

Predictive Analytics in Manufacturing

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Introduction

What is Manufacturing?

Leading countries in Manufacturing

Top Manufacturers in USA



1. Predict Machine breakdown

- Train the model on collected sensor data from machines
- Predict Failure and hence reduce failure rate
- Reduce failure rate and increase machine utilization

Failure Rate <- Failure per unit time



2. Process Optimization

- Train the network to determine the optimal production parameters that will prevent process disturbances
- Minimize Waste and maximize throughput.



Process Optimization

Manufacturing Cost
Quality book

3. Quality Control

- In manufacturing, quality is defined as
conformance to Specification
- Plant managers use traditional quality
practices
- Predictive analytics can be used to gain
operational insights
- Save costs on managing recalls and serving warranties.



4. Other Areas

- Demand Forecasting
- Inventory Control
- Supply chain



Thank you !

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