Customized retail decision making platform automates SME lending process and provides continuous model monitoring and improvement for a leading bank in UAE

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 for UAE and expats and unsecured loans as part of its retail loan offerings.

Summary

The bank was looking to implement a solution that will:

- Automate the loan origination, scoring and decision process for their retail portfolio including SME

- Support the Bank in ongoing model monitoring by storing relevant information and ability to extract the same as and when required

- Provide flexible workflow management module allowing the Bank to manage their credit application process for both retail products and SME lending

D&B implemented its retail decisioning platform 'D&B Tracer' to meet all of the Bank's requirements for credit underwriting, scorecard hosting and data retrieval for continuous model evaluation. The platform was customized to meet the client requirements related to SME portfolio.

Insights

The regulatory policy on maximum loan amount in terms of value and multiples to income did not affect the performance of the model predicting power.

When the models were applied on historical accounts, the scorecard maintained its rank ordering on scoring low on accounts who defaulted. This enabled the bank to define its cut-off strategy.

Technical Design
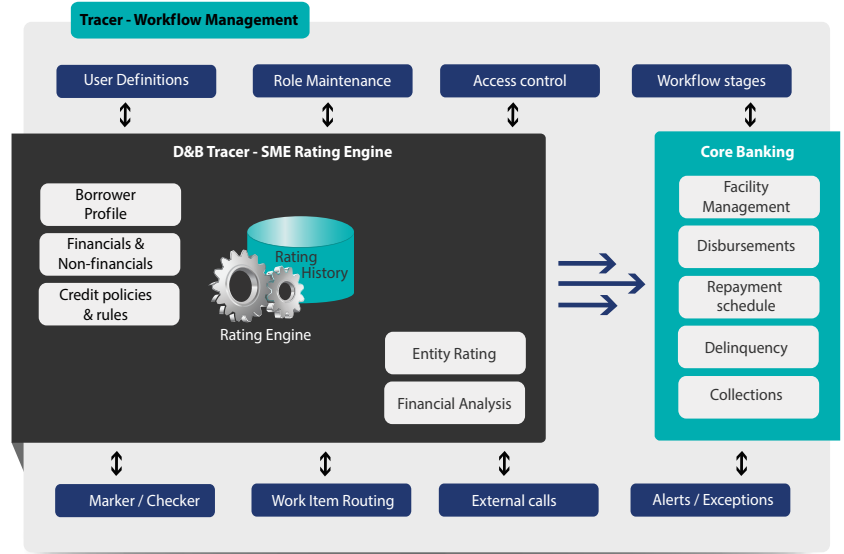
Business Challenges

Single solution: The Bank was looking to have a single solution to meet the risk and credit requirements for both its retail and SME portfolio.
System challenges: The Bank was in the process of migrating its core banking systems and hence did not have a LOS and was working the applications manually. It was looking at a solution that will automate its loan origination process.

Streamlining decision process: The primary challenge for the Bank is to create a system for uniform assessment for all applications across all branches for a particular product type. The existing system of manual process could lead to compliance and risk issues.

SME Assessment: The Bank did not have an automated process to assess the SME on various pre-defined qualitative and quantitative factors. Each SME borrower was assessed manually based on information provided leading to many policy deviations.

Segmentation: The client wanted to assess the applicant based on the nationality as the performance of UAE nationals to expats varied on various data elements.

D&B Solution

D&B implemented its retail credit decision management platform, 'D&B Tracer', to meet the current business challenges of the client and also provided solutions to support the client's strategic vision on model monitoring and automation of the SME lending process, The following were the key modules of D&B Tracer that provided the flexibility to the client to manage the retail and SME lending process:

Client Benefits

- Single solution to meet both retail and SME lending process
- Standardization of loan origination and approval process for all products
- Workflow system to streamline credit process through standard policy and rule engine
- Model monitoring to assess the performance of the scorecard on a periodic basis
- Portfolio monitoring to identify customers with high risk and take necessary exit steps

Rules engine: This module allowed the client to configure and manage policies and business rules that can be triggered at the time of loan origination, This allowed the Bank to enforce standard rules across all applications for a given product.

Scorecards configuration: The scorecard configuration option enabled the risk team to define the various parameters and points associated with a scorecard for a given product. The team also had the flexibility to set champion-challenger scorecards to compare the outcome from two different scorecards.

SME module: D&B developed modules to manage the entire SME lending process. The system provided support to host sector specific SME Rating model, perform financial spreading, generate cash flow and compute financial ratios, Rate SME based on financial and non-financial data, associate a rating to a scale, manage site visits, generate rating reports and a comprehensive workflow system that provided maker-checker, routing, and business process management.

Data library and extract: In order to support the client on regular model evaluation, D&B Tracer provides a comprehensive data storage and extract module that stores all incoming data used in business rules validation & scoring process and an admin tool to extract data from Tracer automatically for a given vintage of Application as well as performance data. The client can configure a file location area for auto transfer to D&B which will then be used to assess the performance of the model.

Admin: The admin console helped the clients' administrator to manage users, roles, access control, audits and various other master maintenance activities thereby providing centralized control on various administrative requirements.