

Predictive Analytics and Credit Decision Management automates credit approval process for accurate decision making



Client Profile

The client is one of the largest domestic banks in UAE with more than AED 1 billion in profit, providing a wide range of financial services including retail, corporate, wealth, investment, treasury and international banking on both conventional and Islamic banking. The Bank is actively promoting its Retail and SME products and provides various types of Credit cards, Personal loans to residents and expats and unsecured loans as part of retail loan offerings.

Summary

The client was looking to enhance their internal risk management on their retail portfolio through automation of entire credit approval process, building statistical application and behaviour scorecard for accurate decisioning and regular validation of scorecards based on historical data. D&B through its predictive analytics and decision solutions offerings provided a complete solution that met Bank's strategy on improving the credit risk process. The implementation also included integration with their core banking software for providing real-time application scoring and also undertook customization work to the client's specific requirement related to Behaviour score calculation of various products.

Insights

D&B periodically assesses the validity of the models using the most recent information on behaviour and finds that the predictive models developed based on D&B expertise for PD of new customers have withstood the economic recession of 2008-09. As the availability of quality data increased due to D&B application maintaining the archive, it became easy to refine the criteria and bands more effectively to be in line with the past happenings and also incorporate credit policies for approval.

Business Challenges

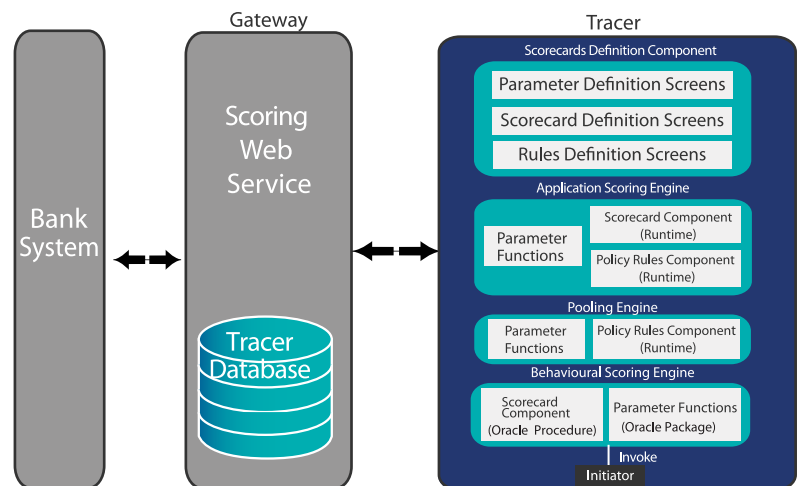
Data challenges: The Bank did not have a robust data repository and also not stored its rejected applications. The delinquency data was also not continuous to provide sufficient information to build statistical scorecards. The migration of their LOS and core banking also posed challenges in tracking a customer using a unique reference.

Streamlining retail credit risk decision: The primary challenge for the Bank is to create a system for uniform assessment for all applications for a particular product type. The existing system of approval was ad hoc and manual leading to compliance and risk issues.

Flexible rules engine: The Bank did not have a rules engine that will validate key applicant information and filter applications on pre-defined criteria even before a scoring is done.

Multiple scorecards: The client did not have a product specific scorecard that can allow them to use relevant product information in aid of decision making on new applications. There was also lack of solutions to compare the performance of two distinct scorecards on the same application.

Technical Design



D&B Solution

D&B met all the business challenges and supported the client strategic vision on retail lending through its solutions on Predictive analytics and Credit decision management. We also evaluated data on a periodic basis to validate the effectiveness of the models based on newly acquired data and incremental payment behaviour information of existing customers.

D&B's models are used more often than any other scoring system:

- ★ 86% use D&B's Commercial credit score
- ★ 61% use D&B's Financial stress score
- ★ 21% use D&B's Industry specific scores

D&B's proprietary scoring models are used not only by lenders, but by business owners, government institutions and prospective investors



Client Benefits

- Robust statistical retail application scorecards for managing real-time credit decisioning
 - Behaviour scorecard to analyze the performance of customer based on past behaviour
 - Workflow system to streamline credit process through standard policy and rules engine
 - Enhanced monitoring & control of the credit portfolio of the Bank
 - Portfolio monitoring to identify customers with high risk and take necessary exit steps
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Predictive Analytics

D&B developed Application scorecards for credit cards (multiple variations based on scheme & product offerings), personal installment loan (Residents & Expats), smart loans against salary, auto loans and home loans using the clients available data based on our industry experience in the region. The client was able to get real-time scores facilitating instant decisions on credit application. D&B also developed behaviour scorecard based on past delinquency and created custom procedure for the client based on customer profile and product offering.

Credit Management Solution

D&B's retail credit decisioning solution Tracer, was implemented to support the client configure policies and business rules, scorecards, access controls, workflow process, robust MIS reporting and interface with core-banking for real-time application decisioning and provision of behaviour scores on cycle dates.