

AI-Based Predictive Maintenance for Railways

Enhancing railway maintenance and efficiency with **Artificial Intelligence**

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A Smart Solution for
Sydney Trains

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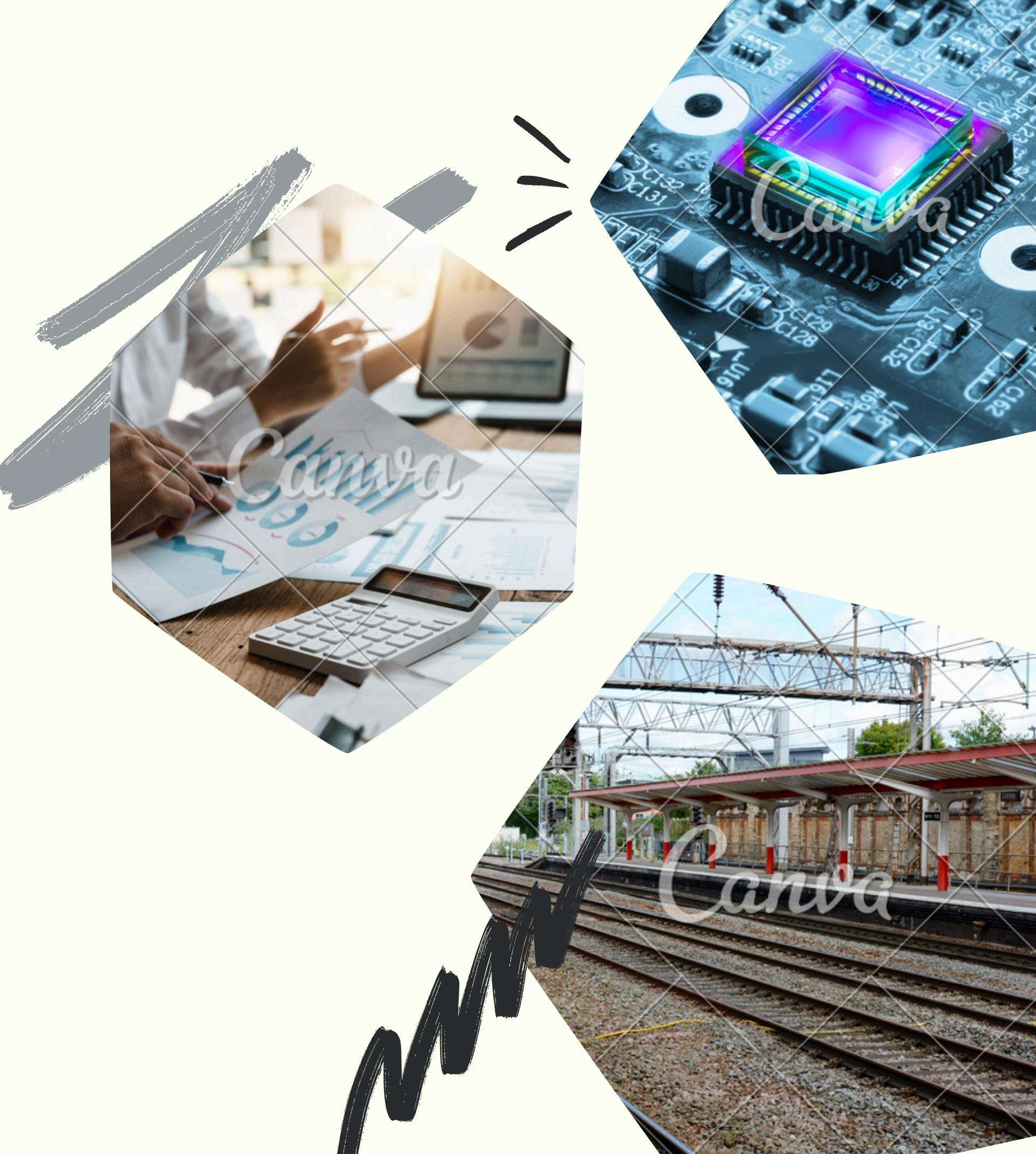


Problem Statement & Background

Our speaker specializes in AI-based predictive maintenance for railways, focusing on enhancing efficiency and reliability. Their expertise allows for **proactive solutions**, minimizing downtime and optimizing performance in the railway industry.

Project Objectives & Scope

AI enhances railway safety and efficiency through **real-time monitoring** and predictive analytics.



Methodology / Approach

Exploring the benefits of AI for efficient railway upkeep



Predictive Analysis

Foresee issues before they occur



Cost Efficiency

Reduce maintenance expenses significantly



Improved Safety

Enhance passenger and crew protection



Operational Efficiency

Optimize scheduling and resource allocation

Impact of AI on Railway Maintenance Efficiency

AI technologies significantly enhance predictive maintenance in railway systems today.

30%

Reduction in unplanned downtime

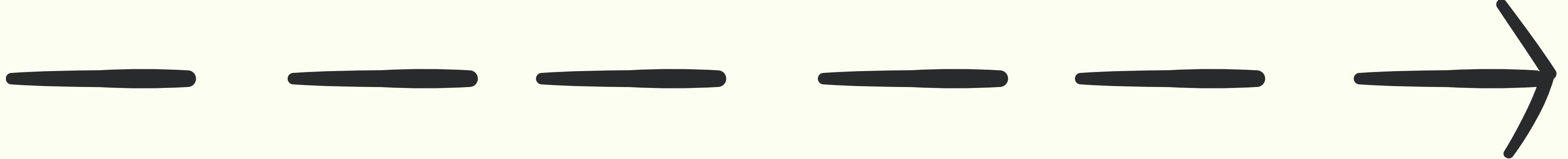
Improving service reliability and punctuality

25%

Increase in maintenance cost savings

Enabling better resource allocation and planning

Plan & Milestones



Initial Implementation

Predictive algorithms introduced in maintenance practices.

Data Integration

Real-time data analytics systems deployed for efficiency.

Full Automation

AI-driven maintenance systems fully operational and optimized.

Expected Outcomes & Risks

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