Identify credit risk before it collapses the global economy

BMO Financial Group investment into the advance IFRS 9 solution using Big Data has allowed the organization to not only meet, but exceed the credit risk monitoring and analysis.

Client:

The Bank of Montreal operating as BMO Financial Group, is a multinational banking and financial services corporation. It is one of the ten largest banks in North America and it is commonly known by its acronym BMO which is also its stock symbol. The company is ranked at number 131 on the Forbes Global 2000 list.

- Founded in 1817
- More than 900 branches, serving over seven million customers
- Number of employees: 45,234

Executive Summary

BMO Financial Group has an enterprise-wide approach to the recognition, measurement, assessment and management of risks faced across the organization. These risks are classified as credit and counterparty, market, liquidity and funding, operational and business risk.

BMO's risk framework guides the risk-taking activities and ensures that they are aligned with client needs, shareholder expectations and regulatory requirements. The framework provides for not only the direct management of each individual risk type but also the management of risks on an integrated basis. It consists of comprehensive risk governance, effective processes and models, and qualified risk professionals.

Challenges

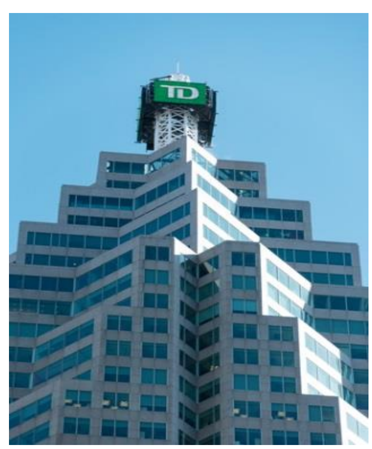
During the last financial crisis, regulators identified the delayed recognition of credit losses on loans and other financial instruments as a weakness in existing accounting standards.

As such, they introduced IFRS 9 as a forward-looking “expected loss” impairment standard that requires banks to provide more timely recognition of expected credit losses (ECL) based on future expectations – as opposed to the current “incurred loss” model.

The new standard requires banks to account for ECL on an individual financial instrument level from the moment instruments are first recognized. They must recognize full lifetime ECL on a more-timely basis. IFRS 9 effectively demands that accounting statements provide a more accurate view of a bank’s financial situation by bringing the impairment methodology used within finance closer to the risk processes employed in expected loss calculations under the Basel regime.

The new standard requires banks to recognize ECL at all times, for all financial instruments, and at the individual asset level. It also requires banks to update the ECL amount at each reporting date to reflect changes in the credit risk of financial instruments. ***This significantly increases the number and frequency of impairment calculations that must be performed and the amount of information that must be collected***

How Denologix Helped



The existing credit risk analysis infrastructure was not sufficient to meet the complexity and frequency demands of the new ECL calculations.

Denologix implemented the Credit Risk solution (IFRS9) in three environments within a 12 months period. The environment consisted of 10 servers.

Big Data platform provides the capacity, power and speed to allow for advance credit risk models to calculate the risk based on the future individual expected impairments. This allows for the potential credit risks to be identified before they actually occur.

The implementation of this powerful and fast platform comes at the cost of complexity because the Big Data tools and techniques are still fairly new to the computing industry at large. Denologix has been at the forefront of Big Data revolution by partnering and working closely with Big Data providers like Cloudera and Hortonworks.

In addition, Denologix used its' traditional business intelligence strength to leap frog in the area of Big Data analytics with partnering and close collaboration with companies like SAS, IBM and Oracle.

Results

BMO Financial Group investment into the advance IFRS 9 solution using Big Data has allowed the organization to not only meet, but exceed the credit risk monitoring and analysis.

This is a big step forward towards minimizing the chances of a financial credit collapse as in 2008.