



R SYSTEMS ANALYTICS

SUCCESS STORY

INDUSTRIAL IOT

A Global Electronics Giant Improved Operational Efficiencies by Engaging R Systems to Develop a Series of Analytical tools

www.rsystems.com

Client Overview

Industrial Internet of Things (IIoT) is the use of Internet of Things (IoT) technologies in the manufacturing sector. IIoT will transform companies and Industrial Analytics based on IoT is poised to revolutionize this sector.

According to Forbes, McKinsey Global Institute predicts that IoT will generate up to \$11T in value to the global economy by 2025. The key benefit we gain from IIoT is the use of Predictive and Prescriptive Maintenance of machines and analysis of product usage in the field.

Industrial Analytics basically gears the collection, analysis and usage of data generated in industrial operations and throughout the entire product life cycle, applicable to any company that is into manufacturing and selling of physical products. While currently, this involves traditional methods of data capture and statistical modeling, the future value will be enabled by advancements in the field of connectivity and improved methods for analyzing and interpreting data.

The client is a multinational conglomerate which operates in 11 business segments: Information & Telecommunication Systems, Electronic Systems & Equipment, Automotive Systems, Digital Media and Consumer Products, etc.

Problem Statement

- High operational costs of production systems on floor
- High equipment downtime
- Lack of compliance and conformance to desired standards

Primary Client Objective

- To improve the operational efficiency and reduce costs
- To minimize equipment downtime
- To establish a quality management & regulatory compliance mechanisms

Our Solution:

► R Systems IIOT

- Part of the R Systems Analytics Big Data Solution Framework

R Systems IIoT

The Approach

R Systems helped the client to develop a set of analytical tools which enabled key decision-makers to make data-driven decisions from IoT data streams.

The tools consisted of two elements:

1. A Custom Dashboard

A web user interface for interactive visualization of KPIs and other critical information pertaining to the overall production performance and health of factory equipment. This dashboard aggregated and cleansed IoT sensor data streams and allowed gaining actionable insights.

2. A Mobile Application

The app imported a subset of the information available in the custom dashboard, based upon the user credentials and provided real-time alerts from a number of parameters programmed into the application and allowed IT and OT staff to identify in real-time equipment which might require maintenance.

The tools developed by RSI employ Edge Analytics for improved field operations in real-time to aid Top Management, Operational Staff as well as Factory Workers

Business Impact:

The tool applied by our customer for their manufacturing plants is helping them towards:

- **Cost reductions** – Reducing various costs of production systems on floor
- **Quality improvements** – Improving the total quality and reducing costs of quality
- **Regulatory compliance** – Improving the compliance and conformance to desired standards

This had the following visible impacts:

- Reduction of equipment downtime by a significant **25%**
- Improvement of MTTR by **15%**
- Improvement of energy efficiency and utilization of equipment