



### Getting started with core banking renovation.

IBM Rational core systems offering helps reduce risk and speeds time to market for renovation initiatives



### Highlights

- Facilitates a low-risk, nondisruptive modernization using an open, model-based approach
- Helps save time and money by enabling banks to identify existing assets and understand how they are being used and how they are mapped to business processes
- Leverage industry standards and models and/or a service-oriented approach to support code reuse and accelerate development of new services
- Validate application security, capability and reliability to reduce costly errors
- Optimize collaboration to help increase productivity and improve visibility into projects and processes

## Transforming in the face of persistent marketplace challenges

For banks, business agility and competitive differentiation go hand in hand. That's why core systems renovation has become a priority. Addressing key business, regulatory and technology challenges requires a more efficient and responsive IT infrastructure. On the business side, pressures to grow revenue and improve efficiency are more intense than ever. New competitors are rapidly introducing new products and services. So the ability to quickly introduce differentiating services and provide customers with personalized service and consistent information across channels is critical. Moreover. efficiencies must be gained in the face of mergers and acquisitions that introduce new applications, processes and code.

Globalization also presents challenges related to integrating outsourced areas of the business. And growing revenues require constant product innovation. From a technology perspective, banks that need to become more flexible and efficient must address the network of functional silos within the organization. And from a regulatory standpoint, banks that need to comply with evolving regulations must address the mountain of mandates that affect their day-to-day operations. Overall, core systems modernization can help banks reduce costs while addressing the myriad of pressing challenges facing them in these challenging economic times.

IBM suggests four paths, or entry points, to help banks cost-effectively and rapidly undertake renovation projects using IBM Rational® software. The entry points can help you analyze and identify existing assets, leverage and extend them to build new applications, automate manual activities, help with finding application vulnerabilities and complying with industry regulations, and measure the effectiveness of projects and processes across the software delivery lifecycle.

## Discovery: understanding existing assets and how they're being used

Understanding what assets exist across the portfolio can lead to greater efficiency on multiple levels. For example, a business unit building a new application may not understand how some of the assets they are using depend on other assets that were recently changed. If they complete testing that does not consider the changes to the associated assets, resources and money will have been wasted because a new test with the appropriate assets will need to be run. Figuring out how a change in one application will impact the bigger picture can be somewhat of a challenge but is a necessity for the business.

The IBM Rational offering for discovery can provide insight into the entire application portfolio and help banks understand and visualize the enterprise architecture. With this understanding, the to-be application can be better realized, asset identification can take

place, gaps can be identified and the full impact of proposed changes can be determined. By understanding your code base across the enterprise, vou can find assets for reuseincluding business rules and potential services—and quickly determine the full impact of proposed changes. IBM can also help map dependencies between applications, systems, organizations and business processes so banks can better align the goals of IT with those of the business. Dashboards provide decision makers with views of up-to-date information on the portfolio so they can make more informed decisions that help reduce costs and drive efficiency.

# Leverage and extend: creating new applications from scratch or by reusing existing code

For banks, finding ways to get more mileage out of core applications, including 3270 and 5250 green screen applications, can pay big dividends. Workhorse mainframe applications have long underpinned operations, yet maintaining them is expensive, and many of the people with the skills to support them are approaching retirement.

The leverage and extend entry point helps banks build more flexible architectures and create new applications or services from existing code or from scratch by taking advantage of industry models or using a service-oriented architecture (SOA) approach. Using industry models and/or SOA can accelerate deployment of new services, processes and user interfaces. Using an SOA enables banks

to create independent services that can be used across platforms. The IBM Rational offering enables your teams to quickly model, architect and assemble new business processes from existing services and rapidly build modern Web 2.0 interfaces.

The IBM Rational offering for leveraging and extending applications can also help cut costs and application development and delivery time. For example, green screen applications can be enabled for an SOA, which can in turn deliver a rapid return on investment (ROI). Furthermore, IBM Rational software leverages tried and tested industry assets to accelerate model-driven development.

## Automate testing: validating application security, quality and reliability

Given increasing regulatory requirements, security considerations and the need for optimal performance, application quality is critical. Ensuring that test and development teams are on the same page in terms of quality goals, objectives and measurements, and ensuring that you have a consistent view of your quality posture, however, can be a challenge in the renovation process. Making sure that Web sites perform and that applications are protected, for example, must be a top priority to maintain customer satisfaction.

The automate testing software delivery entry point can help banks centrally coordinate end-to-end quality across virtually all tools and platforms. It provides tools for eliciting, capturing, elaborating, discussing, managing and reviewing requirements. Automated testing capabilities can also help you save time, improve quality and lower the cost of new applications. For example, automated testing can help pinpoint performance bottlenecks, expose vulnerabilities and accessibility problems in Web applications, and generate timely audit and compliance reports.

## Measure effectiveness: improve visibility into projects and processes

Given the complexity in banking environments, it can be difficult to identify areas where process improvements are required, let alone measure the effectiveness and overall ROI of new practices. Challenges are compounded by dispersed teams that struggle to collaborate and lack realtime visibility into ongoing work. Without visibility, stakeholders can't monitor the health of a project to determine necessary steps for ensuring project success.

The measure effectiveness entry point helps teams collaborate in context across virtually all platforms and multiple geographies. The IBM Jazz™ platform enables the integration of tools from different vendors. Teams are provided the opportunity to work and think in unison with integrated source control, work item and build management. The platform also helps increase automation, predictability and transparency in development processes.

Recommended Rational tools by entry point and business need at a glance			
Discovery	Leverage and extend	Automate testing software delivery	Measure effectiveness
Map business processes to IT	Model your processes	Underpin quality with good requirements	Enhance cross-team collaboration
systems  IBM Rational System Architect®  IBM Rational Focal Point™	<ul> <li>IBM WebSphere®         Business Modeler</li> <li>IBM Rational         System Architect</li> <li>IBM Rational         Software Architect</li> </ul>	IBM Rational     Requirements     Definition and     Management     tools  Inject quality during     coding      IBM Rational     Software Analyzer	<ul> <li>IBM Rational         Team Concert™         for IBM System z®</li> <li>IBM Rational         Team Concert         for i</li> <li>IBM Rational         Team Concert</li> </ul>
Manage reusable assets, business rules and services  IBM Rational Asset Manager	Build new services, reuse existing code  IBM Rational Application Developer for WebSphere Software  IBM Rational Application Developer for System z  IBM Rational Developer for i for SOA Construction  IBM Rational Business Developer  IBM Host Access Transformation Services (reuse green screen applications)	Manage quality throughout the lifecycle  IBM Rational Quality Manager Eliminate quality exposures of Web applications  IBM Rational AppScan®	Implement effective processes  IBM Rational Asset Analyzer
Discover, analyze and manage your application portfolio IBM Rational Asset Analyzer	Reuse existing industry assets  IBM Industry Framework models for banking and financial markets	Automate testing to improve quality  IBM Rational Functional Tester  IBM Rational Manual Tester  IBM Rational Performance Tester	Manage reusable assets, business rules and services IBM Rational Asset Manager



### Why IBM?

For nearly a century, IBM has been working with the world's leading financial services institutions, building industry skills and making research and development investments specifically tuned to their needs. Moreover, IBM is one of the largest providers of technology products and services to the financial industry. Our entry points for core systems renovation draw from our deep experience and wealth of innovative technology resources. So you can be confident in their ability to hasten core modernization initiatives so your institution is better positioned to confront pressing economic and competitive challenges.

#### For more information

To find out more about how IBM can help your bank get started with core systems renovation to reduce risk and speed time to market for new solutions, contact your IBM representative or IBM Business Partner, or visit:

**ibm.com**/software/rational/solutions/financial/banking.html

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IBM Corporation Software Group Route 100 Somers, NY, 10589 U.S.A.

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