

Predictive Maintenance: Business Problem

Predictive maintenance is a proactive maintenance approach that uses data analysis and machine learning to predict equipment failure before it happens. By analyzing real-time data, predictive maintenance can identify potential problems and schedule maintenance before equipment fails, reducing downtime, minimizing maintenance costs, and extending equipment lifespan.

Why predictive maintenance is required?

Here are some reasons why predictive maintenance is important:

- ✓ Improved equipment reliability: By predicting when equipment is likely to fail, maintenance teams can take preventative measures to avoid unplanned downtime. This improves the reliability of the equipment and reduces the risk of expensive breakdowns.
- ✓ Lower maintenance costs: Predictive maintenance allows maintenance teams to perform maintenance only when it is necessary, rather than on a fixed schedule. This reduces the cost of unnecessary maintenance and helps to optimize maintenance spending.
- ✓ Increased efficiency: Predictive maintenance can help to identify inefficiencies in equipment and processes, allowing maintenance teams to take action to improve efficiency and reduce energy usage.
- ✓ Improved safety: Predictive maintenance can help to identify potential safety hazards and address them before they cause accidents or injuries.
- ✓ Better data-driven decision making: By using data and analytics to predict equipment failures, maintenance teams can make more informed decisions about maintenance schedules, spare parts inventory, and equipment replacement.

Overall, predictive maintenance is important because it can help organizations to improve equipment reliability, reduce maintenance costs, increase efficiency, improve safety, and make more informed data-driven decisions.