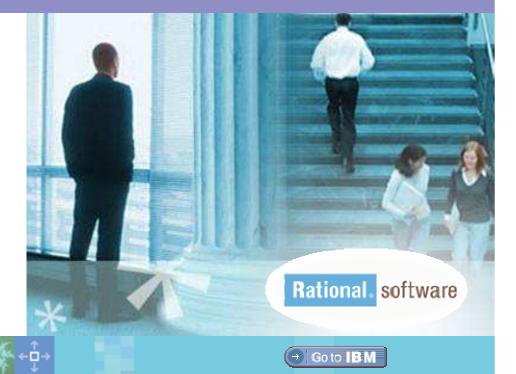


IBM Software Group

Governing the business process of software & systems delivery



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Agenda

Innovation in the real world

- Business and organizational trends and dependencies
- Impact and realities for software and systems
- Evolving software and systems delivery
- The IBM Rational software brand value in action
 - Enterprise modernization
 - ► SOA lifecycle
- The IBM Rational software approach What we offer
 - Process and portfolio management
 - Change and release management
 - Quality management
 - Architecture management





Business realities – What you see Software failure impacts the bottom line

Airbus

Non-compatible software used at different Airbus factories **\$6.1 billion** profit hit over the next four years, 2006

TJX

Cost of data breach at TJX soars **\$256 million** cost, 2007

 Hewlett-Packard Problems with ERP system \$160 million loss, 2004

> Software related downtime costs industry almost **\$300 billion** annually Only 34% of software projects succeed.

Sources: Standish CHAOS Report, Comparative Economic Normalization Technology Study, Business Week, CEO Magazine, Computerworld, InfoWeek, Fortune, The New York Times, Time, The Wall Street Journal, Boston Globe.

What's behind the failure?



An increasingly intense focus on business outcome



Align *IT* and business goals enabling greater business flexibility



Manage value and mitigate risks by improving project management



Control costs & improve global operational efficiencies (GDD)



Ensure security and compliance in a changing global environment

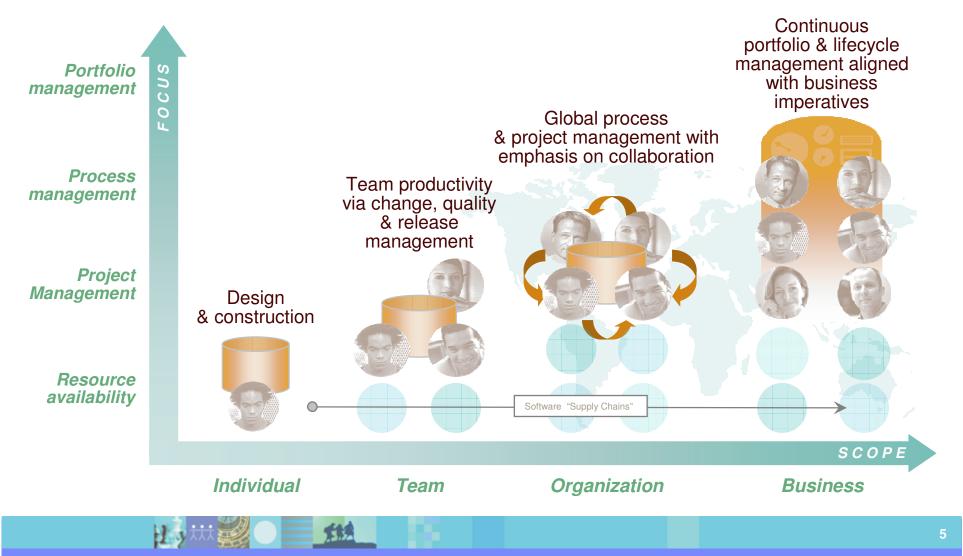


Consume & integrate value in organizationally diverse environments



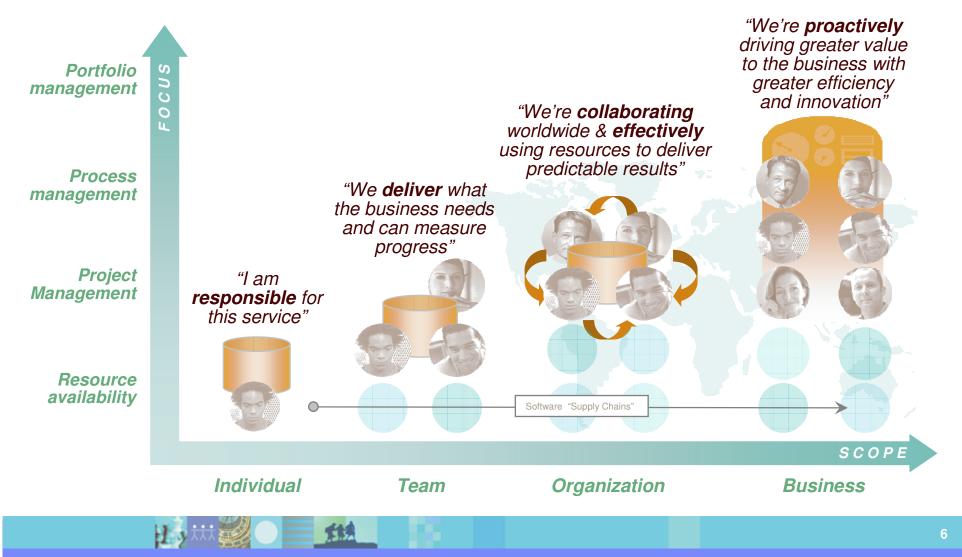


An evolution of desired value – What you want Customers are maturing their approach to software delivery





Evolving and maturing – How you get there Govern software delivery in the context of the business





Our business model

A strategic partner in enabling business innovation & transformation



- Global capability
- Business flexibility
 - Time to value
 - Risk & compliance management

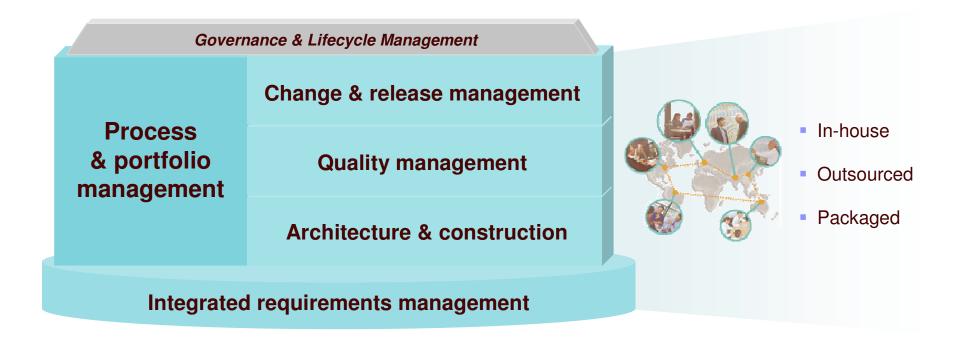




IBM Rational Software Delivery Platform What we offer

Rational. software

Process design and implementation best practices based on a market leading solutions delivery platform







Who is Rational? Brand Value & Strategy





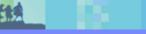


Make software development accountable to the business

Turn excellence in software & systems development into a competitive advantage

Facts and Figures

- 5th brand in SWG, acquired in 2003
- Used by 87 out of the top 100 companies
- Leader in Application Development market for 6 years in row (Gartner)
- Completed 3 acquisitions, System Corp, Build Forge and Watchfire -Telelogic on the horizon.
- Solutions for Development, IT Operations and Lines of Business
- Community of over 10,000 consultants skilled with Rational solutions
- Partnerships with over 40 global and regional SIs





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Enterprise modernization

SOA lifecycle

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Ask yourself, can I?...

Leverage existing assets?

- Discover and gain control over existing enterprise application portfolio?
- Identify assets for reuse in a Service Oriented Architecture?

Leverage modern architectures?

- Create services easily from existing code, including CICS, IMS, i5/OS and terminal applications?
- Define new services for all deployment platforms from initial design to implementation?

Leverage existing IT skills?

- Exploit new technologies and innovation without retraining existing staff that knows the business?
- Utilize new employees on any project independent of target platform?

Leverage common development environment across siloed development teams?

- Lower costs due to elimination of duplicate tools and processes?
- Realize improved end-to-end communication and traceability across the entire lifecycle?



Aspects of enterprise modernization To improve IT flexibility, you need to **modernize** your enterprise in the following areas:

Assets Discover, understand, and leverage existing applications & services

Processes, Infrastructure & IDEs

Improve development processes, environments and infrastructure to reduce costs, improve quality and improve productivity

Architectures

Develop new SOA applications, reuse existing applications as services

Development Investment

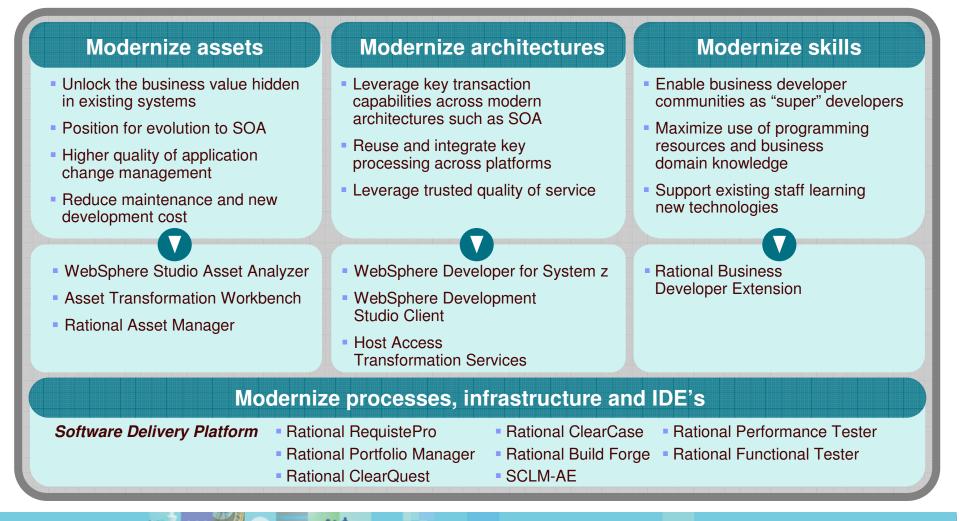
Invest resources in new opportunities

Skills

Rapidly develop technology & platformindependent applications using existing developer skills



Scenario: Global Insurer Solution: Accelerating enterprise modernization with the IBM Rational Software Delivery Platform





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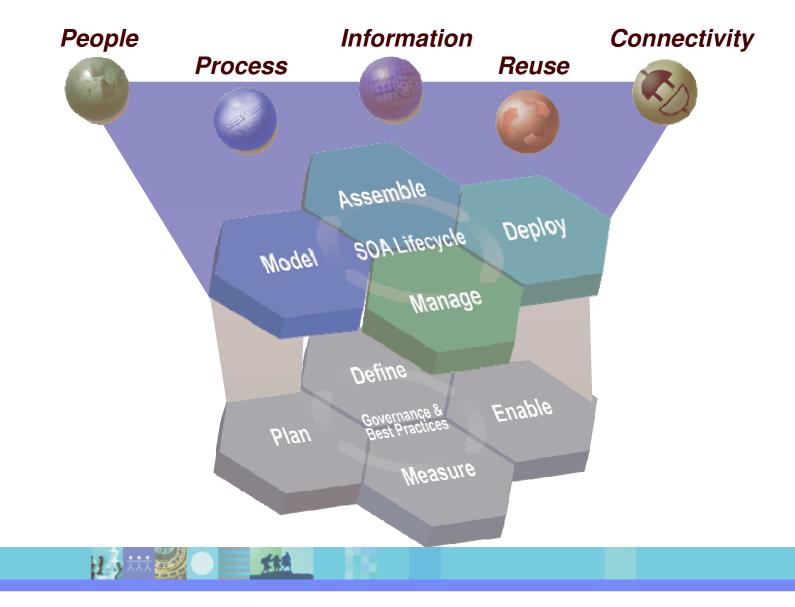
SOA lifecycle

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SOA Lifecycle: SOA entry points



Define

Measure

Plan

112



Every SOA needs SOA governance

Establish the governance need

- Document and validate business strategy
- Layout governance plan

Define the governance approach

- Define/modify governance processes
- Design policies and enforcement mechanisms
- Charter/refine SOA Center of Excellence

Monitor and manage the governance processes

- Compliance with policies
- Compliance with governance arrangements
- IT effectiveness metrics

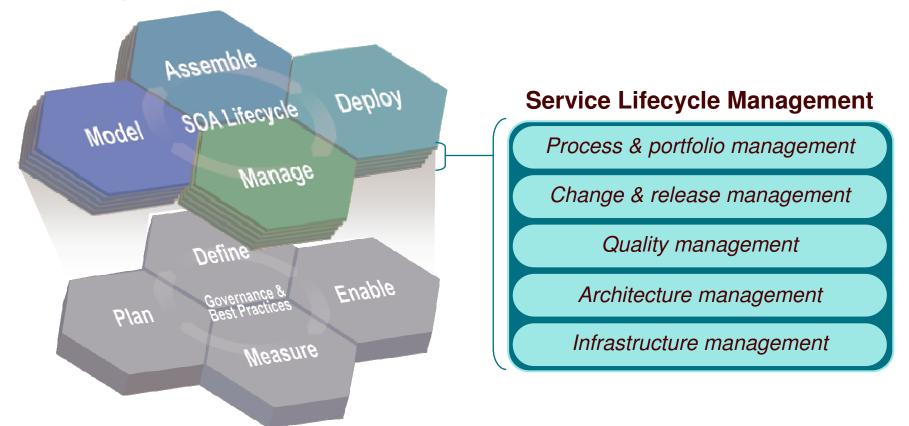
Deploy the governance model incrementally

- Governance mechanisms
- Organization change, educate on expected behaviors and practices
- Deploy policies

Enable



SOA Service Lifecycle Management builds upon SOA governance



Service Lifecycle Management aspects cut across the entire SOA lifecycle



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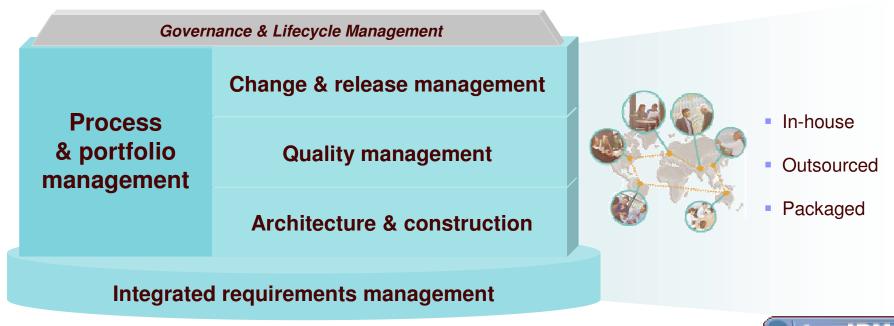




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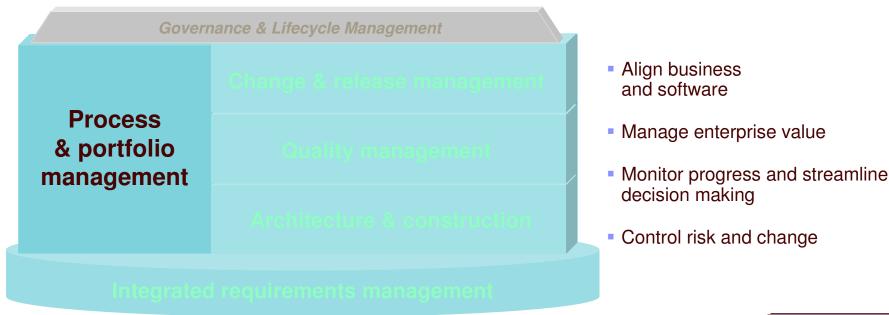




IBM Rational Software Delivery Platform Process and portfolio management

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Align business goals, best practices and projects for improved productivity and predictability







Project and Portfolio Management....







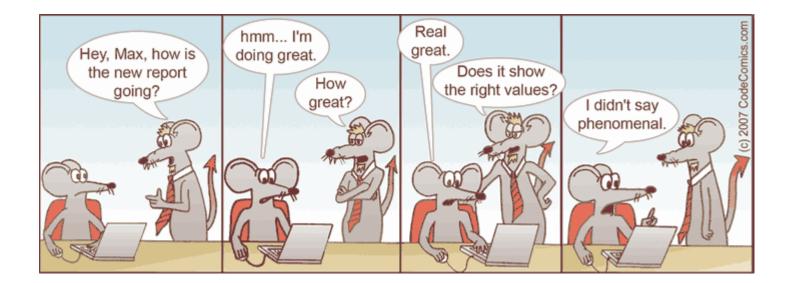
Process Improvement...?







Visibility





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Process & portfolio management

Process and portfolio management



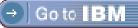


IBM Rational Software Delivery Platform Change and release management

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Improve software delivery and lifecycle traceability from requirements through deployment









Change and Release Management...





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Change & release management Change and release management Create and manage software requirements Rational RequisitePro Implement software and services Requirements Analyst **Rational ClearCase Deliver into production Rational ClearQuest** Rational ClearCase **Rational Application Developer** Rational ClearQuest Microsoft Visual Studio 2005 Measure, Trace, Reconcile Tivoli Provisioning Manager Eclipse Developer Deployment Manager roject Manager Automate and manage lifecycle processes **IBM Rational ClearQuest IBM Rational Portfolio** Automate build and release Tester Manager processes **Rational Build Forge** Manage software quality Rational ClearQuest **Build Engineer** Rational Functional, Performance & Manual Tester

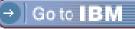


IBM Rational Software Delivery Platform Quality management

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Ensure software functionality, reliability, security and performance in development and production

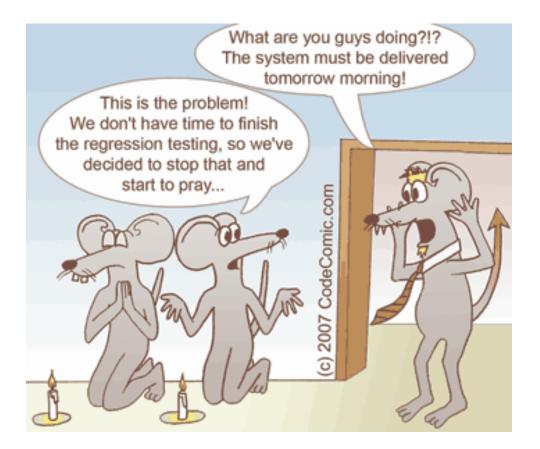








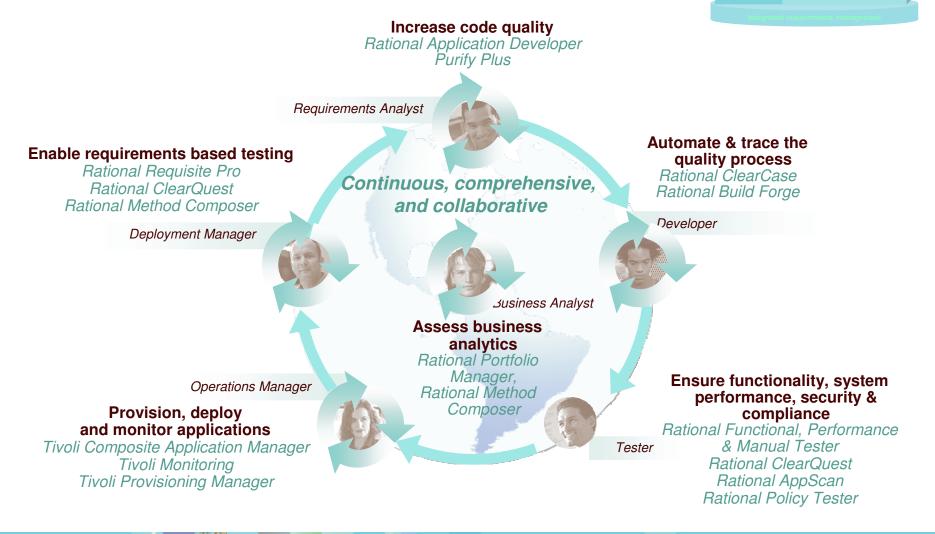
Testing ALL the application?...





Quality management

Quality management



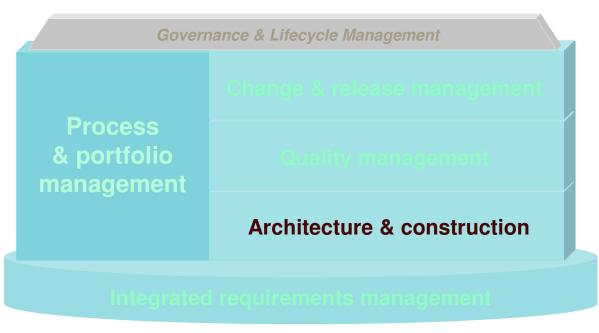




IBM Rational Software Delivery Platform Architecture and construction

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Models, designs, and rapidly builds resilient architectures for SOA, systems, and applications

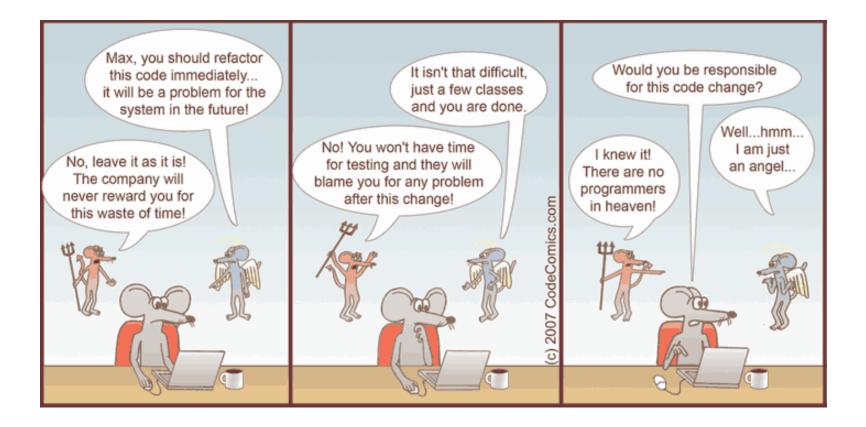


- Link Business Processes with development for complete lifecycle manageability
- Achieve resilient application architectures as SOA, with framework automation
- Accelerate delivery with design specification to code transforms
- Unify teams and ensure compliance with processes, patterns and profiles
- Stay in control and communicate architectural evolution and reconciliation





Enterprise Architect...

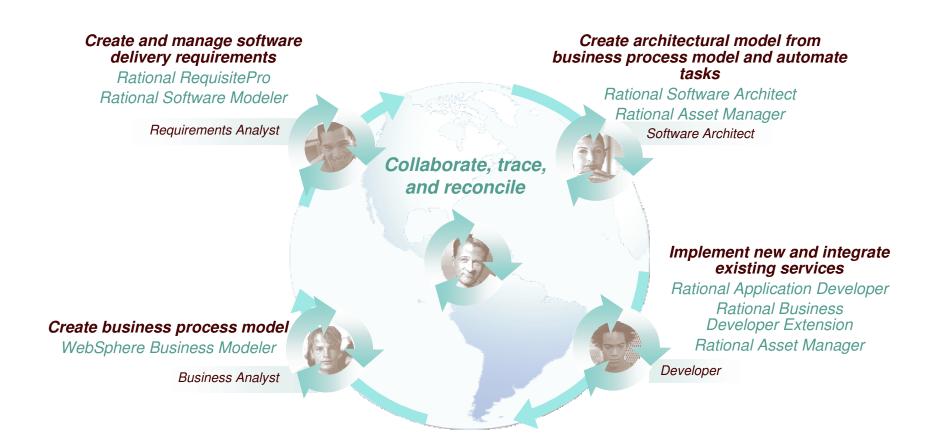






Architecture and construction









IBM Rational Software Delivery Platform Integrated requirements management

Rational. software

Improve the communication of project goals, reduce project risk and increase the quality of applications before deployment

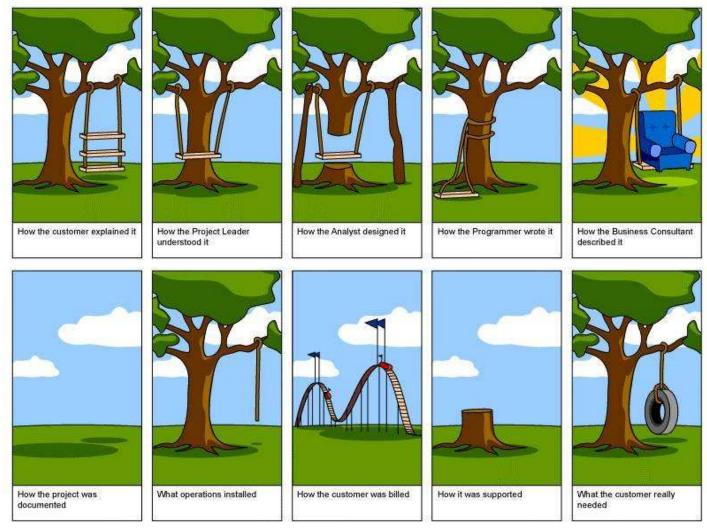


- Ensure that applications meet business needs by tracing to business process models
- Understand the impact of a change via full lifecycle traceability
- Verify quality by linking requirements to test cases
- Understand status, resources, cost, return, and other financial assessments associated with requirements





Requirements Management





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Integrated requirements management Integrated requirements management Create and manage software requirements and use cases Rational RequisitePro **Develop data and architectural** models from business process models and software Requirements Analyst requirements Rational Software Architect Create business process models **Rational Data Architect** and business requirements Continuous, comprehensive, Software Architect WebSphere Business Modeler and collaborative Rational RequisitePro Business Analyst Use models and requirements to write code Rational Application Developer Project Manager Developer Link requirements with project plans, financials and status Use requirements and use cases Rational Portfolio Manager to create test cases Tester Rational ClearQuest



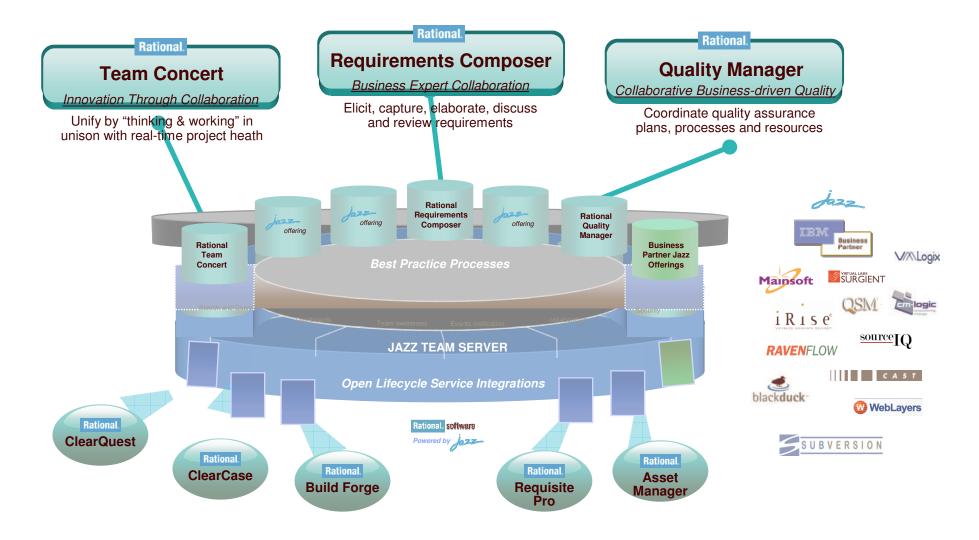
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Introducing the first wave of new Jazz offerings







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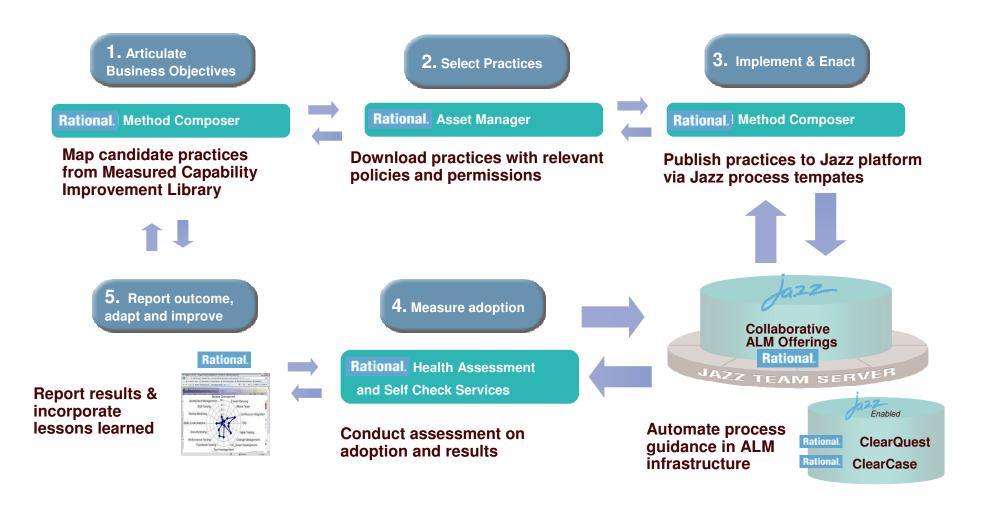
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Automate the authoring, deploying, measuring and adapting of proven best practices processes tied to business outcomes





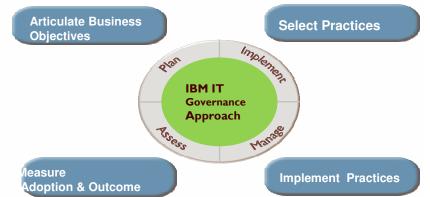


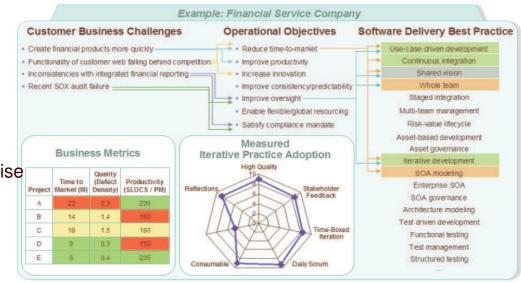
Mapping business value to software delivery best practices

- IBM Rational Health Assessment for Software Delivery to benchmark against proven improvement roadmaps
- IBM Rational Self Check for Software Teams to provide ongoing self assessments

Measured Capability Framework

- A systematic approach to assess practice adoption and map to business metrics
- A delivery model for accelerating adoption through out-of-the-box assets
- Consumable and incremental
- Applies decades of industry process expertise
- Practices delivered in Rational Method Composer 7.5 for incremental adoption







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- IBM Rational software
- IBM Rational Software Delivery Platform
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- Change and release management
- Quality management

- Architecture management
- <u>Rational trial downloads</u>
- <u>developerWorks Rational</u>
- IBM Rational TV

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