

## Banking Performance Management

Three ways banks are winning with performance management



### Contents

- 4 What is banking performance management?
- 8 The result: Better customer care and insight Taking the emotion out of decision-making
- 11 The result: Increased operational efficiency
- 16 The result: Comprehensive risk management
- 20 Summary

### Abstract

Reduced credit availability. Falling demand. Earnings pressure. Currency volatility. There's no doubt that today's economic conditions have sparked a range of challenges for banks, including compromised cash flows, difficulty managing risk and compliance, and declining sales, revenues and profits. For many banks, these negative indicators act as a cue to go into bunker mode. Plagued by a form of corporate tunnel vision, they are often tempted to keep doing what worked in the past, in the hope that it will continue to work in the future. This paper outlines three central ways that banks are, not just surviving, but thriving in turbulent times.

### **Overview**

Both experience and history show that giving in to temptation and going into bunker mode can be a fatal mistake. Consider: in a recent report, McKinsey & Company looked back to the recession of 2000-01 to identify which companies faltered and which took advantage of sluggish times to make gains on their competitors. They concluded that "nearly 40 percent of leading US industrial companies toppled from the first quartile in their sectors during the 2000-01 recession, and a third of leading US banks met the same fate." <sup>i</sup>

To avoid becoming this kind of statistic, your company needs access to critical data about how well your business, your market and your competitors are responding to today's challenging times. For that, you need performance management software.

John Hagerty, VP and research fellow at AMR Research, agrees. "A company that has insight into its operations and its customers has an advantage over companies that don't. That's especially true during times when other indicators might suggest pulling back on technology investment." <sup>ii</sup>

However, staying ahead for banks isn't easy. Data pours in from multiple systems, divisions and regions. And IT departments are challenged to provide solutions that enable productivity and agility in the face of market and consumer demands. Manual processes, inefficiencies and lack of accountability add to the mix. IBM Cognos performance management software helps your organization rise to the challenge with better business insight, planning and performance. It does this by unlocking data captured in operational and financial systems and transforming it into useful, relevant information. You understand what's behind critical issues, trends and opportunities. You gain an accurate forward-looking view of the business and can plan accordingly. And everyone collaborates to make strategically aligned decisions across the enterprise.

With banking performance management, your organization gains a complete and consistent view of all key profitability drivers. So you can:

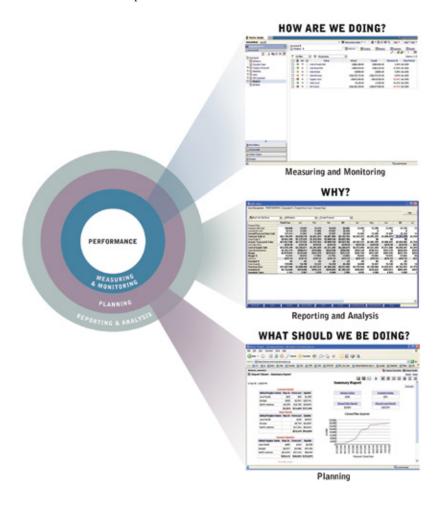
- Track and monitor sales, margins and operational performance.
- Analyze results and identify trends in channels, branches, products, demographics and customer behavior.
- Model the impact of business decisions.
- · Quickly adjust plans to achieve profitable growth.

This white paper will explore the practical applications of performance management for banks. It will highlight how performance management can help you increase customer profitability and satisfaction, manage risk and be more operationally efficient. Finally the paper will examine how three smart companies are using IBM Cognos software to gain rapid insight, real ROI and the quick wins they need to stay competitive.

# What is banking performance management?

To stay ahead in a competitive marketplace, you need to spot trends and make informed decisions quickly. With performance management, banks gain access to the reliable, timely information that drives better decisions. While there are any number of decisions to make, they depend on answers to three fundamental questions:

- How are we doing? A gauge of the most critical indicators for your bank.
- Why? The ability to dig deeper into current issues to understand what led to the results.
- What should we be doing? The facility to set plans, allocate resources, monitor them and adapt.



IBM Cognos software provides a single, enterprise platform for banking performance management. It integrates and leverages your financial and operational data and allows your organization to employ the following capabilities to answer your critical business questions:

### **Dashboards and scorecards**

IBM Cognos software communicates your strategy and objectives through metricsbased scorecards and dashboards. It answers "How are we doing?" by providing people with the information they need to take ownership of their performance – visibility into strategy, understanding the part they play in making the strategy succeed and the metrics to measure their success.

By enabling the strategic alignment of objectives against performance metrics, you can answer at any time the key question: Are we making progress on the things that must be done?

Use IBM Cognos scorecarding and dashboards to:

- Monitor sales and margin performance by channel, division, region, branch, product line and more.
- Measure performance against strategic company initiatives.
- Track financial goals in terms of growth, profitability, key controllable expenses and return on net assets.
- · Measure marketing and sales effectiveness.
- Aggregate risk (credit, operational, market, country), customer profitability and operational data from multiple silos, diverse business lines, all regions, and across the organization to deliver enterprise risk dashboards and scorecards.

#### **Reporting and analysis**

Consolidating the large data volumes your organization amasses is a huge challenge. It is especially difficult given that there are also many tools used to analyze and report on the data, creating more islands of information.

IBM Cognos reporting and analysis consolidates your critical data, and turns it into meaningful information and reports that everyone can use. You can quickly spot trends and drill down to discover underlying causes and issues. The flexible, user-friendly reporting means everyone has the right information delivered in the right way – across all departments, locations, functions and roles.

With a single, standardized BI platform for reporting and analysis, you can accurately assess the "Why?" behind operational activity and performance. This provides the necessary context against which decisions can be made.

Use IBM Cognos reporting and analysis to:

- Identify, report on and analyze costs of trade, staff performance, risk management and compliance, branch profitability, loan performance and customer profit-ability, among others.
- Analyze sales to understand demand, optimize staffing levels and enhance marketing and cross-sell opportunities.
- Understand consumer and market trends, and react quickly to provide a more positive banking experience.

#### **Budgeting and planning**

Many banks still use spreadsheets as their primary vehicle for planning and budgeting. Spreadsheet-based systems create islands of financial and planning data, where everyone works independently. What's required instead is a solution that replaces a fragmented process with continuous, collaborative planning that supports your business drivers and delivers up-to-date insight into performance. IBM Cognos 8 Planning helps you build a foundation for higher performance by connecting strategy to plans, targets and operational objectives.

IBM Cognos 8 Planning addresses "What should we be doing?" by allowing you to set strategic initiatives and turn them into discrete plans and budgets for the entire enterprise – from central office to branches, and marketing to distribution centers. Plans can be built to maximize operational effectiveness, and they can be easily realigned as conditions change.

#### Use IBM Cognos 8 Planning to:

- Develop long-range, financial, cost center, and headcount plans, forecasts and budgets across the enterprise.
- · Create operational plans for branches, channels, marketing and more.
- Gain consensus and consolidate top-down and bottom-up operational plans with financial plans.
- Increase accountability across the organization through a high-participation planning process.
- Support timely updates of forecasts to address changing market influences, new initiatives and competitive factors.
- Manage and consolidate plans via integrated workflow.
- Manage multiple reporting and consolidation standards such as IAS, Basel II and U.S.-based GAAP; inter-company elimination and reconciliation; multicurrency translation; complex ownership calculations; and financial consolidation rules.

With integrated plans, BI reporting and analysis, and performance metrics, you can dramatically improve your understanding of the organization. And this improves your ability to make timely and informed decisions that improve operations, increase sales and drive profitable growth.

### The result: Better customer care and insight

Ask most financial services executives about their key strategies for growth, and the same answers tend to pop up: increase wallet share, improve customer satisfaction and loyalty, serve mass market customers more cost-effectively and know the customer's needs so the institution can offer the right product at the right time. This is amidst a customer base that is more savvy and price sensitive than ever before, and far less loyal.

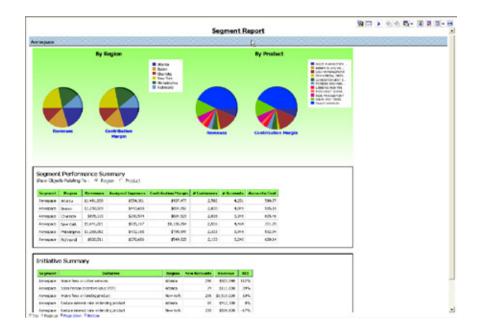
Creating a more customer-centric strategy is predicated on having customer segment or individual customer data available, using the data to understand the behaviors and profitability of customers or groups of customers, and then to create strategies and plans that maximize the institution's success.

The tools to perform these tasks have existed for years, but in most cases, these technologies have failed to recognize the central issue. Data resides in disparate systems, and customer profitability solutions exist in relative isolation from the financial planning process. Customer relationship management (CRM) solutions have been cost-prohibitive and rarely lived up to their promise, and initiative planning and tracking has been an afterthought. Consequently, many institutions have failed to meet their growth and profitability targets.

### Taking the emotion out of decision-making

With IBM Cognos software banks can consolidate customer data, understand customer segments and individual customers, and set and monitor specific targets that improve segment profitability:

- Customer segment reporting, analysis, dashboards and scorecards let managers see at a glance how individual customers and customer segments are performing across measures such as customer profitability, customer lifetime value, risk grade and products most likely to be purchased next. Banks can also identify the customers and customer segments to target for product or service initiatives, based on the performance of past initiatives.
- Initiative planning lets you perform what-if analysis and plan marketing initiatives by product within customer segments.
- Customer segment P&L calculation and forecasting is created dynamically from revenue, balance and cost information to provide customer segment profitability information.
- Activity-based costing and management is based on accurate data through integration with Acorn Systems' Profit Analyzer CI, another costing provider, or the bank's existing systems.



With IBM Cognos software banks can tap into vast amounts of customer data, and create real intelligence on behavior, revenue streams and profitability by customer or groups. They can empower segment managers to report on and analyze profitability down to customer or household, to create regional and product P&Ls within a segment Banks can also more effectively plan sales and marketing initiatives and monitor the success of plans and initiatives to feed information gained back into the process, creating a closed-loop cycle for continual performance improvement.

#### Customer Snapshot: National Commercial Bank (NCB)

Popularly known by its brand name, Bank Al Ahli, and headquartered in Jeddah, Saudi Arabia, the NCB is the largest bank in the Middle East. With 1.7 million customers, 260 branches across Saudi Arabia at the end of 2006, and \$4 billion in paid-out capital as of March 2007, NCB is striving to become a premier financial services group in the MENA region. Over the last few years, the NCB has taken the initiative to create a culture of business intelligence (BI) by deploying an IBM Cognos enterprise solution to better use the organization's collection of data.

Now, with a Cognos performance management system in place, the NCB is:

- Increasing profits through the ability to identify and act on the right opportunities.
- · Analyzing and classifying its customer base into smaller manageable segments.
- Improving accuracy in customer profitability analysis.
- Reducing credit risk through consolidating and monitoring customer credit exposure and continuously enhancing credit policies to ensure adequate credit risk mitigation techniques are in place.
- · Decreasing reporting times dramatically from three weeks to two hours.
- Reducing operational errors to save millions of Saudi Riyals, and improving operational processes for cost-effective process streamlining.

IBM Cognos software allows a relationship manager to cover the entire reporting requirement for their customers' portfolios. For high net-worth customers, the manager can view the complete customer holdings at a glance, and use this information to offer additional products not in the customer's portfolio, request them from the Product Management department, monitor the product cycle time delivery and provide faster service to their customers.

In addition, transactional data analysis through the Cognos 8 BI solution resulted in NCB's alternative distribution channel strategy to serve its customers through non-branch distribution channels in a cost-effective manner. With Cognos in place and an improved understanding of what makes customers profitable, the customer relationship managers are able to serve their customers more effectively and also focus on the most advantageous channels and products.

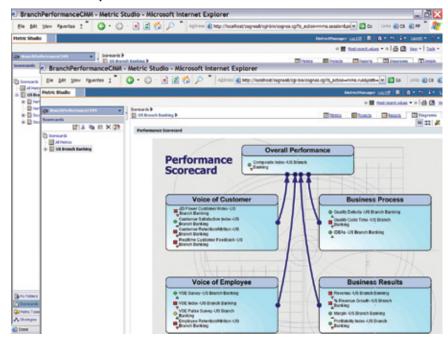
"For analysts, all the branch-wide analysis is there at their finger-tips," says Mohammed Siddiq, Head of the Central MIS Department at the NCB. "They do not have to wait a week for the data to be downloaded in Excel and then manually reformatted. It is all there immediately, all automated, all online – whether it is branch performance in terms of customer waiting time or service time, or relationship manager performance with respect to their customer portfolios across all products, customer segments and channels."

### The result: Increased operational efficiency

Despite the tendency to retrench in times of economic turmoil, companies cannot afford to stand still and wait for the storm clouds to pass them by. Analysts have time and again stated that the banks that will survive the current crisis are the disruptors – the ones who treat information as a strategic asset and know how to use it effectively. These disruptors will unite data, share information widely and analyze it rigorously to find new competitive advantage and squeeze out new efficiencies from the organization. Banks must respond to economic challenges by shoring up internal operations to ensure that the entire organization is running at peak efficiency. Making this determination, however, requires an in-depth understanding of how well the company is operating relative to its historical trends, its peers and the overall market. To gain this insight, your bank needs the ability to connect operational details to business drivers.

Scorecarding for example, is a terrific application for finding new efficiencies. With scorecards companies can distil information into a small number of metrics and targets to:

- Deliver at-a-glance information—Stop sifting through a stack of reports to find what's right...or wrong. Scorecards show you immediately how the company performs against targets you set.
- **Communicate strategy and targets**-Metrics show everyone what's important, what's expected and how you're doing.
- **Increase accountability**—Let people see the strategy and understand their part in making the strategy succeed, and give them metrics to measure their success.
- **Connect departments**—Scorecard metrics, like your strategy, are interdependent. See how your red metric affects others.

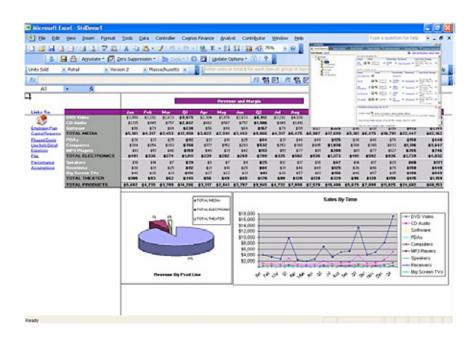


In addition to the right software to help organizations track efficiencies, IBM also provides the thought leadership and best practices for finding the right metrics to measure. The Performance Manager for Banking book, available free of cost at http://www-0l.ibm.com/software/data/cognos/solutions/banking/for-yourdepartment.html, provides a host of metrics so banks can find new efficiencies across:

- Finance
- Product management
- Risk management
- Operations
  Human resources
  IT
- MarketingSales and relationship
- Management
- Executive management
- Customer service

Best practice budgeting, plans, forecasts and financial reporting are also a cornerstone of better performance and efficiency. Becoming a leaner organization means swapping out inefficient processes in favor of new systems capable of driving ongoing performance. For instance, rather than setting targets at specific numbers, your decision-makers may want to begin tying performance targets to events, trends and risk factors. Rather than engaging in planning on an annual basis, they might consider adopting shorter planning cycles focused on the achievement of specific tactics and initiatives.

Organizations with particularly high risk profiles should start preparing monthly forecasts. And regardless of the sector you're in, it is becoming increasingly important to align financial forecasting with the business cycles that prevail in your key markets.



IBM Cognos performance management systems support this analysis by empowering users to track material exceptions triggered by real-time events and trends. Rather than measuring performance in absolutes, your business users can use critical business ratios to gain a comprehensive overview of organizational efficiency.

By replacing rigid annual budgeting with continuous planning – on a monthly, weekly or even daily basis – IBM Cognos performance management software can position your organization to achieve higher performance in both good times and bad. With real-time visibility into up-to-date data, your decision-makers can create rolling forecasts that take a broad range of potential future scenarios into account. Using predictive analysis, business leaders can develop action plans for variable future outcomes, increasing business agility and responsiveness. Performance management with IBM Cognos software:

- Enables banks to establish corporate targets and develop integrated, functional, financial and operational plans.
- Allows banks to do both top-down and bottom-up branch planning to ensure alignment with strategic objectives.
- Manages profitability planning, analysis and reporting by product and customer segment, permitting an extremely high level of precision.
- Provides activity-based drivers and rates used for planning and reporting, allowing unsurpassed accuracy, consistency and confidence.
- Integrates with the bank's existing systems or external providers to provide activity-based costing and management.

#### Customer snapshot: Laurentian Bank of Canada

Founded in 1846, Laurentian Bank of Canada is a Quebec banking institution operating across Canada and offering its clients diversified financial services. Distinguishing itself through excellence in service, as well as through its accessibility, the Bank serves individual consumers and small and medium-sized businesses. The Bank offers its products to a wide network of independent financial advisors through B2B Trust, as well as full-service brokerage solutions through Laurentian Bank Securities. With more than \$19 billion in balance sheet assets, the bank has 156 retail branches, 342 automated banking machines and employs more than 3,400 people.

A key component of Laurentian's success has been its dedication to capitalizing on its greatest asset: human capital. Integral to this strategy was to make every process, including reporting, more efficient. To support this mission, the bank deployed an Oracle data warehouse to consolidate the data from over 20 different legacy systems. The bank also chose to implement an IBM Cognos BI solution to provide employees with the information needed to do their jobs quickly, easily and effectively. With its IBM Cognos solution, Laurentian's Business Intelligence Competency Centre is able to standardize its reporting process and provide the corporate office and branches with a single and complete view of their business. Bank employees are now able to access data that is more accurate and timely – data that was previously unavailable. As a result, they are able to make better decisions, manage closer to objectives, and support the growth of the company.

Benefits for Laurentian Bank of Canada include:

- · Enhanced visibility and better decision-making due to single view of data.
- · Cost savings due to gained efficiencies and standardized reporting.
- Increased data accuracy and timeliness.
- · Competitive advantage resulting from improved sales and marketing.
- Reporting in days rather than months.

### The result: Comprehensive risk management

The financial crisis that started in the summer of 2007 with a sharp devaluation of U.S. sub-prime mortgage assets and continued with the \$700 billion government bailout in 2008 has raised concerns about the effectiveness of banking risk management. Several issues certainly deserve specific attention, including the effectiveness of exposure control processes, the objectivity of credit derivatives valuation and the bank's ability to respond to rapid changes in market liquidity.

At one level, banks need to assess credit and operational risk and use empirical transaction data to confirm that reserves are set correctly for balance sheet capital contingencies. The collateralization of mortgage and consumer loan portfolios into the secondary market is an example of market risk management. Today there is great debate around the global parameters that monitor market risk and support or maintain market stability. Given the various risk parameters, the key is to identify where and how a bank can proactively manage its risks and various assets – physical, financial and human – to its advantage.

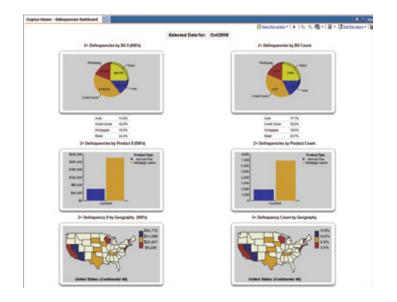
Despite the need for rapid change, a recent IBM study found that two-thirds of financial market firms rate their agility as moderate to poor – and less than five percent feel confident about their risk management capabilities. This lack of confidence is for good reason. Banks rarely have a shortage of risk management expertise, technology and data. The issue lies in consolidating and communicating that data, within the company and externally, to regulators and to the market. Banks typically have large, multiple data warehouses for risk and compliance. They also have complex risk modeling methodologies and no effective way to consolidate and make sense of the information.

They are unable to manage operational risk performance across the enterprise, within departments and across channels. Planning and budgeting systems that do not incorporate risk data can grossly misrepresent credit and operational risk, leading to major discrepancies between projected and actual financial results.

IBM Cognos software unifies data from disparate systems into a single, consistent repository optimized for the risk analysis and reporting that later stages demand. A single metadata layer and conformed dimensions help you ensure the data quality and accuracy that regulators will require. Banks can also model capital requirements to optimize their mix of products, regions and customers for maximum profits.

IBM Cognos software allows your bank to answer key risk questions such as:

- What are the delinquency levels in the portfolio?
- Which products, geographies, business units or vintages are performing well and which are performing poorly?
- How much of the portfolio is rolling from one delinquency bucket to the next?
- What are credit scores across the portfolio?
- How many new loans are being originated, and with what characteristics?
- Are charge-offs rising or falling, and is one product type or geography experiencing more charge-offs than another?
- · Are receivables, delinquencies and charge-offs in line with forecasts for these metrics?
- How is the portfolio performing on such metrics as probability of default, loss given default and exposure at default?



With IBM Cognos software banks can also:

- Monitor broker activities for compliance and fraud.
- Get a full picture of key metrics associated with Basel II including probability of default, exposure at default, loss given default, expected loss and capital ratios.
- · Gain full insight into equity, interest rate, currency and commodity risk.
- Discover and report unauthorized IPO allocations.
- Assure that the trade being settled is the trade that was made.
- Minimize penalties by ensuring that all transactions are settled in the required timeframe.
- Gain clear insight into a host of reputation metrics such as customer attrition and satisfaction, negative press mentions, investor confidence and spend on brand, fines, lawsuits and more.
- Aggregate trading positions and desk-level risk management systems to provide a single holistic view of the firm's risk profile.
- Integrate continuous market and trade activity information to analyze risk of exposure in real time.
- Improve hedge positions by linking continuous rate lock information with portfolio positions for funds management and investment decisions.
- Receive timely notification of risk events, such as downgrades or crossing limits thresholds.

#### **Customer snapshot: Envision Credit Union**

Envision Credit Union is a Tallahassee-based credit union with over \$200 million in assets and more than 30,000 members. In early 2007, Envision noticed that demand for automobile loans was declining. They began focusing on other investments, such as mortgage lending and credit card portfolios.

At the same time, however, Envision decided against issuing any sub-prime loans – a decision that has allowed the organization to remain on stable financial ground at a time when many of its peers are struggling. Dan McGowan, senior VP and CFO of Envision, credits much of this foresight to the organization's investment in business intelligence.

"We are constantly using BI to re-evaluate our institution's risk/reward profile in the process of asset and liability management... It's better not to wait until you're faced with a crisis before doing something progressive. A well-rounded BI program should provide enough good information to offer actionable insight, whether the trend is up, down, or flat." <sup>iii</sup>

In addition to streamlining risk management IBM Cognos software has helped Envision Credit make significant strides in operational efficiencies spread over a dozen projects with varying degrees of complexity.

Capabilities that have improved the company's view into performance include the modeling of fee-related income, analysis of charge-offs and recoveries, reporting of financing activity trends and comparative analysis of all income statement and balance sheet accounts with 'point and click' ease. Reporting and analysis often employs percent thresholds, bringing management focus to significant performance variances from plan or forecast expectations.

A typical example of the efficiency impact is illustrated through the reduction of monthly teller activity reporting from 20-plus manual labor hours to less than 10 minutes. Overall, IBM Cognos software has reduced effort, paper utilization, keying errors and process redundancies while also enhancing timeliness and quality of management decision-making.

### Summary

Decision-making happens at every level, in every function, in every region of your organization. Every one of those decisions is based on the information people have on hand. If that information is on target and reliable, timely and easy to consume, better decisions result. Information that is inaccessible or incomplete, late or inaccurate has a direct and negative impact on decision-making, and ultimately, business performance.

This paper summarizes only three ways that banks are winning with performance management. IBM Cognos software is enabling banks to react quickly to changing markets, operate more efficiently, and continue to pursue growth by helping them gain deeper insight into markets, operations, risk and customer relationships.

These benefits are the promise of performance management. The IBM Cognos Performance Management system allows users to leverage existing investments from multiple sources, and it delivers the full range of integrated capabilities business users need to monitor the business, make better decisions and plan for better business outcomes. When the going gets tough, the tough need insight. That's why leading banks turn to IBM.

#### Why IBM Cognos software?

IBM is the world leader in business intelligence and performance management solutions. It provides world-class enterprise planning and BI software and services to help companies plan, understand and manage financial and operational performance. Cognos was acquired by IBM in February 2008. For more information, visit www.cognos.com.

Only IBM with its end-to-end capabilities can help develop a superior performance management system that will drive more efficient operations, organic revenue growth and better risk management. As part of the IBM's industry frameworks for banking, Cognos delivers tangible and real business results to our clients, combining platform independence, banking-based solutions and Innovation Centers. More than 3,500 financial services firms have selected IBM Cognos software to increase customer, product and channel profitability; manage and reduce risk; address compliance issues; and improve the predictability of financial performance. Among them:

- Nine of the top 10 banks in Europe.
- All the top 10 banks in the U.S.
- Six of the top 10 Asian banks.
- Ten of the top 10 Chinese banks.
- All of the top four Japanese banks.
- All of the top four South African banks.
- All of the world's top 10 investment banks.

Aside from the right technologies and requisite experience IBM also invests heavily in quick start solutions that help banks get the rapid ROI they deserve. IBM Cognos Performance Blueprints are pre-defined data, process and policy models that help organizations speed their software deployments and drive faster return on investment. Cognos Blueprints, available to our customers free of charge, enable banks to apply proven best practices quickly, with less risk, and without having to reinvent the wheel. Most important, Blueprints help reduce the total cost of ownership.

Current Blueprints for Banking currently cover the following critical areas:

- Client Servicing
- Relationship Pricing
- Risk-Adjusted Profitability
- Customer and Branch Performance

### For more Information

For more information on Cognos solutions for financial services companies, please visit http://www.ibm.com/software/data/cognos/solutions/banking/.



### About IBM Cognos BI and Performance Management

IBM Cognos business intelligence (BI) and performance management solutions deliver world-leading enterprise planning, consolidation and BI software, support and services to help companies plan, understand and manage financial and operational performance. IBM Cognos solutions bring together technology, analytical applications, best practices, and a broad network of partners to give customers an open, adaptive and complete performance solution. Over 23,000 customers in more than 135 countries around the world choose IBM Cognos solutions.

For further information or to reach a representative: www.ibm.com/cognos

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#### Endnotes

- i Richard Dobbs, Tomas Karakolev, Rishi Raj, MCKinsey on Finance: Perspectives on Corporate Finance and Strategy, Number 23, Spring 2007, McKinsey & Company
- ii Judith Lamont, BI, in good times and bad, August 31, 2008, KMWorld, http://www. kmworld.com/Articles/Editorial/Feature/ BI,-ingood- times-and-bad-50457.aspx (accessed September 25, 2008)
- iii Judith Lamont, BI, in good times and bad, August 31, 2008, KMWorld, http://www. kmworld.com/Articles/Editorial/Feature/ BI,-ingood- times-and-bad-50457.aspx (accessed September 25, 2008)