



Redefining customer engagement by operationalizing machine learning

For a leading Australian financial institution



Client Description

An Australian multinational bank with businesses across New Zealand, Asia, the United States and the United Kingdom. It is Australia's leading provider of integrated financial services including retail, business and institutional banking, funds management, superannuation, insurance, investment and broking services. It has revenues in excess of A\$30 billion and more than 40,000 employees.





Business Priorities

> The client depended on a legacy system to trigger the Next Best Conversation with their customers, which was resulting in less conversion and increased churn rate.

> To improve customer retention, client wanted to leverage Machine learning models to predict the likelihood of customers to opt for new business products and suggest appropriate next steps with their customers.

The customer also wanted to develop Machine Learning models using MLOps practices for Continuous Delivery and Machine Learning automation pipelines, which can bring down the lead time of taking models from experimentation to deployment and improve governance.

Our Solution

HCL partnered with the client to undertake a significant data and analytics transformation with a focus on deploying and scaling ML models for greater customer conversion.

Our approach involved:

Creating a Feature Store to archive customer's transactions and demographic data from disparate data sources, which facilitated and accelerated the development of machine learning models by providing functionality that combines many necessary activities for model development.

2

Leveraging Auto ML to reduce time for model training and hyper-parameter tuning. Also automated the champion model selection process based on the agreed performance metrics.

3

Developing Machine Learning automation pipelines, which included target label creation, feature selection, model performance validation, model interpretation and model deployment using Docker containerization and Jenkins.

4

Developing an Explainable Al module in the system to understand and interpret predictions made by machine learning models, which enabled quick turnaround from business stakeholders on model validation and approval. Creating a governance layer to monitor machine learning models and providing detailed reports on model performance to the stakeholders.

Business Impact

Feature store and machine learning



automation pipelines helped in reducing model development and deployment cycle from 4-5 months to six weeks. business approvals of models from 4 weeks to less than 8 days.

Achieved 66% increase in conversion rates from Next Best Conversation, which helped in growing the top-line for the portfolio.

For any queries, please reach out to us at digitaltransformation@hcl.com

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