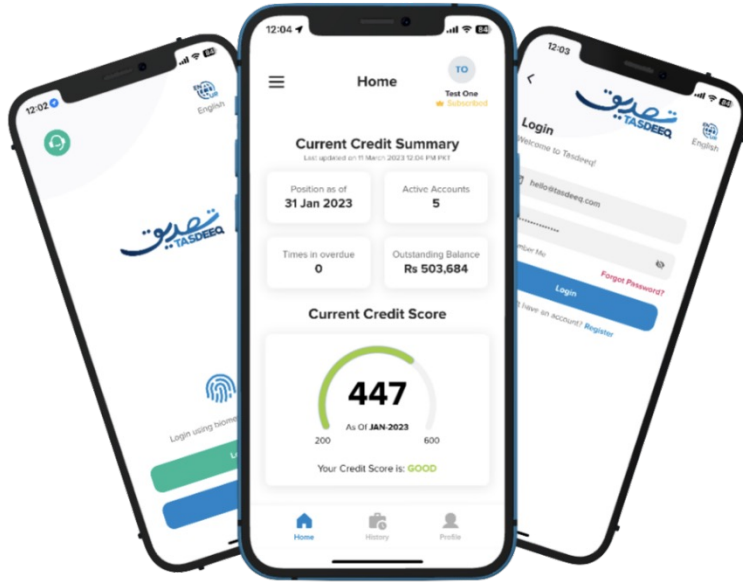# Credit Risk Mitigation Through Machine Learning

tenx.

TASDEEQ is Pakistan's premier State Bank-licensed credit bureau specializing in offering credit reports, credit scores, decision-making tools, and business analytics to a wide range of financial and non-financial institutions.

Challenge

In Pakistan, where less than 10% of people have access to financial services, there's a significant lack of data for building credit histories for new-to-credit customers. Tasdeeq aimed to address this challenge and help lenders evaluate the creditworthiness of borrowers, by integrating financial and non-financial information.

Project

- Developed a cutting-edge analytics platform, which integrates data from 140+ organizations including banks, microfinance providers, lenders, telecoms, utility distributers, and government.

- Leveraged non-financial data attributes, encompassing telecom usage, utility consumption and payment patterns, social media activity, and more, to assess consumer risk profiles.

- Implemented machine learning algorithms to forecast creditworthiness and generate risk scores across various segments including individuals, agriculture, microfinance, and first-time borrowers.

- Created 100+ business intelligence reports and interactive dashboards, empowering clients to access customized daily, weekly, and monthly insights aligned with specific KPIs.

- Launched a mobile application enabling customers instant access to their credit scores and other analytics reports.

Value Delivered

- Instant delivery of credit scores generated using advanced predictive models and data from 140+ organizations.

- Unique industry insights and customizable analytics delivered for improved risk management and benchmarking.
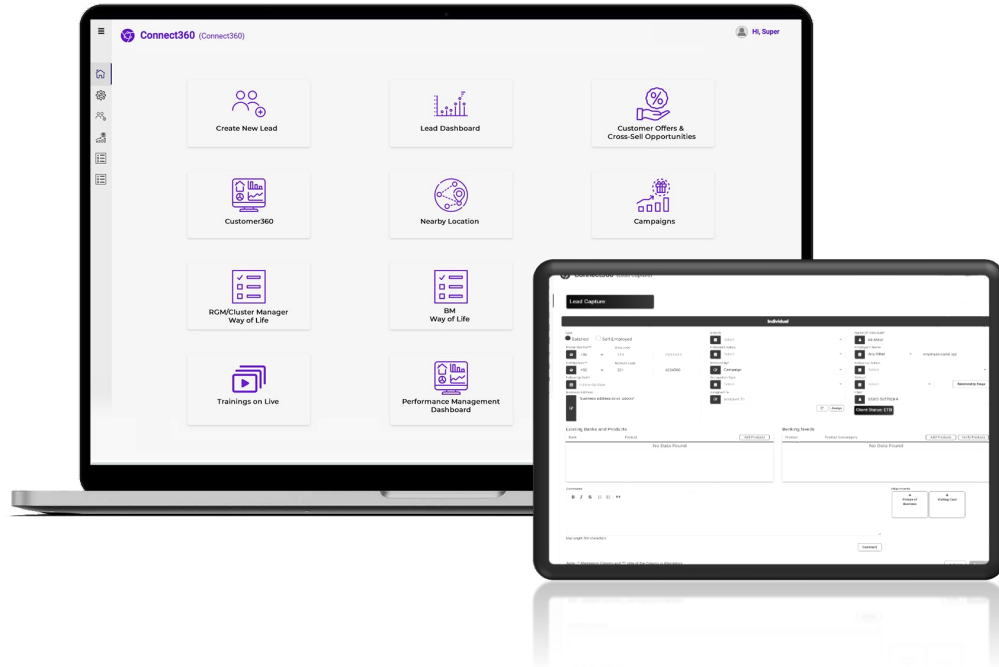
Technologies

Vertica, TensorFlow, MLflow , MySQL, Python, Angular JS, IBM DataStage, IBM Cognos, Power BI

Services

| Consulting & Advisory | Architecture & Governance | Artificial Intelligence | Computer Vision | Data Platforms | Reporting & Visualization | Web Development | iOS Development | Android Development | Cloud DevOps | Quality Assurance | Middleware & Integration |

Strengthening Customer Connections

tenx.

Faysal Bank is a commercial bank that has a strong focus on customer satisfaction. With over 700 branches located across 270 cities, the bank has a widespread presence.

faysalbank

Challenge

Faysal Bank was looking to strengthen their customer relationships with an increased understanding of their profiles, needs, and preferences. However, their customer information was scattered across silos, inhibiting holistic reporting and analytics.

Project

- Integrated customer information from 10+ source systems into a single repository.

- Deployed TenX C360 CRM solution and provided customer-facing employees with relevant information including accounts, recent transactions, family relationships, birthdays, anniversaries, relevant offers and others.

- Created a Sales Management System (SMS) to monitor customer activities and trigger relevant offers and campaigns automatically.

- Developed predictive models to segment customers and identify previously unknown product needs and potential issues.

- Deployed location geo-fencing solution to generate customer leads and increase sales pipeline.

Value Delivered

- Increased information availability for customer service agents.

- Increased ROI on credit card sales campaigns by up to 300%.

- Reduced customer attrition and deposit loss.

Technologies

Python, Django, Angular, MySQL, Flutter

Services

| Consulting & Advisory | Architecture & Governance | Artificial Intelligence | Computer Vision | Data Platforms | Reporting & Visualization | Web Development | iOS Development | Android Development | Cloud DevOps | Quality Assurance | Middleware & Integration |

Transforming Conventional Banking

Faysal Bank is a commercial bank that has a strong focus on customer satisfaction. With over 700 branches located across 270 cities, the bank has a widespread presence.

Challenge

Faysal Bank, after acquiring a smaller bank, encountered information visibility challenges due to dispersed data across multiple source systems and data siloes. They aimed to establish a 360° business view by integrating all data into a trusted platform and generating interactive reports.

Project

- Integrated data from 15+ source systems such as core banking, credit cards, middleware systems, and others.

- Developed a custom banking data model to enable a single view of the business and ensure scalability and performance.

- Designed and built 10 reports and 4 dashboards for distribution to 2700+ users across all the bank's functions.

- Developed predictive models using 200+ features to identify bank customers with a high likelihood of purchasing various credit card products. Models included customer segmentation, deposit churn, deposit RFM, and digital onboarding.

Value Delivered

- One-click analytics and reporting to explore key trends and insights on trusted data.

- Enhanced the bank's expansion efforts with targeted sales campaigns yielding up to 19x increase in conversion rate.

Technologies

Python, Django, Angular, MySQL, Flutter

Services

| Consulting & Advisory | Architecture & Governance | Artificial Intelligence | Computer Vision | Data Platforms | Reporting & Visualization | Web Development | iOS Development | Android Development | Cloud DevOps | Quality Assurance | Middleware & Integration |