Automating Monitoring Complexities with IoT for a Leading Manufacturing Company

About the Client

The Company is a major manufacturer of steel, metal goods and supplier in the U.S. They have more than 10,000 employees and have factories in many major cities. The company has automated machines i.e. boilers and trespassers etc. The client endeavors to continuously strengthen its business and market position further its ranking as a significant regional player and achieve progress across its operations.

At a **Glance**

USE CASE

The client is a large manufacturing company in the U.S, wanting a fully automated cloud solution to gather all the sensors data using IoT and provide automated monitoring of machines

CHALLENGE

Client was facing issues regarding well-formatted data with a convenient UI and automate their equipment monitoring

Business Challenge

The material status inside automated manufacturing machines are being manually monitored within the organization, resulting in the increase of monitoring technicians having human errors that can result in the downfall of the business and growth.
The major issues were:

1. Understanding the effects of continuous upgrades and changes in resource shifts from line to line.

2. The possibility of Human Errors in recording readings.

3. Delayed communication.

4. Wastage of production time due to unplanned maintenance at peak hours.

5. Lack of automation for removal of data from obsolete devices.

6. On-premises data storage, which sometimes slows down the uploading process.

Our Approach

Royal Cyber designed the following solution for the client, creating a fully automated monitoring and processing to replace manual monitoring:

1. Looking at their advanced machines equipped with sensors Royal Cyber designed an IoT application to interconnect them to a central repository on cloud.

2. The formatting of data was carried out through IoT data resources to convert the data in the required human readable format and developed UI having the necessary graphs for monitoring purposes.

③ An alert system was designed that produced an alarm after a threshold assigned to it so that any abrupt maintenance during production hours could be avoided.

④ Automation of data coming from devices that have been put out of repository was moved to Cloud in real time, so the precise status of devices existing in plants could be noted.

RESULTS

The client gained the following benefits:

① No downtime & centralized point of data management from sensors.

② Fully automated monitoring of machinery on premises as well as on cloud

③ No downtime for production due to machinery maintenance during peak hours

④ Increase in productivity and decrease in the cost being spent on-premises equipment management

SOLUTION

Royal Cyber's team automated their infrastructure on cloud and provided a plant-wide IoT solution for better production and manufacturing with a fully automated monitoring and processing.

KEY BENEFITS

› 80% improvement in efficiency

› Speed – just in time provisioning

› Increased consistency & accuracy

› 50% increase in ROI

About Royal Cyber:

Simplifying IT for Customers & Partners

Royal Cyber Inc. Headquartered in Naperville, IL is a leading software organization that provides services ranging from application development and deployment to training and consultancy. We commenced the operations in the year 2002 as a specialized Technology provider striding in as a software deployment service provider, assisting clients to meet the standards and demands of doing business in the rapidly changing marketplace. Today we stand tall as a **One Stop Shop for all your IT needs.**

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