INDIUM

AI-Powered Credit Risk Assessment with teX.ai for a Leading Southeast Asian Loan Provider

SUCCESS STORY

Client Overview

The client is a prominent holding conglomerate that leverages fintech and cutting-edge emerging technologies to drive financial inclusion across Southeast Asia. With a strong focus on serving underbanked and underserved communities, the Client provides various innovative financial services tailored to meet the diverse needs of individuals and businesses. As a holding company, the Client strategically owns and manages the outstanding stocks of multiple financial institutions and technology-driven enterprises.

Assess Loan Viability Through Customer Repayment History

The client manages loan-related data from financial organizations across Singapore and Southeast Asia. Headquartered in Singapore, they operate a successful business with digital microfinance as their core offering. In addition to providing corporate and consumer loans, the client actively pursues strategic acquisitions and partnerships to expand their reach.

As a technology-driven organization, the client leverages innovation to enhance efficiency and better serve its customers. They sought to predict the viability of offering loans based on customers' repayment histories, aiming to optimize financial offerings for their target audience. Additionally, the client required dashboards to provide key insights, including:

1 Overview of current loans, including payback and aging statistics, unpaid principal amounts, and more.

2 A detailed overview of existing loans for each customer.

3 An assessment of their organization's sales, including client retention, churn rate, and loan processing time.

Smart Lending Unlocked: How Indium Used Data & AI to Predict Creditworthiness

Indium utilized a data-driven approach to accurately assess whether a loan should be offered to a target customer, combining advanced analytics and machine learning models. By leveraging historical loan repayment patterns, credit scores, and other key financial indicators, Indium developed a predictive framework to evaluate customer creditworthiness. This approach enabled the client to make informed lending decisions, reduce financial risk, and optimize their loan offerings.

To achieve this, Indium leveraged the following:

▶ teX.ai, Indium's text analytics product, extracts customer-related loans and geographic details at a row level since this information came from two PDFs.

▶ Custom-built business logic to summarize the customer-related information at a row level, using the information extracted from the 2 PDFs.

▶ Feature selection of variables to decide the best inputs for the machine learning algorithm.

▶ XGBoost supervised learning algorithm was used to validate and categorize if it was "Good," "Risky," or "Bad" to offer loans to customers based on their past loan repayments.

▶ The aggregated KPIs were then displayed on intuitive dashboards built on Power BI.
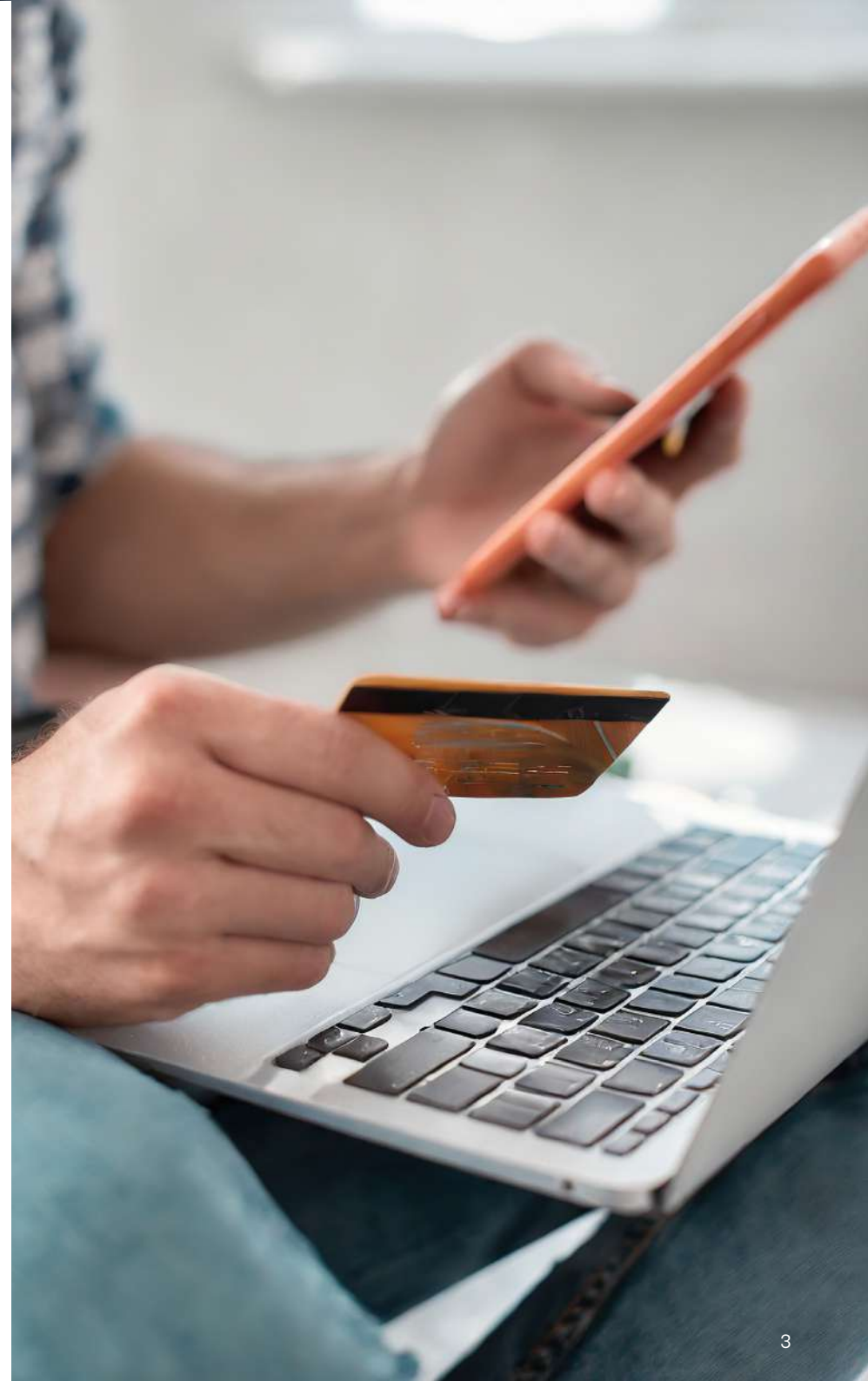
Driving Credit Risk Modeling with Indium

The client achieved substantial efficiency gains by leveraging automation and predictive analytics, reduced operational costs, and enhanced customer experience. The data-driven approach improved approval accuracy and streamlined the entire loan cycle, leading to measurable business impact.

Key Impact Metrics

▶ The machine learning-assisted approach increased the pull-through rate by 40%, resulting in a 30% reduction in loan cycle time.

▶ The client acquisition rate increased by 25% in three months.

▶ The application acceptance rate increased by 40% once human biases were eliminated from the review process.

▶ The automated and optimized procedure reduced client acquisition expenditures by 20%.

▶ The previous system was then enhanced to send personalized messages to target consumers to create a more seamless customer experience and increase customer loyalty.

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About Indium

Indium is an AI-driven digital engineering company that helps enterprises build, scale, and innovate with cutting-edge technology. We specialize in custom solutions, ensuring every engagement is tailored to business needs with a relentless customer-first approach. Our expertise spans Generative AI, Product Engineering, Intelligent Automation, Data & AI, Quality Engineering, and Gaming, delivering high-impact solutions that drive real business impact.

With 5,000+ associates globally, we partner with Fortune 500, Global 2000, and leading technology firms across Financial Services, Healthcare, Manufacturing, Retail, and Technology—driving impact in North America, India, the UK, Singapore, Australia, and Japan to keep businesses ahead in an AI-first world.

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