Analytics in Banking

Addressing Credit Risk Issues

THE CHALLENGE FOR FINANCIAL INSTITUTIONS

In today's turbulent economic climate, the Banking Industry is under intense scrutiny from regulators, customers, and investors as all are persistently analyzing financial institutions based on their practices, compliance, and performance. In order to satisfy these various measures, most banks have recognized the need to integrate Risk and Finance, and implement effective risk management practices. They understand the need to leverage information derived from analytical risk assessments to make better strategic decisions and drive growth appropriately. In this way, risk management becomes a proactive, on-going initiative tasked with creating value in addition to protecting assets and guarding against failure.

It is no longer sufficient to predict credit or default risk based on a credit score alone.

The complexity of economic conditions requires deeper analysis in order to more accurately predict the likelihood of default. Banks need to leverage analytical models to assess the default propensity of each loan and have an effective collections strategy in place if a loan does fall into arrears. Banks are looking at risk analytics to address specific challenges around credit performance and to reduce credit costs. The loan default percentage for most bank still remains unacceptably high, and risk analytics can be a huge part of the solution. By leveraging advanced risk analytics capabilities, banks are able to predict the likelihood of loan default based on certain characteristics and trends, and take proactive steps to avoid any future pitfalls.

EVIDENCE THE PROBLEM EXISTS

Three key areas driving the need for analytics in the banking industry are regulatory reforms, customer profitability, and operational efficiency. Within those areas, arguably one of the most challenging issues banks are facing today is being able to accurately assess credit risk. The chart below was taken from the 2012 IDC Global Technology and Industry Research Organization IT Survey, which included responses from over 600 banking and IT decision makers. 45% of respondents indicated that financial reporting and analytics is the number one driver to implement Business Intelligence/Analytics Solutions, while 38% reported that risk management was the top driver.

Bloomberg, "FHA New Foreclosures Jump as Modified Loans Default" May 2012. A Treasury Department study of modified government- guaranteed mortgages in the fourth quarter found that 49 percent were delinquent again after 12 months.

The Treasury Report analyzed a group of loans that was 80 percent FHA, 15 percent Veterans Administration mortgages and 5 percent Department of Agriculture rural home loans. The rate for Fannie Mae and Freddie Mac was 27 percent. (Source)
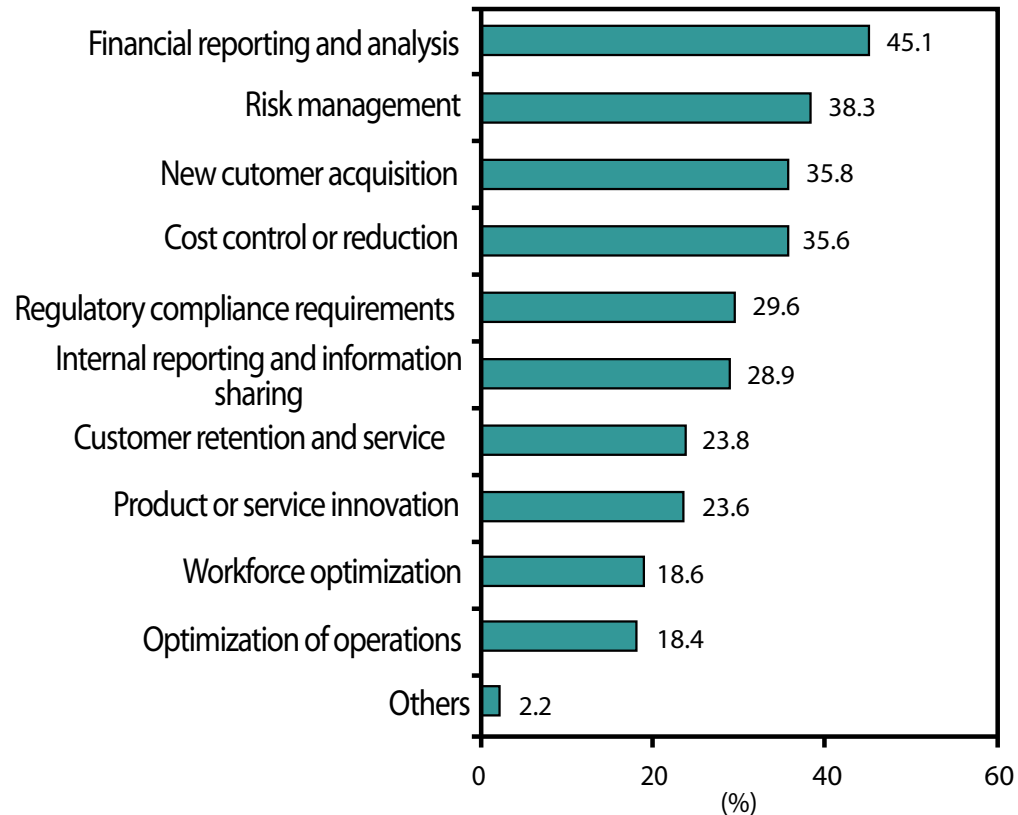
CNNMoney, "Student Loan Default Rates Jump" Oct. 2012. The percentage of borrowers who defaulted on their federal student loans within two years of their first payment jumped to 9.1% in fiscal year 2011, up from 8.8% the previous year, according to U.S. Department of Education data. (Source)

Debt.org, "Defaults on the Rise as College Grads Drown in Student Loan Debt" March 2013. Banks wrote off $3 billion in student loan debt the first two months of 2013, and an estimated 850,000 former students have defaulted on loans, but that

Q. What were the top 3 drivers for your organization to implement Business Intelligence/Analytics Solutions?

Driver	%
Financial reporting and analysis	45.1
Risk management	38.3
New cutomer acquisition	35.8
Cost control or reduction	35.6
Regulatory compliance requirements	29.6
Internal reporting and information sharing	28.9
Customer retention and service	23.8
Product or service innovation	23.6
Workforce optimization	18.6
Optimization of operations	18.4
Others	2.2

N = 93
(%)
Source: IDC Global Technology and Industry Research Organization IT Survey, 2012

is just a snapshot of the big picture of debt that is drowning many college graduates.
(Source)

Bloomberg, "Record Defaults Seen on $40 Billion Recast Loans: India Credit" Sept. 2013. Restructured loans are defaulting at a record rate at Indian banks amid forecasts the worst economic slowdown in a decade will deepen, according to the investment banking unit of the nation's biggest lender. As much as 20 percent of renegotiated credit in India's banking system is now classified as in default, according to SBI Capital Markets Ltd. Such loans, which give borrowers a moratorium on payments, longer maturities or lower interest rates, more than doubled since 2009 to 2.5 trillion rupees ($40 billion) at the end of June, as per Corporate Debt Restructuring Mechanism data.
(Source)

Forbes, "Using Analytics to Prevent Next Major Crisis?" July 2012. According to a global study capturing

and synthesizing the insights from more than 450 risk management analytics professionals in three industries, banking is predicting the greatest increase in risk analytics investments, with **73 percent of banking respondents foreseeing more than a 10 percent rise in expenditure.** In terms of specific capabilities, risk analytics spending is expected to increase most in areas of data quality and sourcing, systems integration and modeling.
(Source)

Forbes, "Using Analytics to Prevent Next Major Crisis?" July 2012. Risk analytics is increasingly important for banks as they cope with a complex regulatory and competitive environment and our research indicates that banks are clearly committed to improving their analytics technologies, tools and teams.
At the same time, banks face significant challenges particularly in the areas of skills, data and integrated approaches that need to be addressed before risk analytics can fulfill its promise.
(Source)

ADDITIONAL CHALLENGES

Risk managers in financial institutions often lack the ability to provide a single consistent view of portfolio credit risk across the entire organization, typically because data is scattered, non-reconciled, not trusted, and provides an inconsistent, incomplete view of what's really happening. In order to gain a full understanding of credit risk and respond effectively, managers must be able to quickly identify significant portfolio issues and drill into relevant data to get to the source of the issue. Very often, being able to provide relevant, consistent risk data for a number of distinct stakeholder groups such as senior executives, analysts and regulators, is a daunting task. In order to meet these challenges, banks require more accurate risk assessments to support forecasting, planning, financial reporting and decision-making at both the strategic and transaction levels.
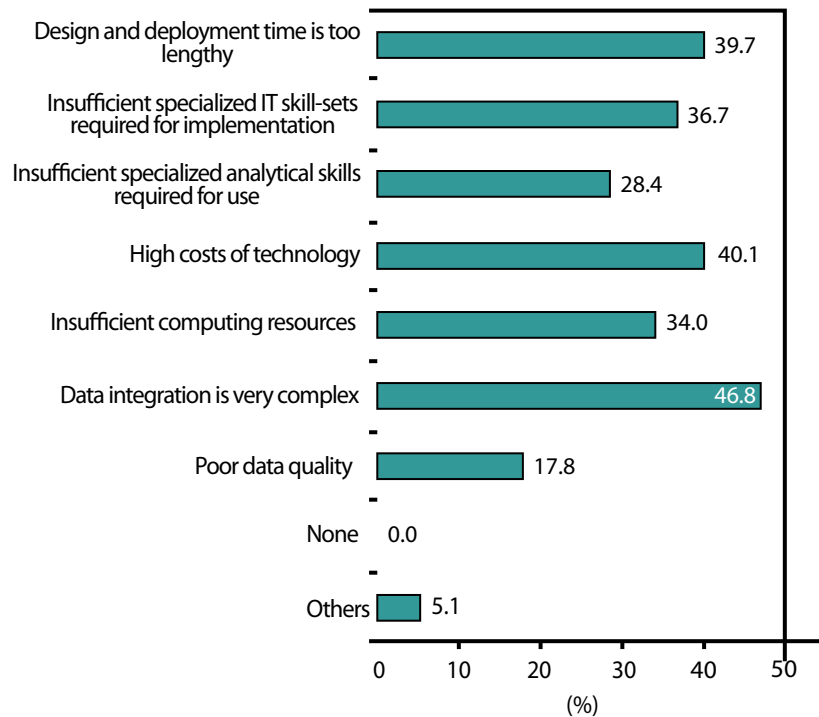
To achieve this, they need an integrated view of their risk across divisions, geographies and risk classes. The chart below highlights the relevance of this as it points to data integration, technology costs, and lengthy project times as being the key challenges financial institutions are facing with their Business Intelligence/Analytics solutions.
During the recession, banks that already had risk information data warehouses and/or analytics in place fared much better through the financial crisis, while banks that relied solely on outsourcing or had substandard analytic abilities were left adrift.
Today, this is taken even one step further; if banks cannot strategically act on what the data is telling them from a management perspective, the data is of little use.

Business Intelligence Top Challenges are Data Integration, Technology Costs, and Lengthy Project Times

Q. What are some of the challenges you are experiencing with your Business Intelligence/Analytics solutions, if any?

Challenge	%
Design and deployment time is too lengthy	39.7
Insufficient specialized IT skill-sets required for implementation	36.7
Insufficient specialized analytical skills required for use	28.4
High costs of technology	40.1
Insufficient computing resources	34.0
Data integration is very complex	46.8
Poor data quality	17.8
None	0.0
Others	5.1

(%)

N = 93
Source: IDC Global Technology and Industry Research Organization IT Survey, 2012

THE SOLUTION

Financial institutions need solutions that can provide more accurate, deeper and reliable analytics while complying with massive amounts of regulatory and shareholder demands. Moving from operational efficiencies and controls, today's best practice financial institution must contribute and drive the measurement and decision-making of performance and execution. They need solutions that support all credit risk metrics in a single instance, can be integrated with existing applications, facilitate reporting, analysis and informed decisions, and provide timely and accurate information to all stakeholders.

In addition, there are actions that financial institutions should take to address their challenges with data migration and integration such as:

- Assess their infrastructure for risk analytics against a desired future state

- Focus on decisions first, and prioritize business intelligence and risk-adjusted analytical applications that can improve the quality of decision-making

- Couple centralized management of data architectures with a shared service model for building out business intelligence competency in line-of-business groups

- Build an incremental plan to focus on linking strategy to operational policies to guide tactical decisions that impact risk

Analytical applications are at the core of Bank's transformation efforts. Strategies to bring together risk, finance, accounting, compliance, and the enabling analytical applications on a common platform will also assist institutions in effectively adapting to shifts in the landscape of financial regulations in the near future - including the adoption of International Financial Reporting Standards (IFRS); the convergence of U.S. GAAP and IFRS; the implementation of Financial Reform Legislation under the U.S. Dodd-Frank Framework; new global capital adequacy, testing, and monitoring requirements from the Basel Accord; and others. Keys to success for a financial institution are a comprehensive strategy that combines well-designed technology architecture, a suite of analytical applications for risk-aware decision-making, and a commitment to raise the analytical orientation of its people toward fact-based decision-making.

The true test as to whether or not a BI deployment is successful is whether or not it has delivered business value. It's not really about how many people are using it within the organization; it's about providing insight, optimizing key decisions, and creating business value from those decisions. Turning data into insight leads to positive business results, such as increased revenues, reduced costs, managed risks, and increased capital. These positive business results in turn give your business a better competitive advantage.

HOW RESEARCH OPTIMUS CAN HELP

http://www.researchoptimus.com/

As a partner in risk analytics for businesses in a number of fields, particularly investment and finance, Research Optimus provides a number of tools that assist you in making the right decisions based on data that may not be immediately visible. We're experts at developing solutions for risk management, which is why so many companies have turned to us for their analytics and risk management needs.

Whether your needs are focused on liquidity risk, stress testing, Basel II or III, capital risk, or some method of performance measurement, we have the skills and experience necessary to complete your risk analytics profile. When you work with us, you work with a company that has helped numerous organizations just like yours with their business research and risk analytics needs.