Predictive Asset Maintenance Solution

Predictive Solution to improve machine uptime

Zero unplanned down time is No.1 priority for majority for organizations as it is costing 50bn+ per year for industrial manufactures alone.

What is Predictive Asset Maintenance Solution?

Wipro's Predictive Asset Maintenance Solution aims to predict and prevent any machine failure using advanced IoT, cloud and machine learning technologies. The solution analyzes production data to identify patterns and predict issues before they happen.

Why PAM is needed

Extended Downtime and production loss: Any Critical equipment failures during working hours would cause disruption in manufacturing and reduce shift productivity. Machine downtime affects plant efficiency.

Increased cost of Maintenance: Preventive maintenance is costly with periodic maintenance activity which might be redundant

Timely availability of spare parts and trained technicians: Availability of the spare parts and skilled technicians. All components needs to be stored as no insight into failures, driving the OPEX higher.

Increase Efficiency

- Reduce down time
- Increase utilization
- Improved MTTR (Mean Time To Repair)

Increase OEE (Overall Equipment effectiveness) by reducing reactive maintenance

Reduce OPEX

- Reduce maintenance cost
- Improved spare parts availability & inventory
- Verify maintenance effectiveness

By adopting a predictive maintenance strategy instead of preventive maintenance, cost reduction can be achieved.

Increase Life of Parts and Machine

- Early detection of failure
- Improved MTBF (Mean Time Between failures)
- Reduce risk for workers

On-time maintenance reduces catastrophic failures, increasing the life of parts and the machine itself.

Multiple machine operatonal parameters are monitored through industrial grade non-intrusive sensors, providing real time visibility to asset condition.

Edge processing on the gateway provides actionable insights and predictive alerts to the stakeholders.

Cloud platform to provide enterprise level scalability and security

Easy integration to legacy, modern machines and enterprise systems.

Things	Connectivity	Global Infra	Data Analysis	Data Storage	Data Exposure	Applications

BLE based sensors	Gateway with GPS/LTS/WiFI	AWS IoT Core	Rules Engine	DynamoDB	API Gateway, Lamda Functions	Web App

Tangible Benefits / Desired Outcomes

Increased plant efficiency and machine OEE (Overall Equipment Effectiveness)

Reduced OPEX cost due to preventive maintenance strategy

Increased Worker safety and machine life

Why Wipro?

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