

The IBM Information Framework for the banking industry: Blueprint for SOA and Data Warehousing solution success

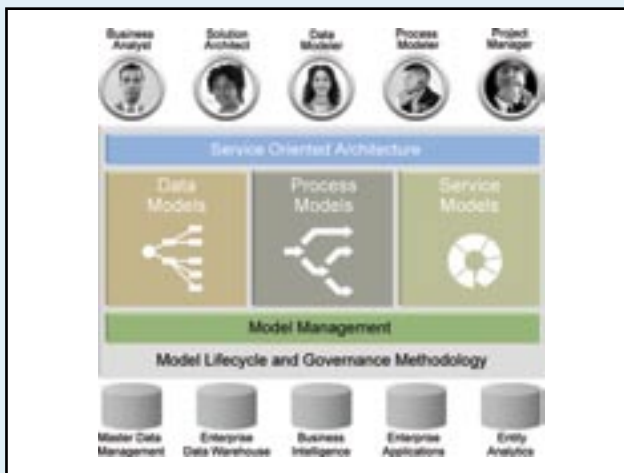


Industry models for banking

Executive summary

With new alternatives to safeguard and manage finances emerging in the form of technology and non-bank businesses, banks must work harder than ever to get and keep customers by offering differentiated products and services. At the same time, banks need to manage risk and comply with the requirements of new directives and regulatory demands such as Basel II, Sarbanes-Oxley (SOX), the Capital Adequacy Directive and Anti-Money Laundering. As a result, banks have begun to reexamine ways to increase the speed at which they can respond to an increasingly informed and demanding customer base, new regulations and emerging marketplace changes.

Often however, a complex web of legacy silos, disparate systems, redundant functionality and excess capacity prevent banks from achieving the agility and flexibility needed to operate on demand. This complexity results in redundant processes, excess costs and an inability to leverage and retrieve critical information when and where it's needed.



These complex business models must be simplified—not unit by unit, process by process or product by product, but across the entire organization. Banks need to establish a common framework and language of the business concepts, standards and data definitions to ensure their IT investments contribute to a consistent and flexible architecture. This strategy helps reduce the expense of integration and increase the velocity and accessibility of information. But while that may be the end goal, there are many steps involved. For many organizations, the question is where and how to get started?

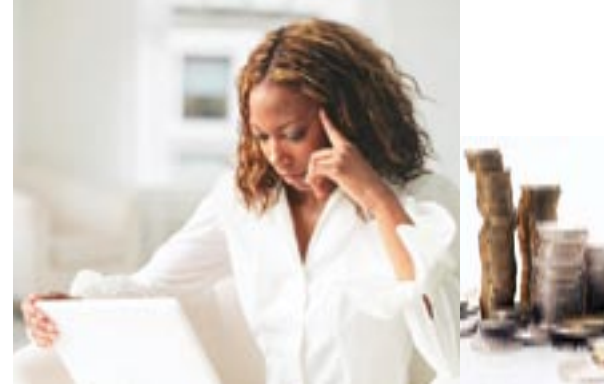
IBM Industry Models speak the language of business.

That's where the IBM Information Framework (IFW) comes in. It's a comprehensive suite of models comprising of data, process and service-based models that help banks accelerate the planning and requirements analysis of business process transformation, core system renewal and consolidated reporting solutions. It contains the proven business knowledge and best practices required to support critical business issues and ensure that IT projects are linked with business requirements. In addition, it provides a common blueprint of an overall framework for handling risk management and regulatory compliance, as well as re-engineering, broadening and standardizing core business processes or implementing new business process architectures. Together, these capabilities can help you gain a more complete understanding of customer buying behavior, loyalty and the effectiveness of your marketing activities.

This executive brief explains how IBM can help your company leverage the IFW. In addition, it outlines the specific resources IBM has developed, including:

- *The IFW process and service models, a content-rich set of models designed specifically for banks to enable the creation or optimization of enterprise-wide processes, and the supporting SOA services and component-based development.*
- *The IFW data models, comprising of the Banking Data Warehouse, an information data model that provides a blueprint for a comprehensive data warehouse and analysis templates for use by business intelligence applications.*

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Vision for the future

What will the banking industry look like in 2015? The IBM Institute for Business Value has identified five major industry trends that will impact the retail banking industry:

- Customers redefine the rules of the game
- Universal banks and ultra-focused niche players thrive
- Changing workforce composition dictates new approaches
- Regulatory burdens intensify
- Technology improves inexorably

The end result is a total transformation of the retail landscape by 2015, as mid-tier, national and regional banks collectively lose share to acquisitive large banks, as well as to non-bank and specialized firms that present unique value propositions. In response, IBM has developed quantitative models that combine historical perspectives with potentially disruptive forces to create a vision of the future — with actionable recommendations.

Simplifying processes to maximize profitability

Over the years, many banks have accumulated a complex infrastructure made up of isolated systems rigidly tied to their own processes, systems and specific channels. It's estimated that nearly 70 percent of budget goes to maintaining these legacy systems. The result is that there is very little flexibility to adapt to changing consumer, regulation and marketplace changes. For example, something as simple as building new management reports for a new area of the business can require significant time and costs. At the extreme end, a major product rollout can take years to fully implement across all lines of business and geographies.

Banks can no longer afford to have information and analysis capabilities duplicated across inflexible channel or system silos that drain IT resources and inhibit responsiveness. Business users need consistent, relevant information to combat the new trends through better decision making, innovative products and superior service. For compliance measures, banks must maintain data for reporting requirements, adapt quickly to new regulations and ensure processes are consistent across products and channels. Inaccurate information can expose the company to significant regulatory and government compliance risk.

The Component Business Model from IBM can help by simplifying the way banks look at their operations. Viewing business activities as autonomously managed components that can be optimized individually for greater value to the whole business enables decision makers to cut through historical boundaries that may have built up along organizational, product, channel, customer, geographical and informational lines.

It enables banks to see efficiencies and places where components can be reused across the organization. For example, the vast majority of the different regulatory initiatives require data to be collected, analyzed and reported in different formats and under different timescales. But the data needed to comply with one regulation may also be required for other regulations. By collecting data once and making it available across integrated structures, banks can save significant time and costs as well as helping to ensure consistency. Or a business process such as loan origination can be built once and then reused across different areas, such as savings, mortgage or equity.

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Implementing IFW process and service models from IBM can help you:

- Identify opportunities to streamline and outsource processes and be more responsive to customers.
 - Reduce time-to-market with new products, such as online portfolio management.
 - Strengthen the retail network by integrating multiple channels.
 - Integrate a merger and legacy systems more quickly.
 - Reengineer processes to comply with regulatory requirements, potentially releasing capital for additional lending capacity.
 - Facilitate a reliable mechanism for information availability across the organization such as customer data integration.
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A natural extension to the Component Business Model, the IFW from IBM is easily customized to cover specific requirements. The IFW business models help banks identify, describe and structure all of the business functions, data and processes in an objective manner that can be understood by both IT and business users. In addition, they can help establish a streamlined, efficient organization where services are built once and reused many times across multiple lines of business, enabling organizations to:

- *Identify and prioritize initiatives for delivering business value.*
- *Create a single source of customer information and reporting efforts.*
- *Achieve a single architecture to address all compliance issues over time.*
- *Employ a comprehensive and consistent dictionary for describing business issues, applications and components.*

Banks can leverage the entire framework, including:

IFW process and service models

While many banks want to reengineer and standardize their core enterprise-wide business processes, it can be difficult to know where to start. Many business processes that have essentially the same purpose are ultimately carried out in very different ways in various organizational units of banks. The different process flows are typically the result of multiple siloed systems that have come from years of mergers and acquisitions, with varying levels of automation, multiple organization structures and the continued introduction of new products and channels. Eventually, these overlapping processes can significantly increase costs and complexity, while decreasing flexibility and customer service.

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The truth is that while they are called different things, many of these business processes have essentially the same purpose and should therefore be the same process. Using a framework enables you to streamline processes across the organization, eliminating existing redundancies, while enabling you to:

- *Deliver a consistent customer experience across channels.*
- *Decrease IT costs needed to support disparate processes.*
- *Introduce best practices in an enterprise-wide fashion.*
- *Facilitate compliance efforts with policies and regulations.*

Unfortunately, capturing and coming to an agreement on definitions can be a major stumbling block for many organizations. The IFW process models play a critical role by helping banks analyze and compare their own business processes to best practice business processes, such as payments, loans, marketing and customer relationship management, in a disciplined, objective manner. The models major areas of banking processes such as:

- *KYC/account opening*
- *Lending and syndicated lending*
- *Mortgages and wealth management*
- *Savings, investments and deposits*
- *Sales and relationship management*
- *Product and marketing management*
- *Payments, risk and compliance*
- *Human resource administration*

They describe the most important step-by-step processes within an organization, ranging from front to back office functions, such as sales and marketing management,

payments, lending, and HR administration. Pre-analyzed and tested templates are populated with 80 percent of the content required to describe banking operations, giving process re-engineering projects a quick start. These templates can be used to re-engineer existing approaches or to deploy new capabilities. In addition, they provide a consistent, enterprise-wide lexicon for identifying and naming organizational activities and the triggers within key business processes, and a fast path to an enterprise-wide business process architecture and documenting business requirements. The end result is the potential for huge savings in development time and resources during the analysis and design stages of a business process reengineering project.

The IBM service models enable business and IT to agree upon the scope of services to be developed and deployed within a service-oriented architecture (SOA). Specifically, they enable analysts and developers to capture business requirements through the use of cases, thereby identifying appropriate service definitions that form the entry point into an underlying integration infrastructure. For example, organizations can leverage them to:

- *Create common business components for core system renewal projects.*
- *Provide service definitions that implement the process models.*
- *Enable the deployment of enterprise-wide information as a service.*





IBM Banking Data Warehouse

Just as processes have become a tangled web of complexity for many banks, the information needed to understand customers and operations is often spread across numerous information silos and in multiple formats. The problem is not a shortage of data or reporting systems—it's the fact that it's not available in a consolidated and business analysis format that clearly indicates trends, patterns or other forms of analysis.

Getting relevant information into the hands of business users can help you combat industry challenges through better decision making, consistent reporting, differentiated products and superior service. This means delivering information to the users in a form that directly mirrors the Key Performance Indicators of the business. The data feeding these KPI metrics needs to have been pre-integrated and of sufficient data quality. Defining the KPIs and the IT infrastructure necessary to bring the data together is a complex task.

Part of the IFW data model portfolio, the platform-independent Banking Data Warehouse (BDW) offering contains thousands of hours' worth of development effort and expertise to help business users and IT staff implement business-ready analysis templates (business solution templates) and an enterprise data warehouse on time and on budget. Customized to meet specific needs, the BDW provides the blueprint to help bring data from various disciplines together for a single, unified view of the enterprise data to facilitate segmentation and profiling, data mining, channel profitability analysis and campaign management using the Business Solution Templates. It offers the scalability and flexibility needed to address existing and future data consolidation requirements and can be customized to meet specific needs. The BDW can be integrated with an existing data mart, enterprise data warehouse or reporting solution.

The BDW:

- Delivers competitive advantage by enabling the consolidation of clean data across multiple channels, and products.
- Supports rapid implementation of warehousing solutions with meaningful financial data.
- Facilitates a structured approach to subsequent customization and extension of the data warehouse.
- Enables business users to more effectively control and reduce the time taken to scoping their requirements.
- Provides a solid basis for statutory reporting and relationship management supporting decision support and executive information applications.
- Helps minimize development costs.
- Reduces the risk of failure by facilitating an incremental approach to delivering integrated reporting repository.

Encapsulating extensive experience in delivering effective data warehouse solutions, the BDW helps promote:

- *Enterprise risk management, finance and compliance reporting:*
 - *Basel II*
 - *Sarbanes-Oxley Act*
 - *International Financial Reporting Standards (IFRS) and IAS*
- *Single view of customer, product and channel profitability*
- *Maximization of wallet share*
- *Customer loyalty and retention*
- *Marketing campaign management*

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IBM Industry Models Advantage

Proven— Seven of the top ten insurance companies and the top three banks worldwide are using the IBM Industry Models in various facets of their business-driven IT strategies, such as risk and compliance reporting.

Business-ready— The models are proven to foster collaboration and approval between business and IT, as necessary, to turn business requirements into actionable solutions.

Regulation aware— Subject matter experts have distilled compliance regulations into statutory reporting requirements without the need for external development.

Comprehensive— Content garnered from multiple client engagements is turned into a suite of interrelated data models with a proven methodology and models that require minimal customization.

The BDW includes Business Solution Templates (BST) that once implemented are used by the business user with a Business Intelligence tool. They comprise a set of over 80 templates that support the rapid definition, scoping and development of commonly required business analysis requirements (KPIs) such as customer profitability, wallet share analysis, customer attrition analysis and liquidity analysis. The BSTs cover major areas of banking information, such as:

- *Asset & liability management*
- *Profitability*
- *Regulatory compliance*
- *Relationship marketing*
- *Risk*

Summary

By unlocking information contained in individual applications and repositories from a variety of silos and vendors and making it readily available to the people and processes that need it, the IBM IFW can create a foundation for future projects, help you respond to (and comply with) regulatory and compliance requirements and enhance your clients' experience.

The comprehensive IFW solution exploits a range of components from across the IBM software platform as well as best-in-class Business Partner applications. These include some or all of the following:

- *IBM Threat and Fraud Solution*
- *IBM Information Server—for delivery of trusted, consistent and re-usable information*
- *IBM DB2® Data Warehouse Edition—integrated platform for dynamic data warehousing*
- *IBM WebSphere® Customer Center—real-time, transactional customer data integration*
- *IBM Rational® Data Architect—enterprise data modeling tool*
- *Business Intelligence applications—tools from IBM Business Partners*
- *IBM WebSphere Business Services Fabric—for modeling, assembly and deployment of business services*
- *IBM WebSphere Process Server—for consistent, secure execution of processes with transactional integrity*
- *IBM Rational Software Architect—for UML-based, model-driven service and application development*
- *IBM WebSphere Business Modeler—for modeling and optimization of business processes*



Why IBM?

IBM understands that clients require a strong long-term partner for strategic and complex initiatives. That's why IBM:

- *Has spent decades helping businesses generate, manage and extend their strategic financial initiatives.*
- *Invests over US\$1B annually in information management research and development.*
- *Employs more than 1,500 consultants and service professionals dedicated to data warehousing and data management with experience gained from over 250 data warehouse, business process and SOA engagements.*

For more information

To find out how IBM can help you create value by leveraging IT to solve your key strategic business challenges, contact your IBM representative or IBM Business Partner, or visit:

ibm.com/software/data/ips/products/industrymodels/.



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¹ IBM Institute for Business Value, Economist Intelligence Survey

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