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Identification of Payment Defaulters through Machine Learning and Implementation of Credit Worthiness in SAP S/4 HANA

Presented By

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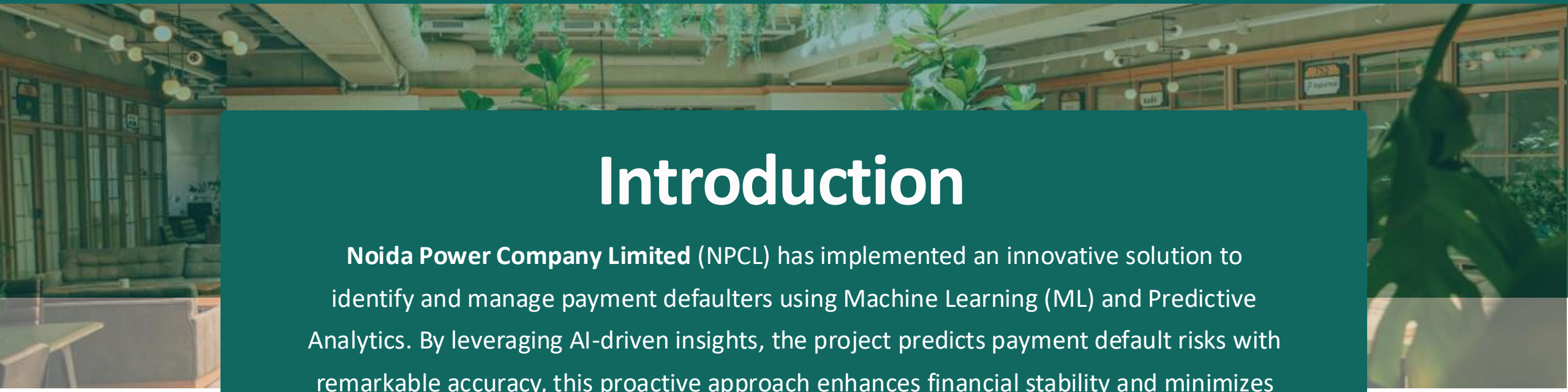


Introduction

Noida Power Company Limited (NPCL) has implemented an innovative solution to identify and manage payment defaulters using Machine Learning (ML) and Predictive Analytics. By leveraging AI-driven insights, the project predicts payment default risks with remarkable accuracy, this proactive approach enhances financial stability and minimizes revenue loss.

The integration with SAP S4HANA further streamlines the process, providing real-time creditworthiness scores for consumers. This system enables NPCL to make data-backed decisions, reduce temporary disconnections by 8% and improve monthly recovery by 7%.

Context

In the utility industry, managing payment defaulters has traditionally been a reactive process, resulting in potential financial losses and operational inefficiencies.

01

Financial Impact

02

Inefficient Collection Processes

03

Rising Payment Defaults

04

Data Abundance

Relevance - Why it matters?

Implementing machine learning (ML) predictive analytics to identify payment defaulters and determine creditworthiness in SAP S4HANA is highly relevant in today's utility sector. It addresses critical challenges faced by electricity providers and enhances financial and operational management.

Customer Relationship

Enables personalized communication and targeted interventions to prevent defaults.

Proactive Risk Management

Predicts defaulters in advance, reducing financial losses.

Operational Efficiency

Automates identification and intervention processes, saving time and resources.

Payment Default – Predictive Modelling

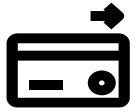
Machine learning models analyze historical payment behavior, consumption patterns and customer demographics to forecast the likelihood of payment default.

Seasonal variations, tariff changes and economic factors are incorporated to enhance accuracy.

Challenges

In the utility industry, managing payment defaulters has traditionally been a reactive process, resulting in financial losses and operational inefficiencies.

01



Data In-Silos

02

Data Imbalances

03

Data Integration & Management

Key Takeaways & Recommendations

01

Reduced Disconnections: Targeted interventions lower temporary disconnections by **8%.**

02

Increased Cash Flow Improved payment predictability enhances revenue collection by **7%** month-on-month.

03

Improved Operational Efficiency: Automation through AI and SAP S4HANA streamlines defaulter identification and follow-up with an ROI of 60%

04

Accurate Risk Assessment: Real-time creditworthiness scores enable proactive decision-making.

Key Takeaways & Recommendations

05

Integrate with ERP Systems: Utilize platforms like SAP S4HANA for seamless credit score management.

06

Develop Data-Driven Strategies: Leverage historical and real-time data to customize consumer interventions.

07

Promote Consumer Awareness: Educate consumers on the importance of timely payments to improve payment behavior.

08

Scale for Future Growth: Ensure the solution is scalable to accommodate larger datasets and customer bases.

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THANK YOU

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