



INDUSTRIAL USE CASES

PREDICTIVE MODELLING ANALYTICS

TOPIC : PREDICTIVE ANALYTICS FOR MANUFACTURING : RICOH
PRODUCTS LTD.



JOTHIKA R (927621BAD019)

KANIYAMUDHAN Y (927621BAD020)

KAVIN K V (927621BAD021)

III – YEAR AI-DS



PROBLEM STATEMENT

One potential problem faced by Ricoh Products Ltd could be the need to streamline their production processes to reduce waste and improve overall efficiency.

This may involve optimizing production schedules, minimizing material waste, reducing energy consumption, and enhancing resource utilization across their manufacturing facilities.



ABOUT INDUSTRY:

INDUSTRY NAME: Ricoh Products Ltd

EXPLANATION

- Ricoh Products Ltd is a subsidiary of Ricoh Group, a Japanese multinational imaging and electronics company.
- Specializing in office equipment, Ricoh Products Ltd manufactures a wide range of printers, photocopiers, and multifunctional devices. The company is known for its innovative technologies in document management and imaging solutions.
- With a global presence, Ricoh Products Ltd serves businesses and organizations of various sizes across different industries. Its commitment to quality and customer satisfaction has made it a trusted brand in the office equipment market worldwide.



SOLUTION

Some of the solutions which can be used with the help of predictive modeling are,

- Use of predictive analytics to analyze the demand forecasting
- Use of predictive analytics for maintenances
- Use of predictive analytics for optimizing supply chain logistics



SOLUTION EXPLANATION

From the above problem statements which are faced in the Ricoh industries Ltd are

- Demand forecasting
- Maintenance
- Optimization of Supply chain



DEMAND FORECASTING

Ricoh can use predictive modeling techniques to forecast demand for their products accurately. By analyzing historical sales data, market trends, and other relevant factors, they can predict future demand more effectively. This helps optimize production schedules, minimize overproduction or underproduction, and ensure that the right amount of inventory is available at the right time.



MAINTENANCE

Implementing predictive maintenance systems can help Ricoh Products Ltd anticipate equipment failures before they occur. By analyzing data from sensors, equipment logs, and historical maintenance records, predictive models can identify patterns indicative of impending failures. This allows Ricoh to schedule maintenance activities proactively, minimize unplanned downtime, and extend the lifespan of their manufacturing equipment.



OPTIMISATION OF SUPPLY CHAIN

Predictive modeling can optimize supply chain logistics for Ricoh Products Ltd by forecasting supplier lead times, transportation costs, and inventory levels. By analyzing data on supplier performance, historical order patterns, and market dynamics, predictive models can identify opportunities to streamline supply chain operations, reduce inventory carrying costs, and improve delivery reliability.

THANK YOU!

