EMBRACING ENTERPRISE-WIDE AI TO IMPROVE THE CUSTOMER EXPERIENCE

Impact

- 4% improvement in churn prediction
- 8% rise in data upselling recommendation
- 5% growth in quality acquisition
- Analyse semi-structured, structured & unstructured data
- Model building and machine learning
- Perform descriptive, predictive and prescriptive analytics
- Data lake for both reporting and analytics

With over 46.8M subscribers, Robi Axiata Limited is the second largest mobile network operator in Bangladesh and is a joint venture between Axiata Group Berhad of Malaysia and Bharti Airtel Limited of India.

The company commenced operation in 1997 as Telekom Malaysia International (Bangladesh) with the brand name AKTEL, and subsequently changed its name to Robi Axiata Limited. The company offers mobile communication services, broadband services, office communication, and has been a pioneer for paving the way in taking mobile financial services to the underserved communities in the rural and semi-urban areas.

Needing to improve CX through digital transformation

Robi embarked upon an organizational journey of digital transformation to improve the customer experience(CX). "We want to be recognized as the most transformative digital enterprise within the Axiata group as well as in all of Bangladesh", said Mamun Bin Shaheed, Vice President, Enterprise Data Warehouse & Analytics, Robi Axiata Limited. This meant embarking on the transformation journey along with their customers and, in parallel, introducing measures to improve the customer experience, ensuring a layer of added personalization in every conversation. "Every customer event generates valuable information, and modern data servicing nodes produce data in line with the customers' internet activities," Shaheed added. "We needed a system that would help us harness vast amounts of data within our existing Exadata data warehouse and leverage AI/ML to derive customer insight and predict service delivery issues that may arise.

The company chose Cloudera's data platform together with Cloudera Data Science Workbench (CDSW) to deliver their strategy. Along with Cloudera Support service, these offerings helped Robi build an effective data lake to gain insights into every customer interaction, using applications with enriched data feeds such as campaign management and sales apps.

Data for better decision-making

Robi deployed Cloudera's Data Hub technology to an 18-node cluster, along with Cloudera Data Science Workbench, and has plans to deploy CDP. This platform houses all network and customer business data including call records details, customer information, billing and payment-related data, charging and revenue information, network problems, alarms, incidents and performance-related information. Additionally, it integrates third-party data sources including Facebook and Twitter feeds, market insights, as well as customer internet footprint from advertising agencies.

8%

Rise in data upselling recommendation

"The move to CDP became imperative. Features like master data management, data cataloging, anonymization, and performance boosting capabilities of LLAP and increased atomicity inclusion in hive, convinced us about this decision. The centralized security and governance layer enforced and the integrated features of SDX will help us manage our data operations smoothly."

Mamun Bin Shaheed, Vice President, Enterprise Data Warehouse & Analytics, Robi Axiata Limited

About Cloudera

At Cloudera, we believe that data can make what is impossible today, possible tomorrow. We empower people to transform complex data into clear and actionable insights. Cloudera delivers an enterprise data cloud for any data, anywhere, from the Edge to AI. Powered by the relentless innovation of the open source community, Cloudera advances digital transformation for the world's largest enterprises.

Learn more at cloudera.com

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"Cloudera Enterprise data platform with Data Science Workbench is the best combination for any organization planning to build a collaborative data science environment. Even though we started out with three use cases, our roadmap to analytics covers all areas of our operations and we see Cloudera bringing together an ultimate solution to make our roadmap real." Mamun also explained their deployment of CDP as a crucial step for the company.

Intelligent automation

The project helped Robi's data science teams activate their AI investment to develop and tune machine learning models using nearly 20TB accurate data on a daily basis in order to improve business outcomes as well as eliminate operational challenges across multiple domains and use cases.

Customer retention: Customer churn is a major challenge for operators in any telecom market due to various reasons like cost of service, product variation, service quality, etc. The machine learning powered churn prediction model helps Robi predict and identify customers most likely to churn, and supports customer care executives in making the right adjustment to price, product or service to retain subscribers.

Next Best Action (NBA): By analyzing the customer's past usage and recharge history pattern, this machine learning model helps identify the right upgrade or add-on product for the individual subscriber leading to fewer instances of customer dissatisfaction and offers that are perceived as out of tune with a subscriber's needs.

Network Capex Prediction: Due to the dynamic nature of the telecom market, operators regularly undertake network rollout activities. However, a sudden spike of rollout projects can sometimes cause operators to face an expense challenge. The Network Capex Prediction model built on CDSW, integrates network usage, customer acquisition, QoS data and helps operators identify the next best investments for a future network rollout, allowing more accurate planning to secure the required capital expense.

Based on some of the use case deployments, Robi expects to see a 4% improvement in customer churn, an 8% rise in upsell recommendations and over 5% improvement in in quality acquisition. Robi has embarked on a journey of digital transformation with a long-term vision of becoming a data-driven enterprise. The goal is to drive teams to inform decisions with the help of information and not gut-feel, enrich customer experience with personalized service and become the country's most preferred telecom service provider.

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