VISHWAKARMA UNIVERSITY
Maximising Human Potential

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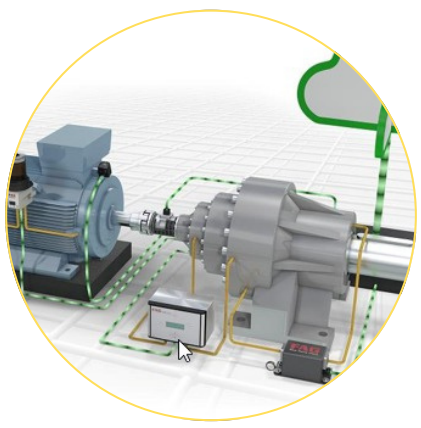
Cloud Based Health Monitoring System For Machines

Problem Statement

Industries face significant challenges with machine downtime, which can result in production delays, increased costs, and reduced efficiency. Traditional maintenance methods such as periodic inspections are often insufficient for preventing machine failures or optimizing machine performance in real-time. There is a need for a system that can predict failures, improve maintenance schedules, and enhance operational efficiency.

Objective

- Monitor machine health in real-time.
- Predict machine failures before they occur.
- Optimize the maintenance process by providing alerts and reducing unnecessary checks.
- Improve overall machine efficiency and reduce downtime.



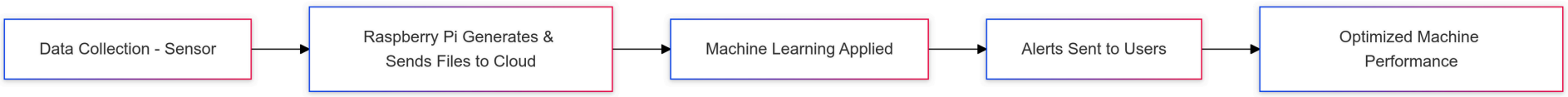
Expected Outcome

- Real-Time Machine Health Monitoring: Continuous tracking of machine parameters, ensuring early detection of anomalies.
- Predictive Maintenance Alerts: Proactive alerts for potential machine failures to avoid unplanned downtime.
- Optimized Maintenance Schedules: Maintenance activities will be performed only when necessary, reducing overall maintenance costs.
- Improved Machine Efficiency: Machines will operate at optimal conditions, reducing energy consumption and increasing productivity.

Result

- Reduced Maintenance Costs: Predictive maintenance can reduce maintenance costs by up to 40%.
- Decreased Machine Downtime: With proactive alerts, the response time to issues will be quicker, leading to minimal production disruptions.
Increased Operational Efficiency: By optimizing machine performance, the system will help in improving overall productivity and sustainability.

Working



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