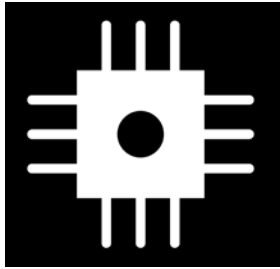


Future Forward: 2010 and Beyond for IBM Rational

Jason Leonard
IBM Rational Business Unit Executive,
Australia & New Zealand
jleonard@au1.ibm.com



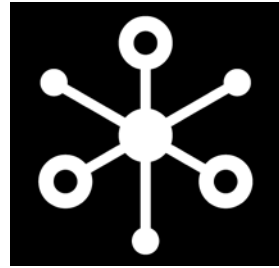
The reality of living in a globally integrated world is upon us



INSTRUMENTED

We now have the ability to measure, sense and see the exact condition of everything.

- Today, there are 1 billion transistors for each person on the planet.
- By 2010, 30 billion RFID tags will be embedded into our world and across entire ecosystems.



INTERCONNECTED

People, systems and objects can communicate and interact with each other in entirely new ways.

- The internet of people is 1 billion strong. Almost one third of the world's population will be on the web by 2011.
- There will be nearly 4 billion mobile phone subscribers worldwide by 2009.



INTELLIGENT

We can respond to changes quickly and accurately, and get better results by predicting and optimizing for future events.

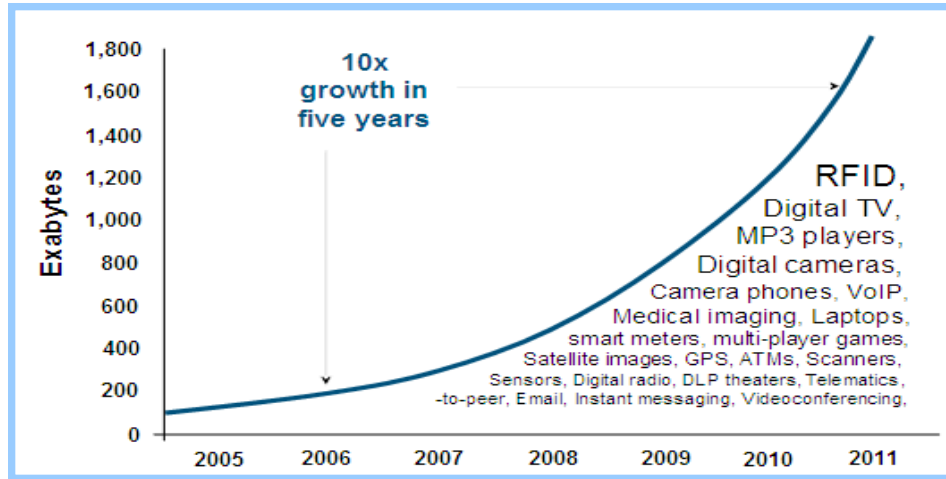
- Every day, 15 petabytes of new information are being generated. This is 8x more than the information in all U.S. libraries.
- An average company with 1,000 employees spends year to find information on its servers.



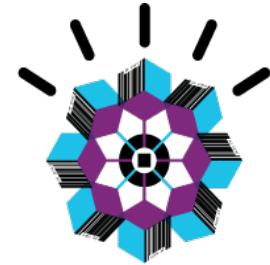
Let's build a smarter planet

Organisations that design and create software solutions face a world of growing complexity!

We've entered a new wave of business innovation made possible by smarter products and systems



By 2011, the world will be 10x more instrumented with connected devices doubling to over 1 Trillion



Smarter Products

- Products & services that are instrumented, interconnected, and intelligent
- Building blocks for constructing custom smarter solutions
- Software is the “invisible” thread
- Mass production meets mass personalization

Business Innovation

The Industrial Revolution

Electricity, Mechanical Engineering

Information Technology, Electronics and Telecom

1800

1900

2000

2010

Businesses are facing an unparalleled rate of change



Successful businesses will use software to drive innovation and competitive differentiation

Economic pressures are driving the need to achieve greater value from investments in software

Changing the Cost Structure of IT Will Become a Business Imperative

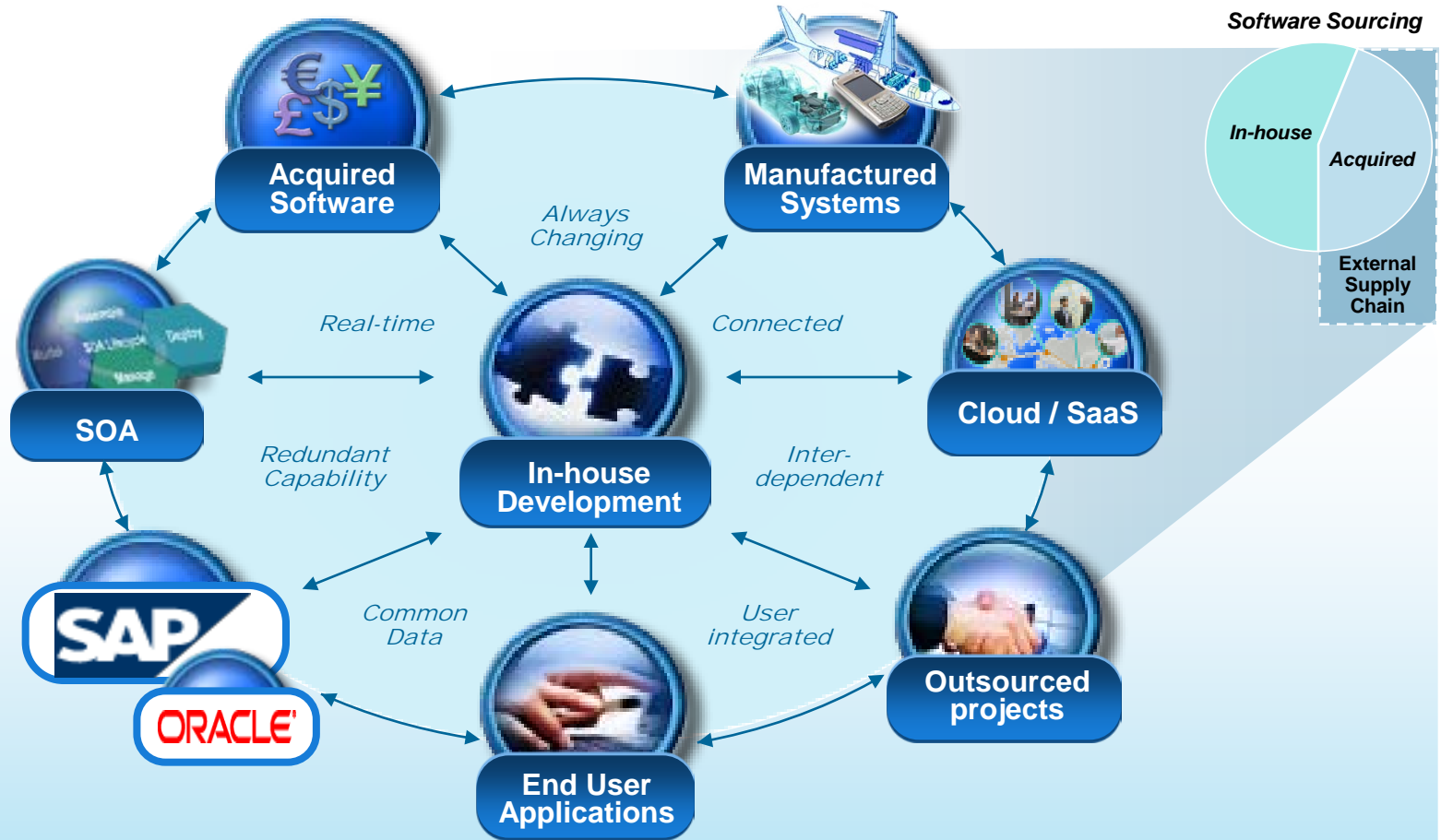
*“The message for IT is clear; business needs and **expects greater agility from IT**. The current approaches are clearly not satisfying customer needs. A **new approach to IT delivery models and sourcing** options is required that allows IT organizations to be **more responsive to the needs of the business**.”*

– Gartner, October, 2008

“Changing the Cost Structure of IT Will Become a Business Imperative for Most CIOs”



Across an ever evolving “software supply chain”



Composed of purchased, outsourced and in-house built software assets which are ever-evolving and increasingly interdependent

Delivering innovative software and systems is not easy



“34% of software projects are deemed unsuccessful costing \$300B annually”



“Only **22%** of executives felt their IT and business strategy were tightly integrated”



“**49%** of projects suffer overruns and **62%** fail to meet their schedules”

Product Ideation → Product Concept → Product Launch → Profitable Operations
takes too long, costs too much and lacks sufficient quality



Building a competency in software is challenging

Overcoming a history of cost overruns, schedule slips and quality issues



*“Only **34%** of software projects are deemed successful costing over \$300B annually”*



*“**49%** of budgets suffer overruns and **62%** fail to meet their schedules”*



*“**30%** of project costs are due to rework and poor execution of requirements”*



*“**50%** of outsourced projects are expected to underperform”*

*Silos of people,
process, and projects*

Geographic Barriers

- Poor communication
- Language, culture, time
- Process gaps resulting in rework

Organizational Barriers

- Weak collaboration
- Poor project governance and LOB oversight
- Security of IP

Infrastructure Barriers

- Incompatible tools
- Unreliable access
- Lengthy on-boarding
- Inflexible integration



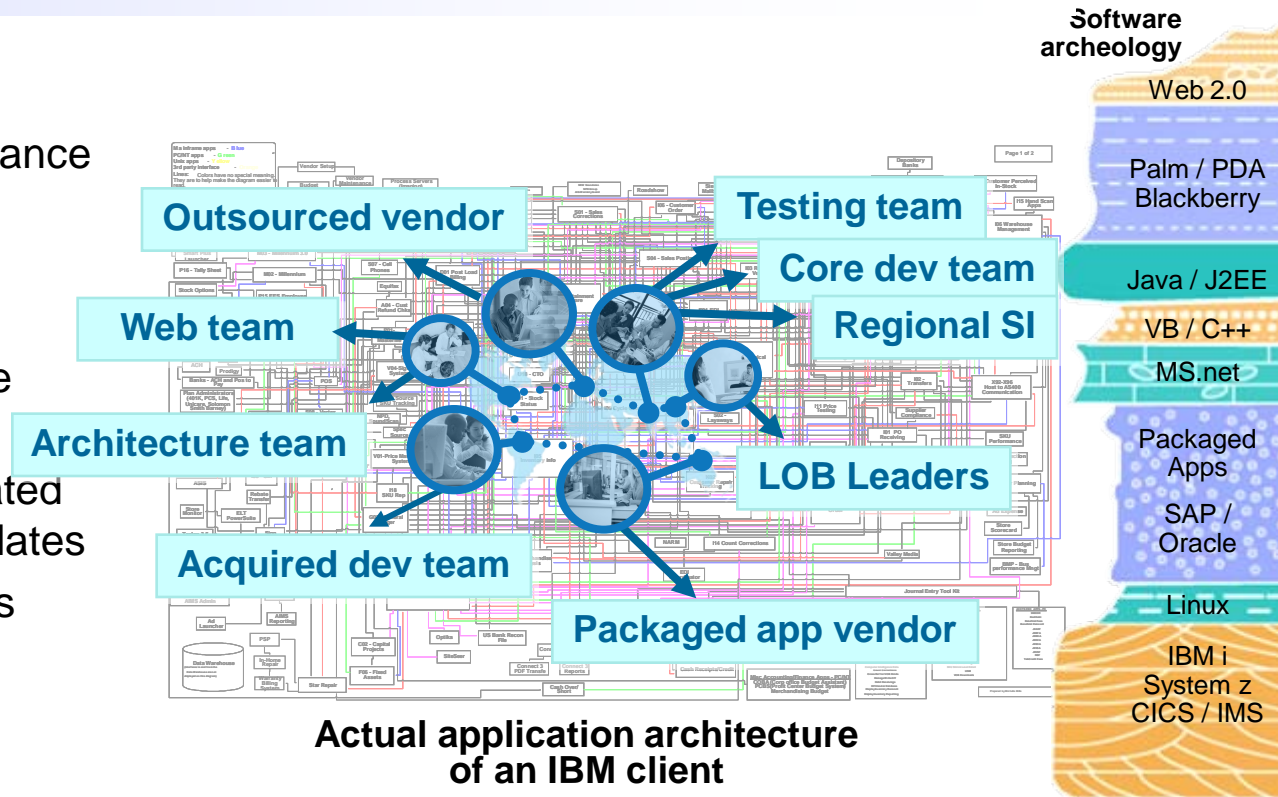
Performance of people and assets in software supply chains



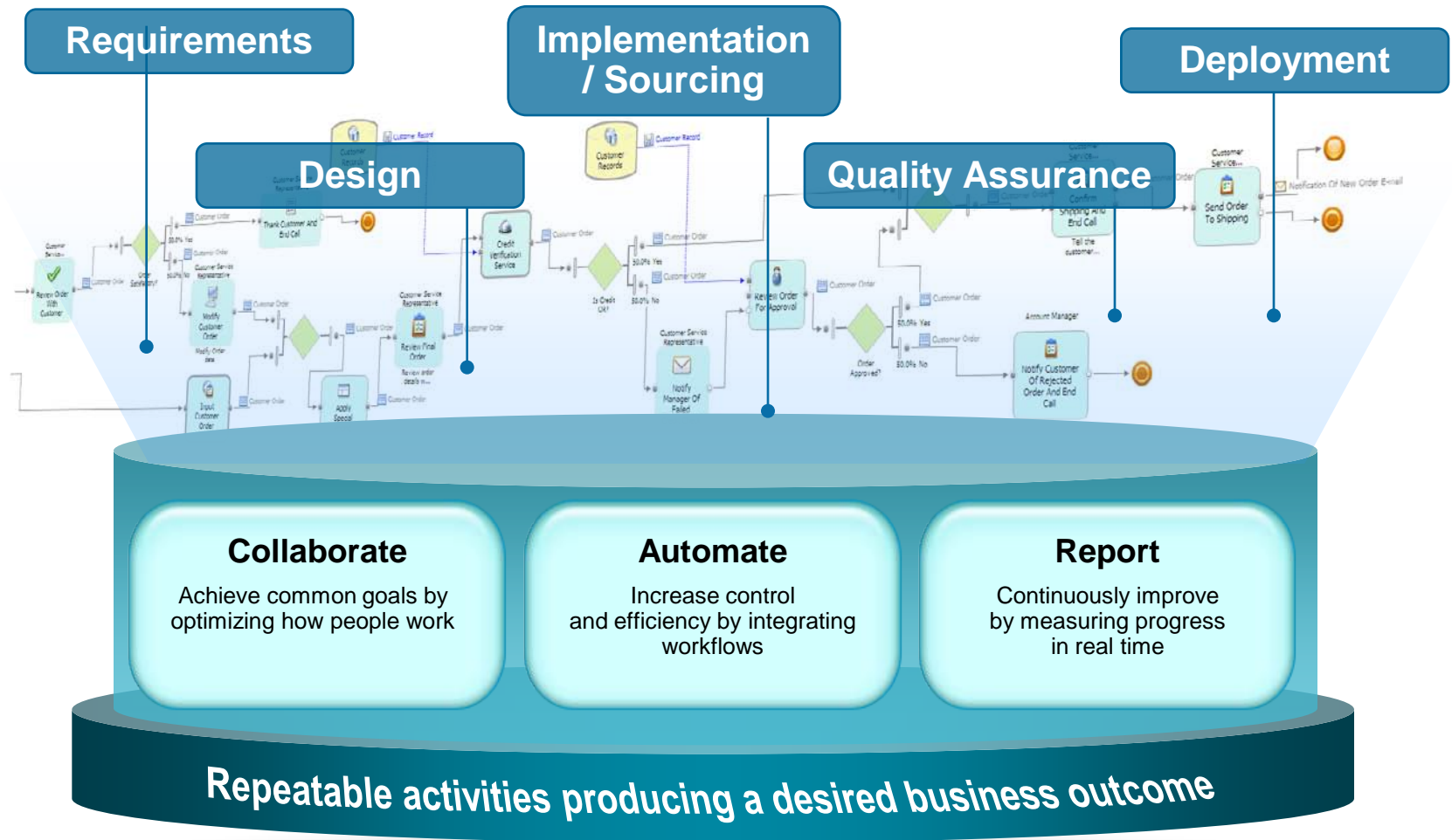
“Whether designing an airplane, assembling a motorcycle [or delivering software]... the ability to integrate the talents of dispersed individuals and organizations is becoming the defining competency for managers and firms.”

— Tapscott & Williams, Wikinomics, Copyright 2006

- Lack of architectural governance
- Layers of disjointed, poorly managed software assets
- Contributors are everywhere with diverse skills, roles
- Growing complexity associated with IP and regulatory mandates
- More formal IT and business service level agreements



Successful organisations are managing software and systems delivery as a robust business process



What is required to bring about fundamental transformation?



Jazz is a platform for transforming software delivery

Rational Offerings

Third party Offerings

Business Partner Offerings

Jazz is...

- Our vision of the future of systems and software delivery
- A scalable, extensible team collaboration platform
- An integration architecture enabling mashups and non-Jazz products to participate
- A community at Jazz.net where Jazz products are built
- An evolution of our portfolio over time

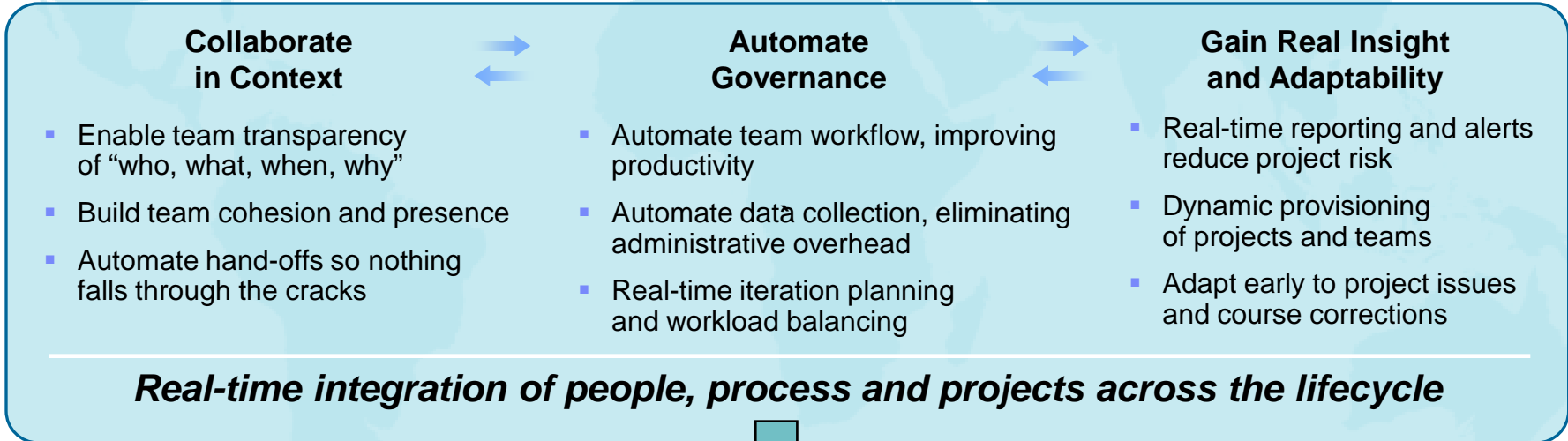
Jazz is a platform for *transforming how people work together* to deliver greater value and performance from their software investments.

Based on a foundation that can transform software delivery

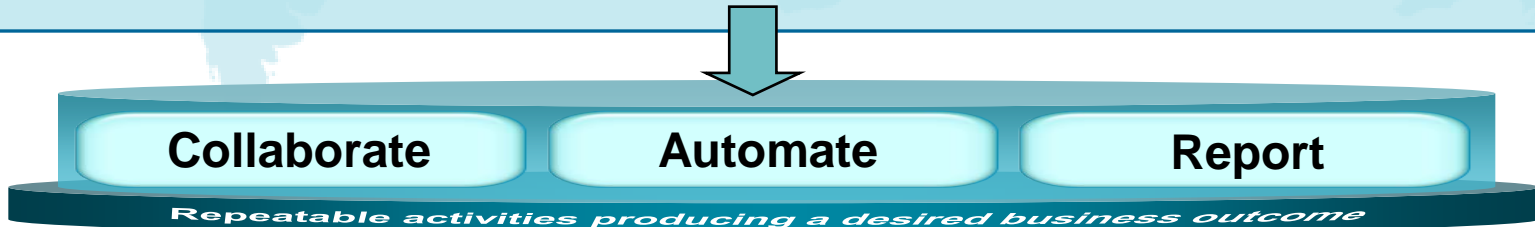
A open technology initiative to *transform* how people work together to deliver greater value and performance from their software investments



- Robust, extensible and scalable
- Globally distributed, fluid and dynamic
- Community-based and open at Jazz.net

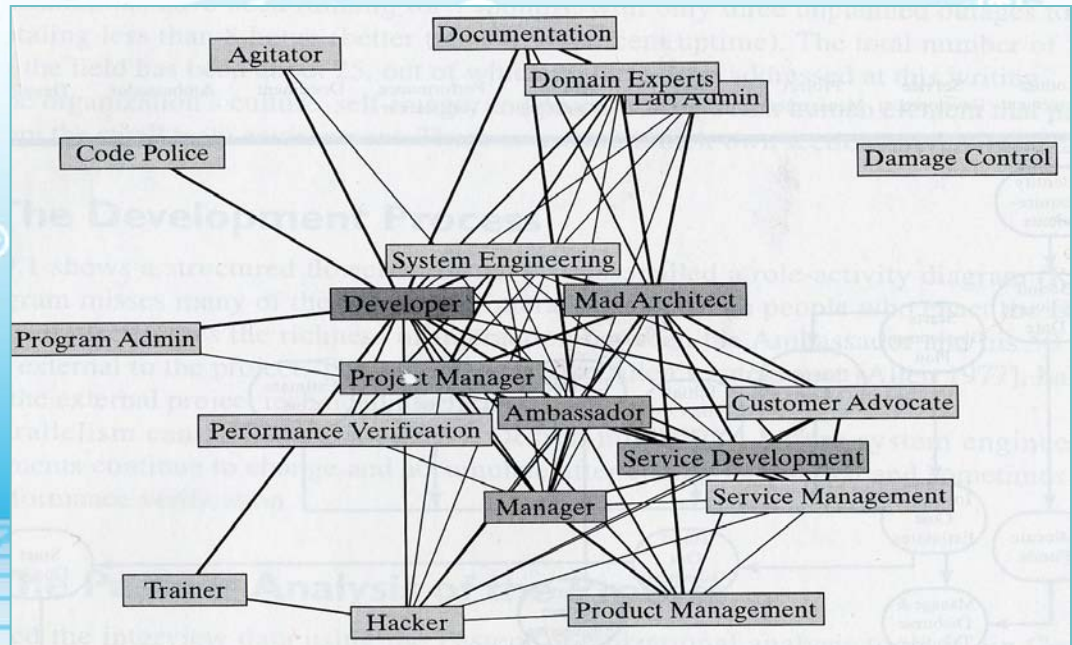


Real-time integration of people, process and projects across the lifecycle



Patterns of success: Enable team collaboration

How do we effectively develop with teams across 3 continents?



- Two-thirds of development organizations have teams that work in multiple locations.¹ Studies show that **teams with more than twelve members rapidly lose effectiveness.**²

Graphic: Coplien, *Organizational Patterns of Agile Development*

¹Evans Data Corporation North American Development Survey, Vol II, 2007

²Knowledge@Wharton. "Is Your Team Too Big? Too Small? What's the Right Number?" June 14, 2006.

To leverage global resources more effectively, Jazz enables collaboration across teams and geographies



Collaborate

Achieve common goals
by optimizing how people
work

- Leverage social networking capabilities to enable broader and richer participation in software projects
- Virtualize "team memory" to overcome geographic and temporal gaps in the software lifecycle
- Enable flexible, global resourcing and energy-saving workplace models

jazz™

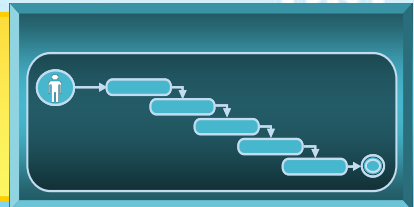


Patterns of success: Focus on process and workflow automation

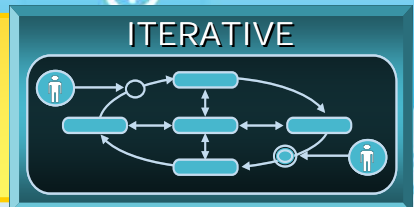
How can we accelerate our adoption of practices?

Make your tools aware of your process decisions

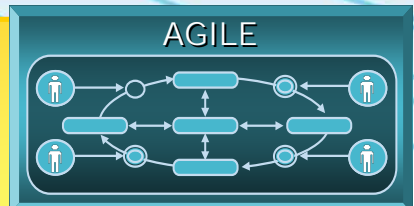
- **Waterfall development**
When *stability* is the primary driver
– Example: Rational ClearCase kernel



- **Iterative development**
When *stability and change* are equal players
– Example: Rational Software Architect, Rational Business Developer



- **Agile development**
When *change* is the primary driver
– Example: Rational Team Concert, Rational Quality Manager, Rational Requirements Composer



³Ambler, Scott, "Agile Adoption Rate Survey: February 2008," Ambysoft.

To deliver better outcomes, Jazz automates the implementation of any process



Automate

Improve agility by
automating team process and
workflows

- Flexible process enactment makes it easy and natural for team members to "do the right thing"
- Built-in support for Scrum and other Agile processes deliver proven approaches to planning and managing Agile projects
- Standard processes automate repetitive tasks and improve team efficiency

jazz™



Rational.

Patterns of success: Deliver real time, fact-based reporting

How can we track progress against goals?

- “Organizations exercising world-class performance management practices enjoy a 2.4 times market returns of typical companies”
- *BusinessWeek* Study:
The Payoff of Pervasive Performance Management

- Studies show that:
 - 52% of users **don't have confidence** in their information¹
 - 59% of managers **miss information** they should have used²
 - 42% of managers **use wrong information** at least once a week²



¹AIIM 2008 Survey

²Accenture 2007 Managers Survey

To ensure progress towards business outcomes, Jazz supports correlated, multi-level *reporting*



Report

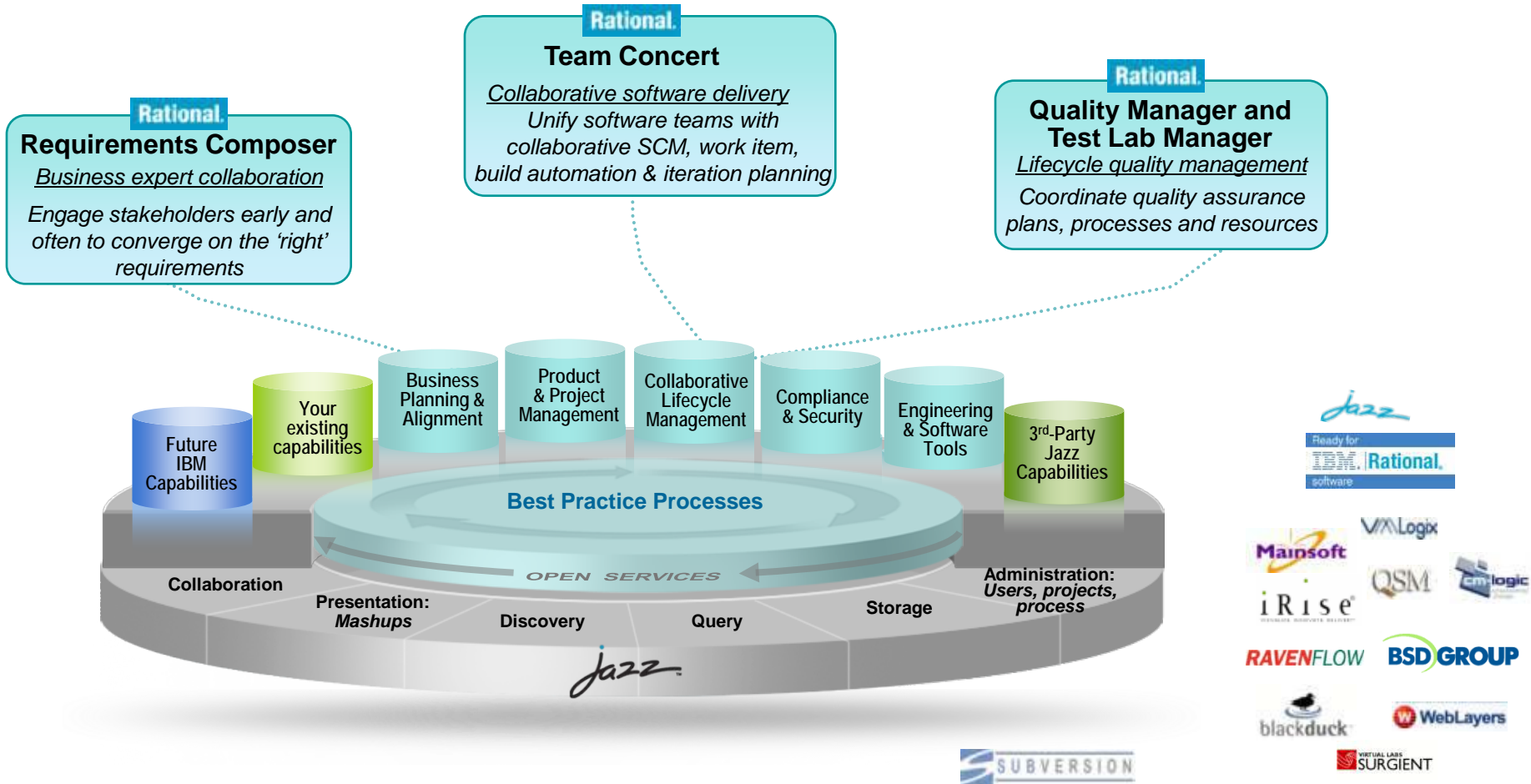
Continuously improve
by measuring progress
in real time

- Deliver more accurate information through real-time instrumentation of the software delivery lifecycle
- Leverage metrics for continuous individual and organizational capability improvement
- Gain insight into a projects spanning geographic & organizational boundaries

The word "jazz" in a lowercase, cursive font with a trademark symbol. The logo is positioned on the front edge of a large, light gray, cylindrical platform that has a white top surface. On the top surface, there are several small silhouettes of people standing in a line, and a large, faint arrow pointing to the right.

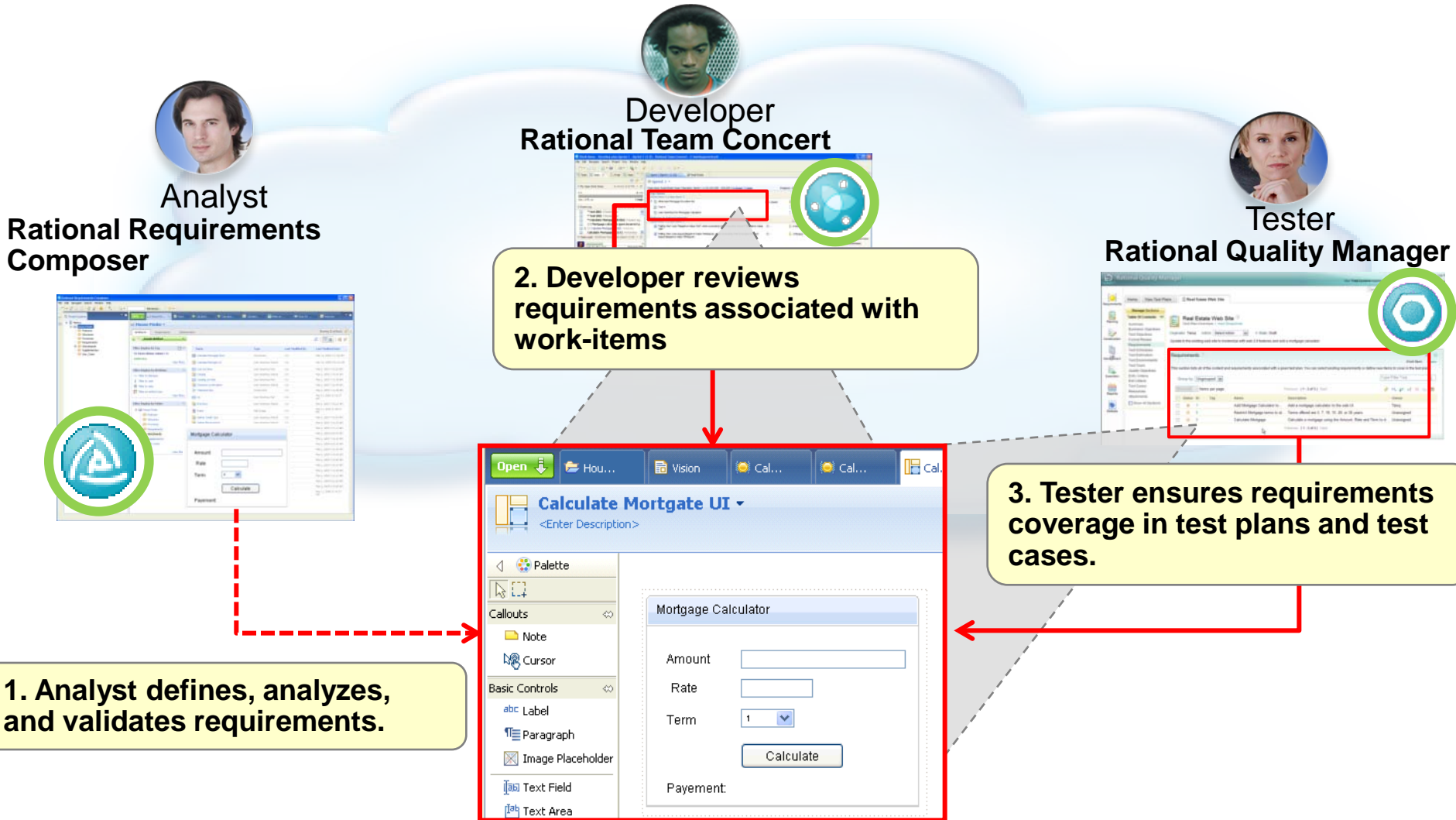


2008: First wave of Jazz products



Align technical teams with business drivers

Integrated workflows foster clarity of requirements

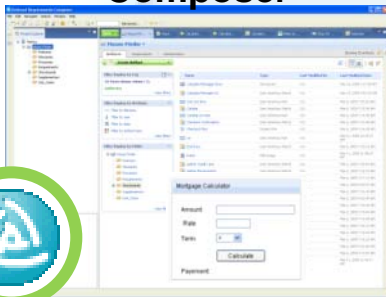


Accelerate the build-test-debug cycle

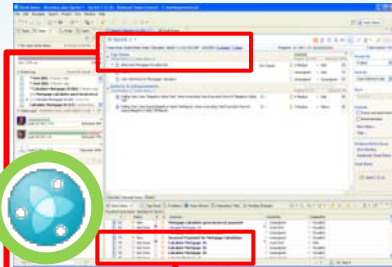
Integrated workflows speed defect time-to-resolution



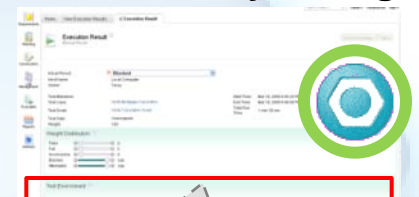
Analyst
Rational Requirements Composer



Developer
Rational Team Concert

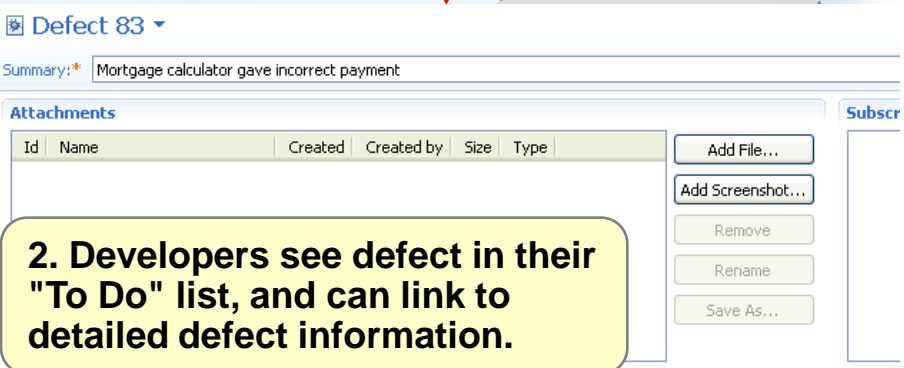
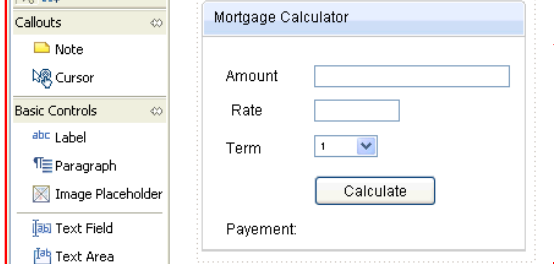


Tester
Rational Quality Manager

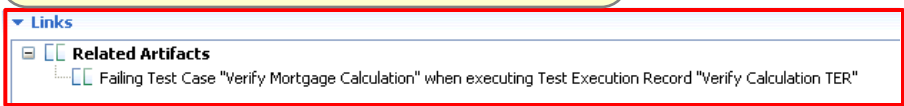


1. Tester captures test execution results and logs defect as a work-item.

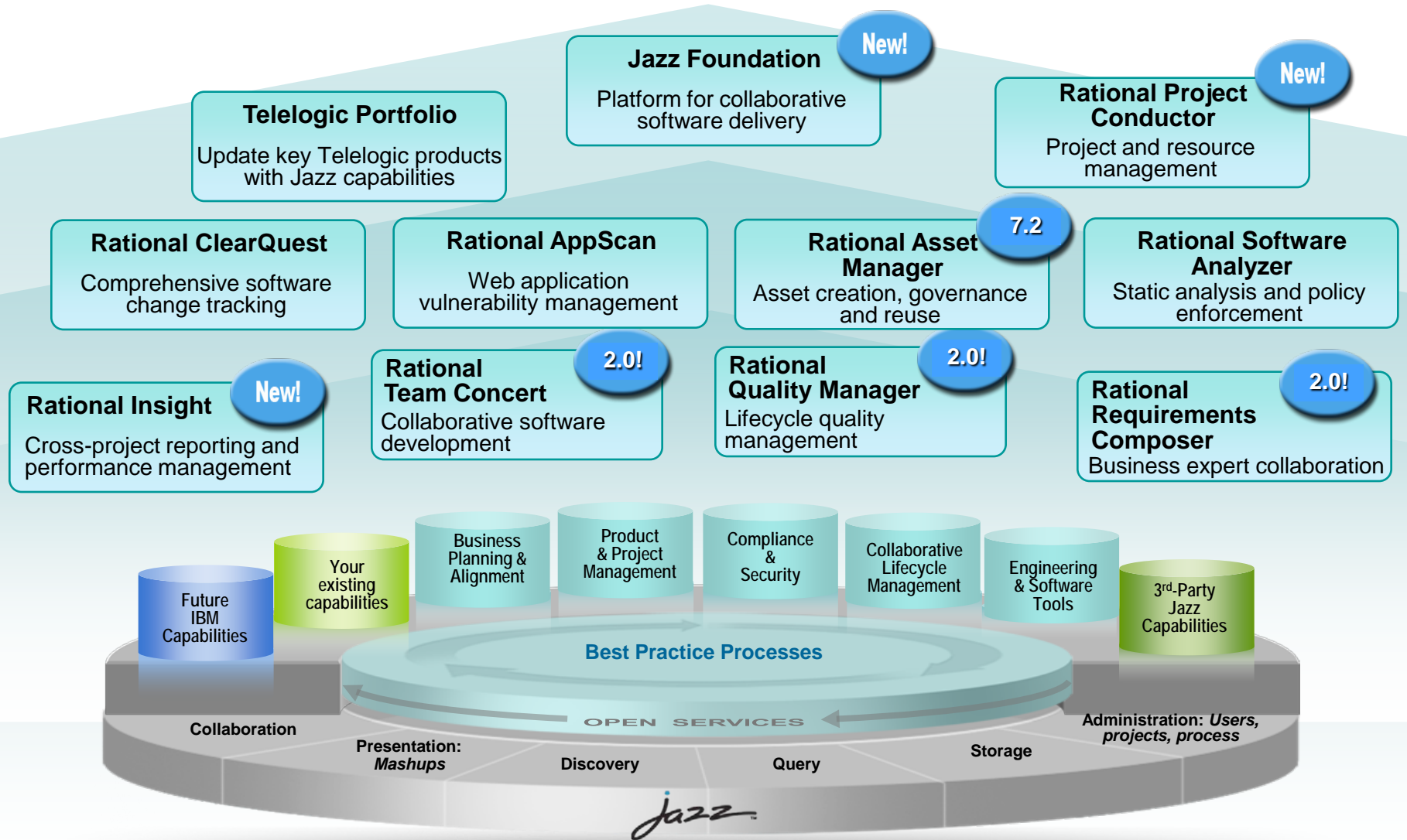
3. At any time, developers and testers can link to associated requirements, sketches or storyboards.



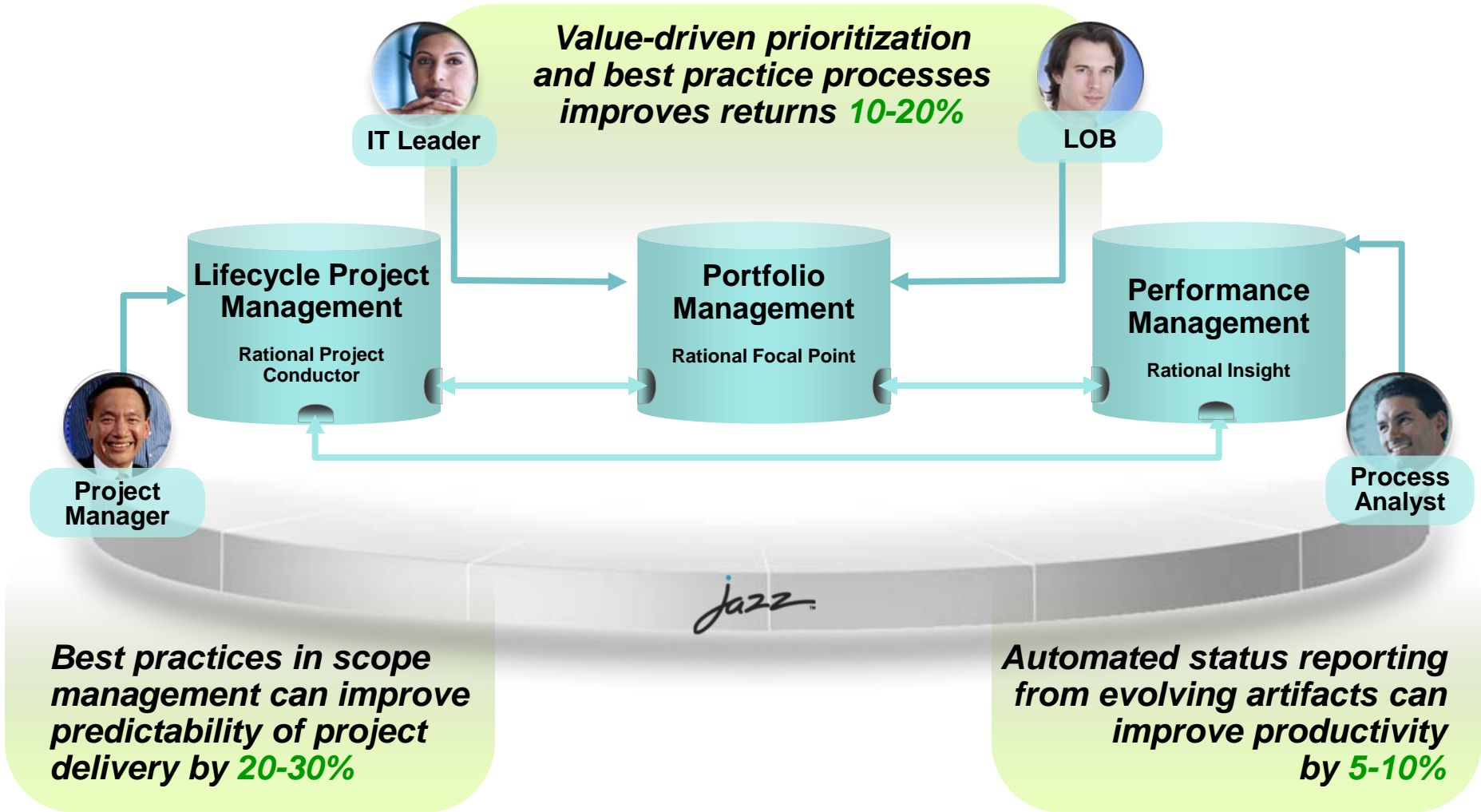
2. Developers see defect in their "To Do" list, and can link to detailed defect information.



The second wave: 2009



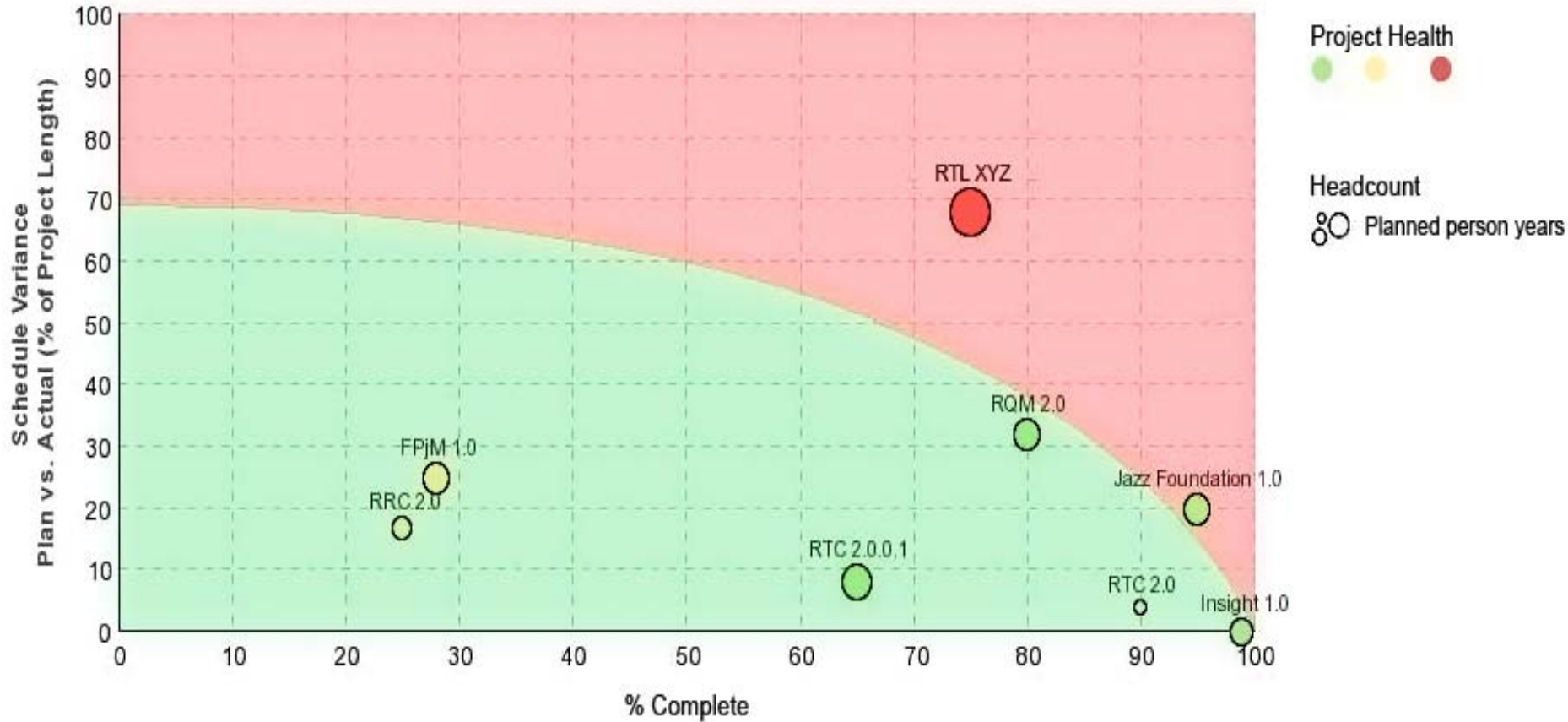
Optimize business outcomes through improved business planning & alignment



Source: Based on hundreds of client interactions of the IBM Rational Services Organization, as observed by VP Services, IBM Rational

Example: Providing a single view of project health

Quickly identify delivery issues that need immediate attention

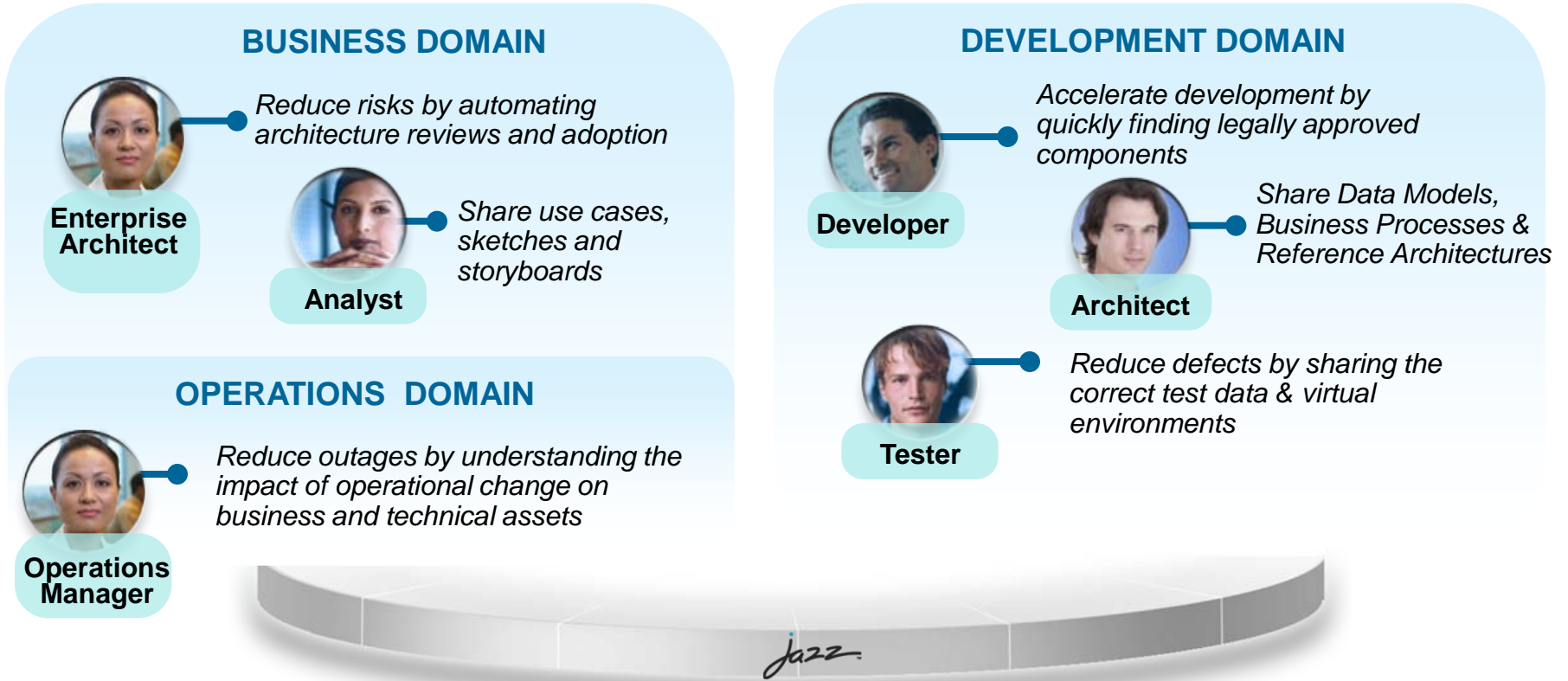


Sample of actual IBM project health report

Rational Insight

Deliver greater value from Jazz-based assets

End-to-end asset management



Reduce costs and improve quality with end-to-end asset management and reuse automated by Jazz workflows

Rational Asset Manager

2010: Jazz "on the cloud"

Delivering an "instant on" collaborative ALM solution



IBM Rational Software Delivery Services for Cloud

- Gain immediate access to a fully integrated collaborative application lifecycle management (ALM) environment.
- Dramatically reduce up front costs by reducing acquisition costs.
- Cost effectively test solutions in the cloud to optimize your software delivery life cycle

900 business partners “jazzed” about IBM Rational software



Rational partner solutions extend the value of Jazz

Mainssoft

Collaborate with Microsoft® SharePoint® and Lotus® Quickr® libraries

QSM

Analyze project data and automate task-level work breakdown structures

VXLogix

Reserve, deploy and manage an inventory of virtual test resources

BSD GROUP

Synchronize defect and change workflows with HP Quality Center

WORKSOFT

Execute tests for SAP

SOGETI

Enable TMAP process support

iRise
VISUALIZE. INNOVATE. DELIVER.

Simulate requirements to reduce project risk

cm logic
empowering change

Enable bidirectional JIRA change management integration

WebLayers

Deliver automated governance to insure compliance and minimize business risk

blackduck

Find and manage open source approvals

DeviceAnywhere
by Mobile Complete

Execute mobile handset tests.

SURGENT
VIRTUAL LABS

Accelerates test cycles with virtual machine management and execution

RAVENFLOW

Visually validate business requirements

reto

Integration between Rational Quality Manager and Borland CaliberRM to enable traceability between requirements and test artifacts

finaris

Execute data tests.

Task

Integrate with Mylyn task focused interface

ARSIN Corporation

Tools for validation of SAP business objects

iTKO LISA

Execute LISA tests from RQM

BigLever
SOFTWARE, INC.

Allows users to define RQM test cases according to product line features

Ready for
IBM Rational
software

Jazz.net: Creating a higher-fidelity connection to our customers

Suppose we did our development out on the Internet?

Jazz
COMMUNITY SITE

We're building a new generation of products to help make software development more collaborative, productive and enjoyable.

Learn about Jazz | Explore projects | Download products

Jazz Team Blog

Report from Rational Software Conference 2009
By Seth Packham
Wed, 10 Jun 2009

Well, I'm back and fully recovered from an exhausting but fun week at the Rational...
[More >](#)

Introducing Rational Focal Point for Project Management
By Neil Leblanc
Mon, 08 Jun 2009

Thank you for your interest in Rational Focal Point for Project Management. This product...
[More >](#)

Upcoming Events

Reducing Cost through Improved Software Delivery Workshop
23 June 2009 in Edinburgh, UK

Join us in Edinburgh, UK to learn about the main areas of IBM Rational's application...
[More >](#)

Follow the activity at RSC
Guide to Jazz at RSC 2009
[Jazz Twitter feed](#)

Announcements

Rational Quality Manager and Rational Test Lab Manager 2.0 Beta 2 now available!
Wed, 3 Jun 2009

The Rational Quality Manager team is pleased to make 2.0 Beta 2 available for download. Visit the Rational Quality Manager and Rational Test Lab Manager project page to learn more.
[Download now >](#)

Rational Requirements Composer is now available!
Fri, 29 May 2009

Rational Team Concert 2.0 RC2 available!
Sat, 30 May 2009

With 2.0 Beta 2 and now Release Candidate 2 we're pleased to introduce the new Enterprise Edition server with scalability, high availability, and enhanced security.

There's also enhanced agile planning with full Web support, backlog planning, taskboards, risk assessment, and new SCRUM reports.

[Download Release Candidate 2 now.](#)

[Learn more about 2.0 >](#)

Log in to Jazz.net

User ID:
Password:

Forgot your user ID or password?
Not a member yet?
[Register now!](#)

Featured Downloads

- [Rational Quality Manager and Rational Test Lab Manager 1.0.1.1](#)
- [Rational Requirements Composer 1.0.0.1](#)
- [Rational Team Concert 1.0.1.1](#)

[All Downloads >](#)

In The News

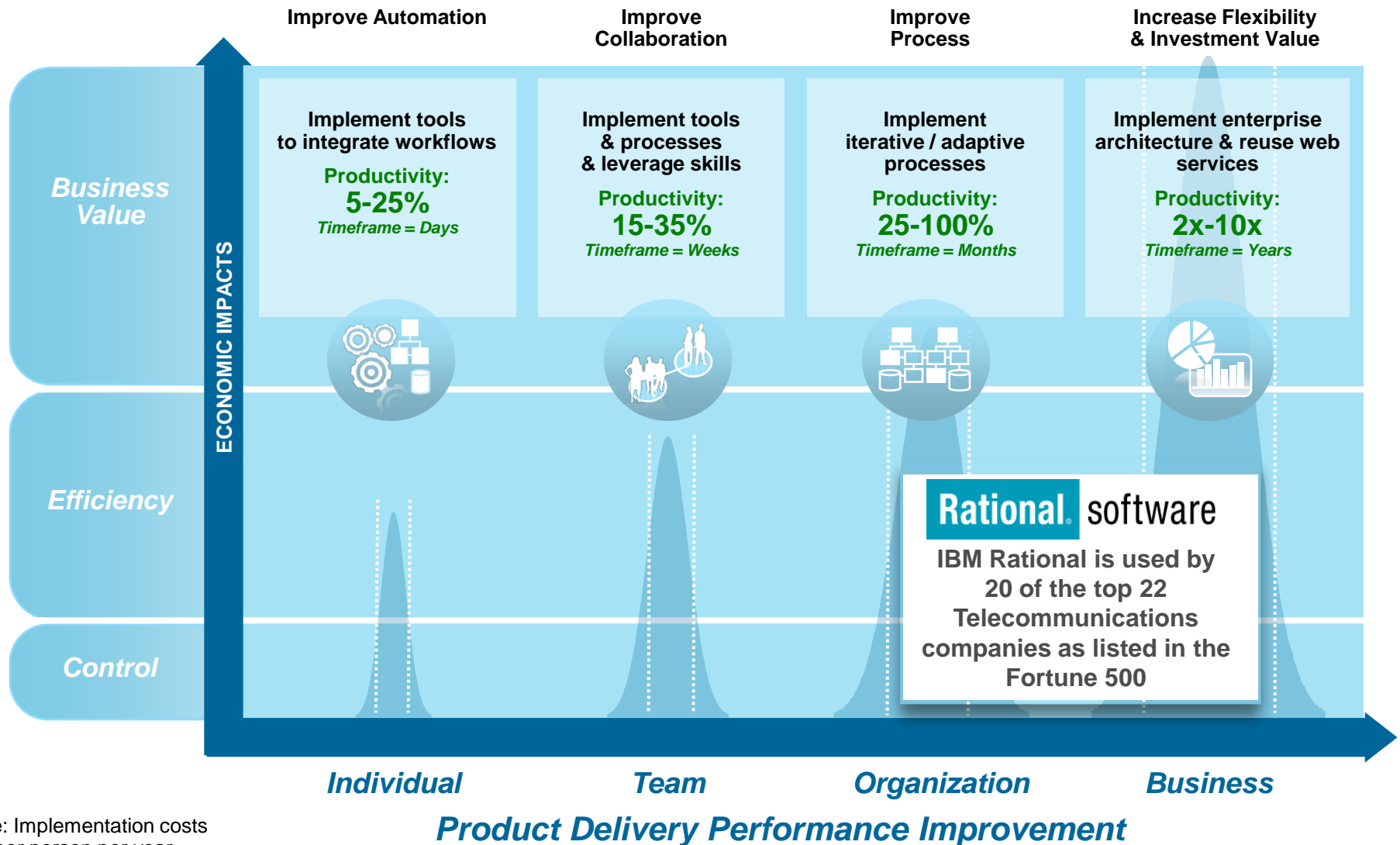
SCM tools are not configuration management tools
fscorner.blogspot.com
Monday, 8 Jun 2009

- A transparent software delivery laboratory where you can...
 - Communicate with the development team
 - Track the progress of builds and milestones
 - Get the latest product trials and betas
 - Join developers and product managers in discussion groups
 - Submit defect and enhancement requests

What analysts are saying...

- **Liz Barnett, Ez-Insight:** *"With the Jazz project, Rational has developed **breakthrough technology** and is **poised to set the standard for collaborative ALM**... Given the current business climate of "deliver more with less much sooner," organizations have no choice but to rethink the ways that they deliver software solutions. The Jazz project will help teams achieve that goal."*
- **Paul Herzlich, Ovum:** *"IBM has taken the opportunity to exploit the Jazz platform's power inventively. Its 'living' test plan is a **masterpiece of applying new technology to a familiar problem**... What is being delivered will demonstrate convincingly that IBM is raising the standard for a test management product."*
- **Julie Craig, EMA:** *"Rational's differentiators are **difficult for competitors to equal**, and the new Jazz platform foundation may well turn out to be one of the best investments the Rational team has made."*
- **Simon Jacobson, AMR:** *"Frankly I wish folks who sold quality management solutions took this approach. **Most of the folks I speak to talk about the lifecycle, but they are selling you a mass transit system, but only really provide the train station.**"*

The Result? Continuous improvement against business outcomes



Note: Implementation costs are per person per year.

This is also true for businesses developing complex and embedded systems software to drive Product Innovation



Automotive

Enhanced **collaboration** enables you to manage relationships between OEM and multiple suppliers

Powertrain
Engine
Transmission



Climate and Comfort

Networks

Steering

Lighting

Brakes and Stability

Safety



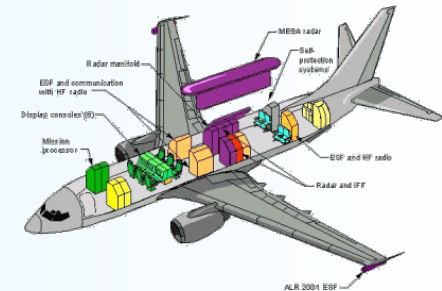
Electronics
Includes Telecom

Increased **automation** enables you to develop products at a lower cost and with fewer resources than ever before, while coping with rapidly changing market demands and technological advances



Aerospace and defense

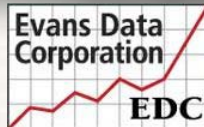
Advanced **reporting** enables you to demonstrate compliance to requirements and regulations with complete accountability



Gartner

1 **Application Development Software**
IBM Rational clear leader for the eighth consecutive year

Gartner, July 2009



1 **Software Development Platform User Satisfaction**
"IBM has spent a lot of time and effort to evolve their set of tools into a complete software delivery system, and they have succeeded ... and their users absolutely love their tools"

Evans Data Corp, July 2009



1 **Application Vulnerability Assessment Software**
Rational AppScan

IDC, Sept 2008



"The challenge in any company is to do more with less. System Architect continues to enable us to achieve our goals at relatively low cost..."

Wayne Pales, Head of Strategy & Architecture, AGL



"With a site the size and complexity of the Australian Open, automated tools like IBM Rational Performance Tester and IBM Rational Policy Tester can save days, if not weeks, of repetitive manual work."

John Kent, IT Project Manager, IBM Sponsorships, IBM



WESTINGHOUSE
rail systems

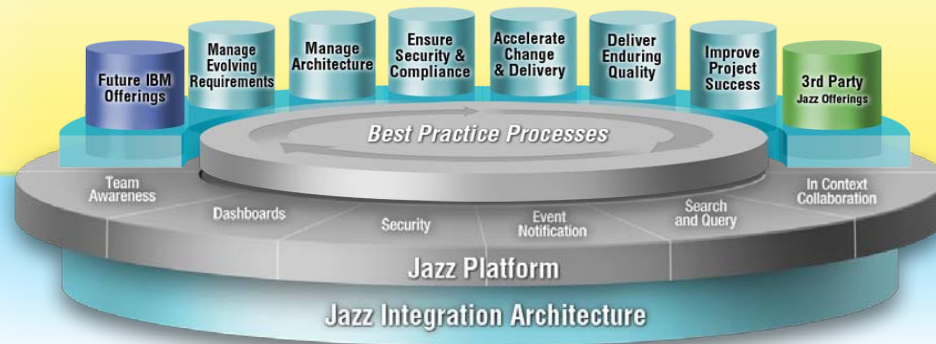
"With Rational's products, we almost doubled productivity."
Julian Robins, Technical Director, Westinghouse Rail Systems

In Summary

- A **unified platform** that includes a common foundation for collaboration, automation and reporting can dramatically improve the business process of software delivery
- Through **insight** into real, honest, in-flight data, teams can better measure and understand the improvements they are making using this platform
- Achieving **business differentiation** with agility and confidence is a reality today



Let's build a smarter planet





Learn more at:

- [IBM Rational software](#)
- [IBM Rational Software Delivery Platform](#)
- [Process and portfolio management](#)
- [Change and release management](#)
- [Quality management](#)
- [Architecture management](#)
- [Rational trial downloads](#)
- [Leading Innovation Web site](#)
- [developerWorks Rational](#)
- [IBM Rational TV](#)
- [IBM Business Partners](#)
- [IBM Rational Case Studies](#)

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