onsemi

Quantenna's Success

Quantenna, now onsemi, a leading provider of high-performance Wi-Fi solutions, aimed to enhance their operational efficiency and maximize productivity.

Their search led them to **yieldWerx,** a platform designed to streamline data analysis, improve equipment uptime, and optimize manufacturing processes.

Baqar Tabrez, the engineering team lead, championed the implementation of yieldWerx and oversaw its successful integration within Quantenna's operations.

BAQAR TABREZ
Engineering Team Lead

Unlocking New Horizons

Quantenna's engineering team faced the challenge of spending hours analyzing a single set of data before yieldWerx. **Baqar Tabrez** highlights the significant improvement:

> ***Before using the tool, it took an engineer around 4 hours to analyze one set of data. With the tool, the same engineer can analyze 4 sets of data in the same amount of time.***

This remarkable increase in efficiency led to a **6-10x** boost in engineering productivity.

Uninterrupted Growth

Equipment downtime plagued Quantenna's productivity in the past. However, **yieldWerx's real-time alert system** transformed their equipment management approach. **Baqar Tabrez** notes the impact:

> ***The tool alerts the engineer when equipment & test parameters are drifting out of spec, allowing them to quickly address the process and yield issues and prevent equipment downtime AND/OR significant yield loss.***

This resulted in a notable **10%** increase in equipment uptime, early fault detection, and effective identification of issues.

Potential to Proficiency

Quantenna aimed to deliver exceptional yield and optimize their manufacturing processes. yieldWerx provided invaluable insights into yield limiters, empowering Quantenna's team to pursue statistical data mining rapidly.

As **Baqar Tabrez** explains,

> ***yieldWerx was able to provide insights into the root causes of yield limiters and pursue statistical data mining quickly by exporting summary context with plug-ins to JMP, allowing the Process Engineer to make targeted improvements to the manufacturing process.***

Impact

- Faster data analysis & improved efficiency
- Enhanced productivity and cost savings
- Significant productivity enhancements
- Substantial cost savings and ROI
- Cost-effective solution for semiconductor yield

Achievements

- 6-10x increase in productivity
- 10% increase in equipment uptime
- Yield improvement over 60% through SPC implementation
- Savings of over $1 million on hardware investments
- yieldWerx 15% cheaper than competitors

Results

Quantenna's adoption of yieldWerx brought substantial cost savings and a rapid return on investment. They saved over **$1 million** on hardware and equipment investments. **Baqar Tabrez** emphasizes that the cost-effectiveness of yieldWerx being **15% cheaper** than competitors.

The platform's robust reporting and analysis capabilities, flexible yield calculation options, and streamlined processes resulted in significant cost savings, achieving an **ROI** in months rather than years.

The Path to Success

Quantenna's partnership with yieldWerx has brought about remarkable transformations in their operations. With the guidance of the Quantenna teams, yieldWerx has propelled Quantenna to new heights of productivity, efficiency, and cost savings.

The platform's integration has resulted in a significant increase in engineering productivity, a reduction in equipment downtime, and a substantial improvement in yield.

$1M
ANNUAL PRODUCTION **SAVINGS**

10x
INCREASED **PRODUCTIVITY**

Aftkhar Aslam, yieldWerx's CEO commented about the engagement with Quantenna

yieldWerx prides themselves on the level of automation that we bring to our customers. We want to be able to cut out all the human glue and logic that Quantenna engineers had to painstakingly execute every time they wanted to monitor their data. Data seamlessly was loaded into yieldWerx, and yieldWerx monitored the data letting Quantenna engineers know well ahead of time that they had yield and process issues and provided enough time for them to react, perform RCA and execute changes that impacted WIP Lots. Product & Test Equipment engineers focus on resolving the issues rapidly vs looking for a needle in haystack.

Take a 15 days free trial or schedule a demo to uncover a potential of your data when processed by yieldwerx.

yieldWerx™
THE FUTURE OF YIELD ANALYSIS & BEYOND

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