap costs.