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Resonating Mindz

Case study – Predictive Maintenance of Industrial Motors

Abstract : Resonating Mindz has helped CIKAUTXO to increase plant uptime, by predicting Motor Failures. This has led to reduced downtime of Motors by 75% and reduce maintenance cost by 30%

Problem statement

CIKAUTXO - Spanish automotive component manufacturer based out of Pune India, had unplanned plant downtimes due to abrupt breakdown of Motors. These motors were typically of rating 50 HP to 100 HP. It was not possible to have a large inventory of the Motors.
Unplanned downtimes led to production loss and affected plant efficiency.

Description of the solution

The solution involves continuous monitoring of the Motors and having its health status available on a web dashboard.
The wireless monitoring device - X-Predictor is mounted on the motor, captures vibration and temperature continuously and sends it to Server.
Server has an AI-ML based predictive maintenance algorithm deployed that analyses the data and predicts failures.

Business impact / RoI

- Reduce downtime of Motors by 75%
- Reduce maintenance cost by up to 30%
- ROI within 6 months
- Equipment life extended by 3 more years

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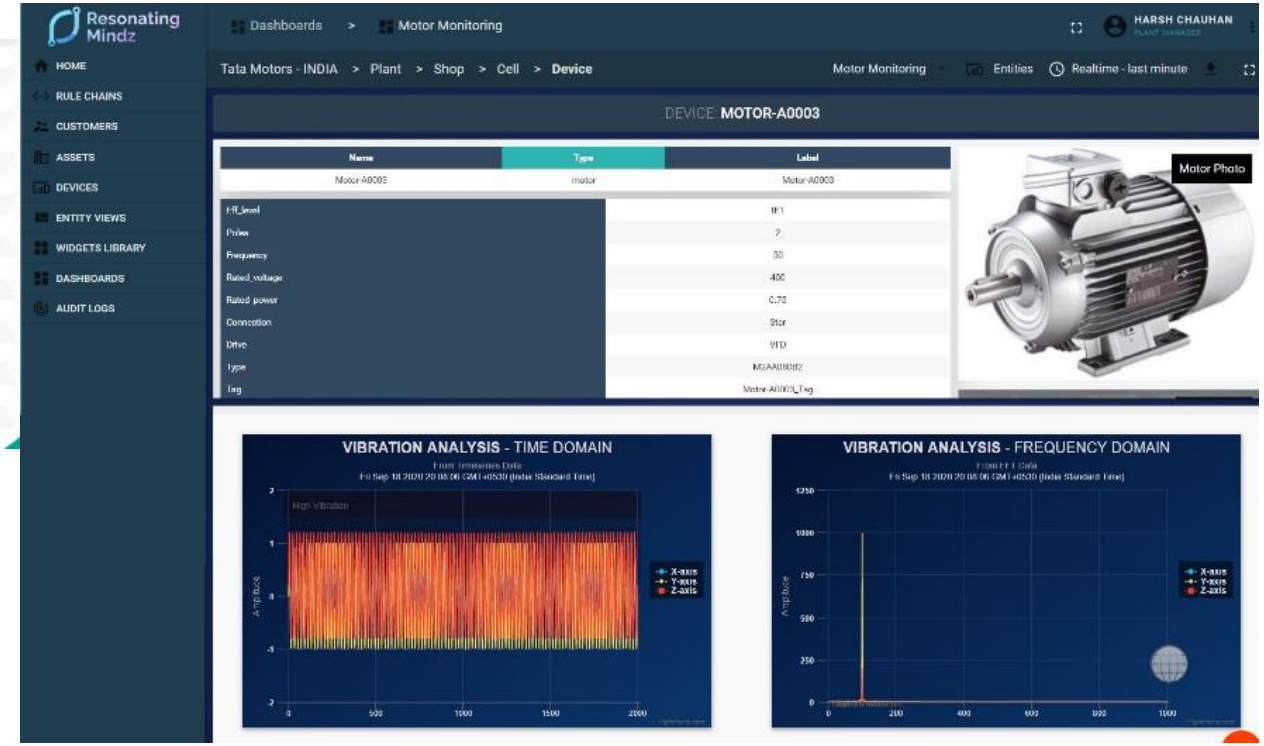
Key Features

- Predictions using ML
- Remote Monitoring
- On-Premise, Cloud
- Wireless
- Battery Operated



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Resonating Mindz

Case study – Machine/Equipment Monitoring, OEE

Abstract : Resonating Mindz has helped MAHLE to achieve shop floor production visibility and 10% OEE improvement.

Problem statement

MAHLE - German Automotive company based out of Pune, had VISCO line with 16 SPMs and 6 Test Rigs. Management as well as the Shop floor team does not have real time visibility of Planned vs actual production. This leads to difficulty in finding the root cause of production in efficiency.
Paper based reporting of production status is in-efficiency and error prone.

Description of the solution

System automatically collects Machine Process parameters. With this live data, it is possible to identify production bottlenecks and take corrective action immediately. For Each machine on the production line, OEE is calculated.
The data is reliable as it is extracted live from the Machines. So easy to identify bottlenecks.
Historical data is available anytime for comparison. Information about top downtime reasons across the plant is available readily.

Business impact / RoI

- 10% Improvement in OEE
- Live and continuous Production Monitoring.
- Management as well as the entire shop floor has live visibility of the production.
- Accurate OEE data. Improved plant efficiency.

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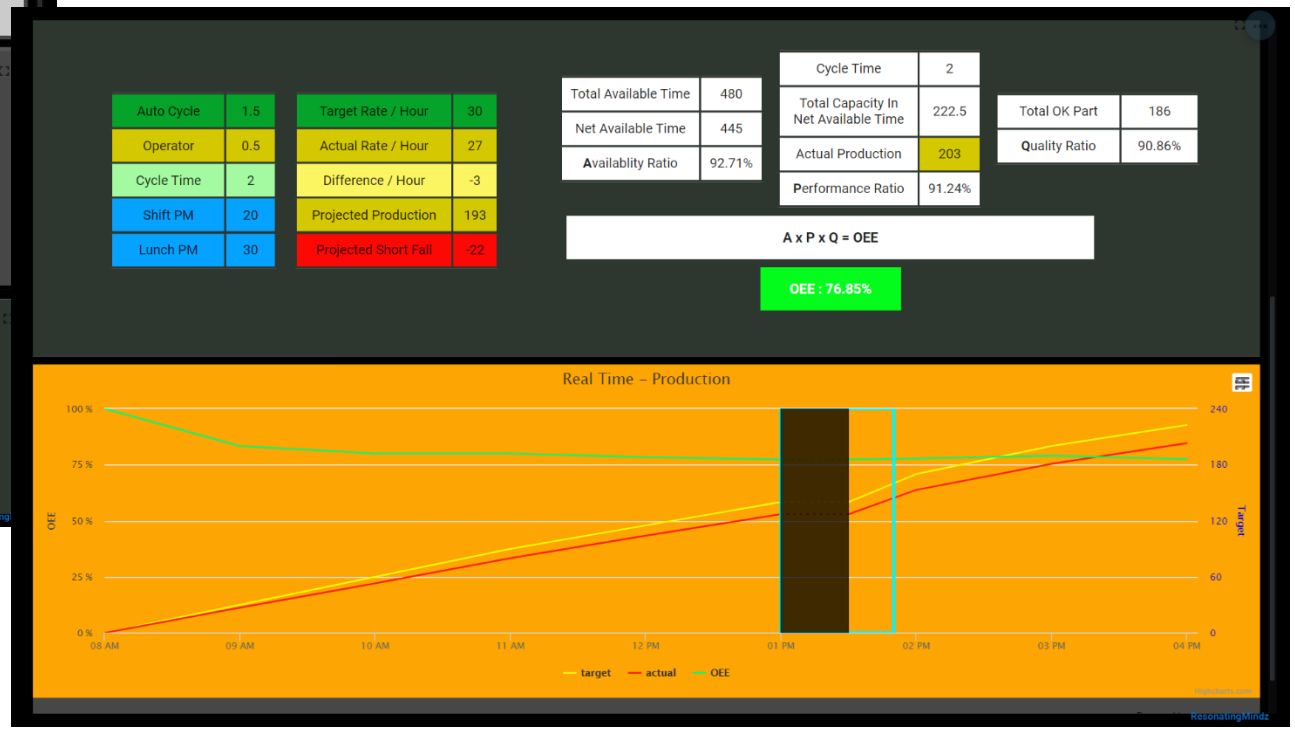

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Resonating Mindz

Case study – GAS, Energy Consumption monitoring

Abstract : Resonating Mindz helped AB InBev detect gas, energy leakage there by savings of 5% of the gas, Energy consumption.

Problem statement

AB inBev, a global brewer lacked information about which production lines, equipment are consuming more Gas/Energy. This was leading to higher operational costs, lower profitability. Manual data collection from flow meters was error-prone.

Description of the solution

The system involves continuous monitoring of consumption of Gas/Energy. On the server-side per shift, per day, per Month consumption charts are available. All data is logged automatically.

Business impact / RoI

- Savings of 5% by identifying gas/Energy leakage
- Improve maintenance costs by reducing manual data collection by 5%

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Resonating Mindz

Case study – GAS, Energy Consumption monitoring

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Resonating Mindz

Case study – Part Traceability

Abstract : Resonating Mindz helped MAHLE to achieve Part Traceability for Automotive Compliance.

Problem statement

MAHLE was asked by its OEM to record all Part history data, the machine process parameters during production for compliance purposes. During Part recall as well as Quality purpose, there was no traceability.

Description of the solution

The system automatically captures machine data for each individual Part during the Production Process. So, for each Part, information about which all machines, and test rigs it has passed through and machine parameters for each machine are recorded.
For compliance, this data is available for 3 years.
A search console is provided. By entering Part UUID, you get the entire Part history.

Business impact / RoI

- Meet Automotive Compliance Requirements
- Limit spread of production defects due to a specific lot of Components/Supplier/Machine.

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Case study – Part Traceability