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Solutions for Power



**Collaborative Lifecycle Management:
gestirne il valore con la piattaforma Jazz**

Milano, 1 Luglio 2010



Roberto Pozzi
Rational Client Technical Professional

Agenda

- ◆ **Deliver value by managing the software life cycle**
- ◆ **The Rational Solution / Strategy**
- ◆ **Benefits of managing the software life cycle**



Driving Business Differentiation

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What is Application Lifecycle Management?

- ▶ *The coordination of development life-cycle activities, including requirements, modeling, development, build, and testing, through:*
- 1) *Process Automation - Enforcement of processes that span these activities.*
 - 2) *Traceability - Management of relationships between development artifacts used or produced by these activities.*
 - 3) *Reporting - Reporting on progress of the development effort as a whole.*

FORRESTER®

- In its simplest form, ALM is really just the integration and coordination of **people, tools, information, and process**....enabling development and maintenance of software applications

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What does this mean?

- ALM is a discipline as well as a product category.
- ALM doesn't support specific life-cycle activities; rather, it keeps them in sync.
- ALM doesn't live in practitioner tools; it lives in the integrations between them.
- A collection of development life-cycle tools is not necessarily ALM.

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Compelling Reason #1: Business pressure

To drive innovation, while controlling risk/costs & focusing on quality

Market Pressures

- ◆ **93% Senior business executives say innovation is a top strategic priority.**¹
- ◆ **3X Increase in the gap between leaders' need and their ability to deliver innovation.**²



Sources: 1. Forrester Report on Innovation Management Tools, 2008. 2. 2008 IBM CEO study.

Execution Mandates

- ◆ **Innovation: new business models = new requirements**
 - ✓ **Customer centric models, e.g. financial market rewards**
 - ✓ **Requirements change faster than IT can implement**
- ◆ **Efficiency: reduce cost of software delivery & operations**
 - ✓ **Rethink software delivery processes**
- ◆ **Quality & speed to market: looking for new methods**
 - ✓ **While measuring business risk of software & systems failures**



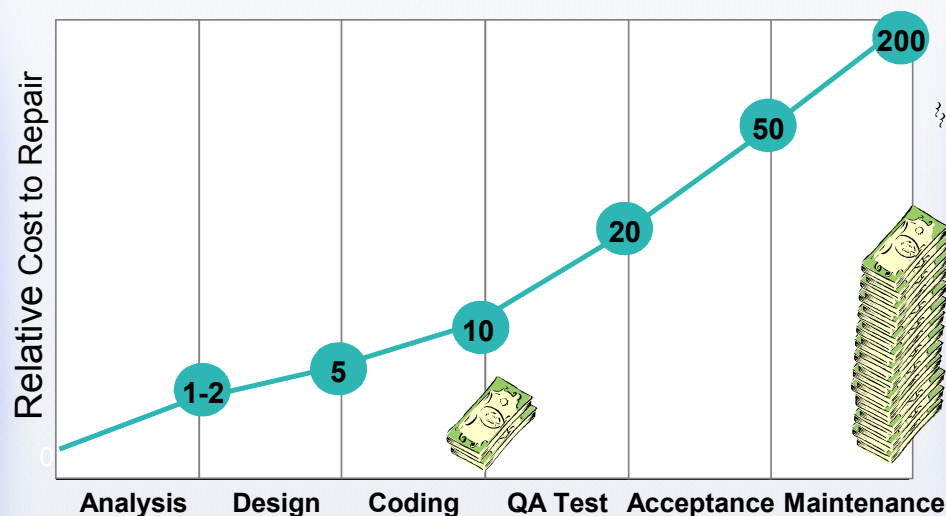
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Compelling Reason #2: Improve lifecycle processes

Traditional methods yield excess rework, delays & poor quality

Business Risk

- 41% of projects fail to deliver expected business ROI
- 2/3 of executives make more than half of their decisions based on 'gut feel' rather than verifiable information



Cost

- More than 40% of IT development budget will be consumed by poor requirements

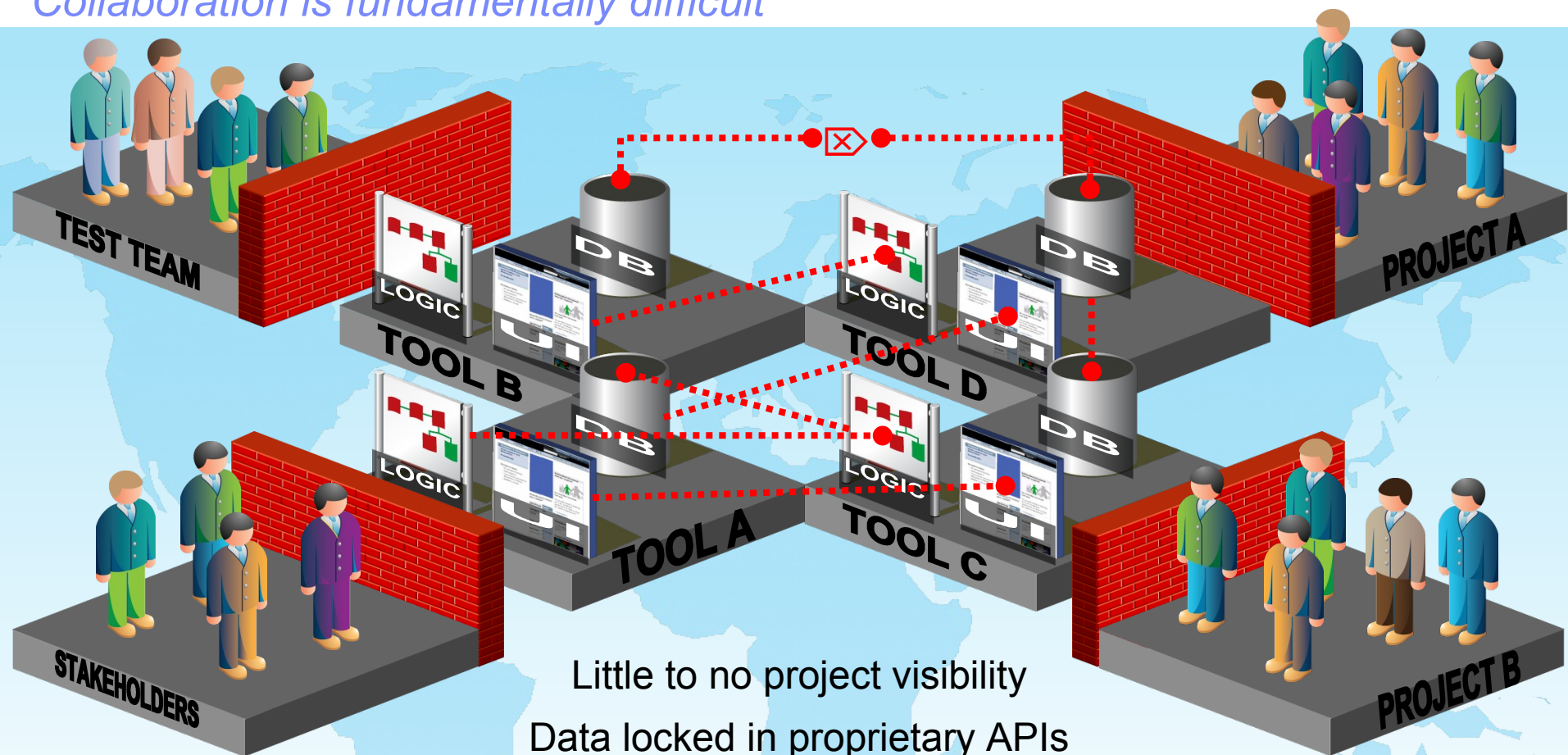
Traditional QA Testing

- 25 – 30 % delivery time in testing (IBM Study)
- Poor upstream quality yields rework
- Compressed schedules make it worse



Compelling Reason #3: Islands of people, process & information

Collaboration is fundamentally difficult



Little to no project visibility

Data locked in proprietary APIs

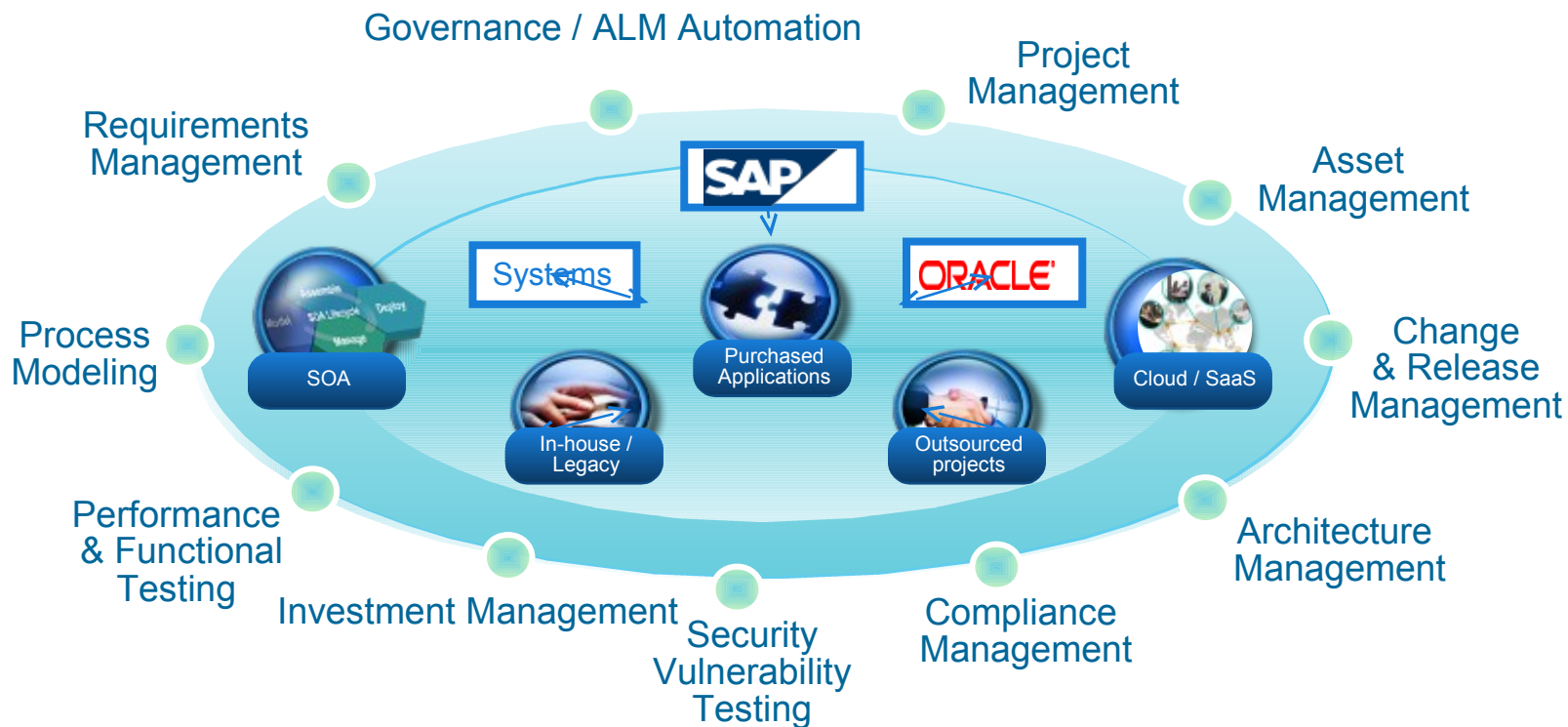
Poor process and workflow integration

High maintenance and administration costs

Persistent functional, geographic and organizational silos

Compelling Reason #4: ALM is no longer just about S/W development

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



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ALM The Market

- **Overall Market Rating: Positive**
- The adoption of ALM is in an early growth stage. The majority of users buy ALM products with a specific adoption value in mind, and only **occasionally have the desire to drive the vision** across the delivery chain.
- In addition, a good number of products in the market are provided as **evolutions of more-fixed-point solutions** or from relatively small (under 100 employees) private companies.
- We estimate that sales of ALM tools totaled \$1.26 billion for calendar year 2007, with a growth rate of 11.2%. The ALM market will stay relatively **strong because of the value that ALM returns** to a company in productivity, predictability, automation and governance.
- There are **no viable open-source alternatives** to the products covered in this MarketScope; however, many of them support a variety of opensource components stretching the capabilities of products such as Subversion, thus enabling them to potentially replace surrounding pieces of the ALM ecosystem.

MarketScope for
Application Life Cycle Management

Gartner RAS Core Research Note G00162941, Jim Duggan, Matt Light, Thomas E. Murphy, 17 December 2008

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MarketScope for Application Life Cycle Management



IBM receives highest available rating

- IBM launched the **Jazz initiative** to create a new code base designed for collaborative, workflow-driven development with a new repository.
- **The willingness to embrace heterogeneous tools** had already been demonstrated in the current solutions and will be reinforced by the support for VS. If support for other vendors' tools continues in the revised products, then the IBM solution should be attractive to large enterprises that choose best-of-breed solutions.

In our opinion, this validates that:

- IBM is one of the few vendors with credible offerings in almost all the requirements of ALM
- Jazz is a solid architectural foundation for further innovation
- We rate **IBM as a Strong Positive** because of its current market **strengths and breadth of portfolio** [.....] **Jazz is a solid architectural foundation for further innovation.**

Rational. software

	RATING				
	Strong Negative	Caution	Promising	Positive	Strong Positive
Aldon			X		
Borland				X	
CollabNet			X		
IBM					X
Kovair			X		
Microsoft				X	
MKS				X	
Polarion			X		
Rally Software				X	
Serena Software				X	
TechExcel				X	
VersionOne			X		

As of 11 December 2008

Source: Gartner MarketScope for Application Life Cycle Management, Jim Duggan, Matt Light, Thomas E. Murphy, December 17, 2008.

The MarketScope is copyrighted December 17, 2008 by Gartner, Inc. and is reused with permission. The MarketScope is an evaluation of a marketplace at and for a specific time period. It depicts Gartner's analysis of how certain vendors measure against criteria for that marketplace, as defined by Gartner. Gartner does not endorse any vendor, product or service depicted in the MarketScope, and does not advise technology users to select only those vendors with the highest rating. Gartner disclaims all warranties, express or implied, with respect to this research, including any warranties of merchantability or fitness for a particular purpose. The MarketScope graphic was published by Gartner, Inc. as part of a larger research note and should be evaluated in the context of the entire report. The Gartner report is available upon request from IBM.

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II Mercato 2009

Table 1
Worldwide Application Development Software Revenue Estimates for 2009 (Millions of US Dollars)

Company	2009 Revenue	2009 Market Share (%)	2008 Revenue	2008 Market Share (%)	2009-2008 Growth (%)
IBM	2,005.52	27.7	1988.00	26.9	0.9
Microsoft	1,065.37	14.7	1,069.48	14.5	-0.4
CA	795.01	11.0	803.10	10.9	-1.0
HP	757.44	10.5	816.96	11.1	-7.3
Compuware	428.22	5.9	488.07	6.6	-12.3
Others	2,195.59	30.3	2,227.60	30.1	-1.4
Total	7,247.15	100.0	7,393.21	100.0	-2.0

Source: Gartner (April 2010)

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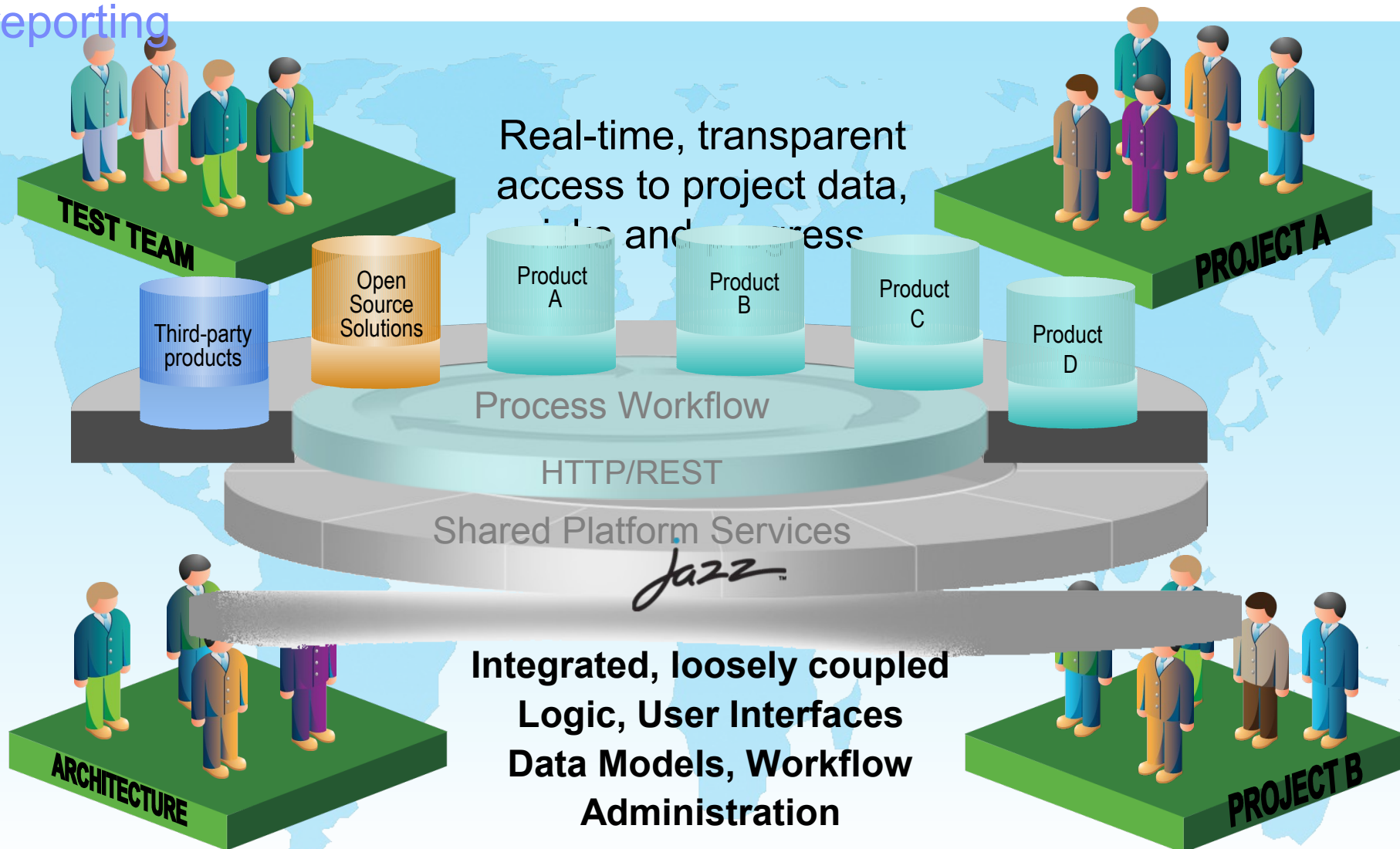
- ◆ Deliver value by managing the software life cycle
- ◆ **The Rational Solution / Strategy**
- ◆ Benefits of managing the software life cycle



Driving Business Differentiation

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With Rational customers can break down organizational, functional and geographic barriers thru collaboration, automation and reporting



Real-time, transparent access to project data, time and progress

TEST TEAM

PROJECT A

Third-party products

Open Source Solutions

Product A

Product B

Product C

Product D

Process Workflow

HTTP/REST

Shared Platform Services

Jazz

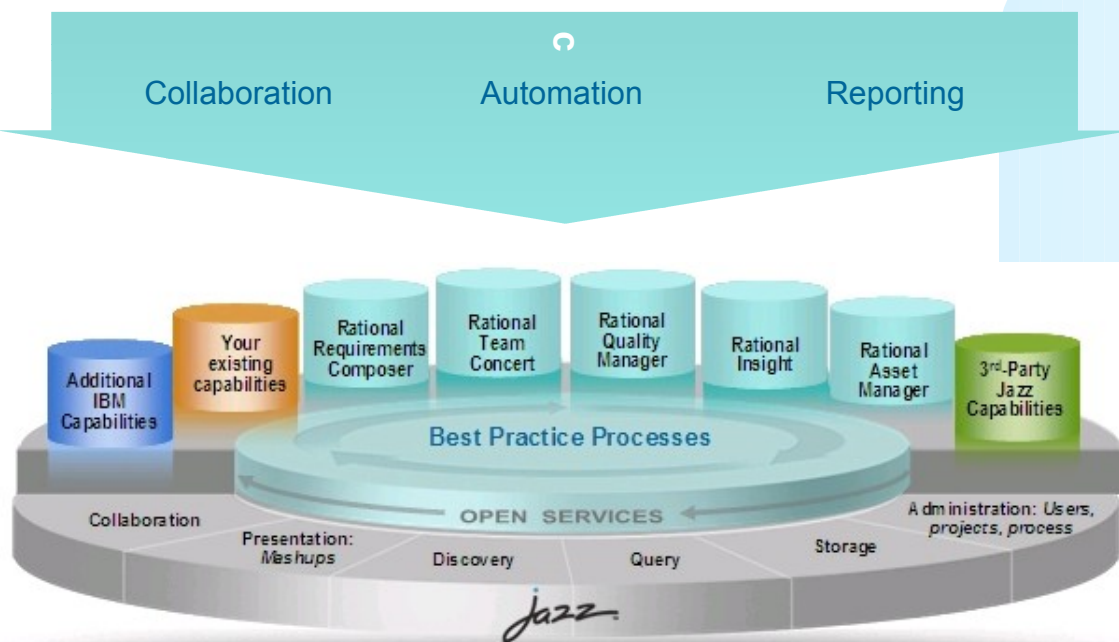
ARCHITECTURE

PROJECT B

Integrated, loosely coupled
Logic, User Interfaces
Data Models, Workflow
Administration

Jazz-based Collaborative Lifecycle Management platform

Transform software & systems delivery



Provides

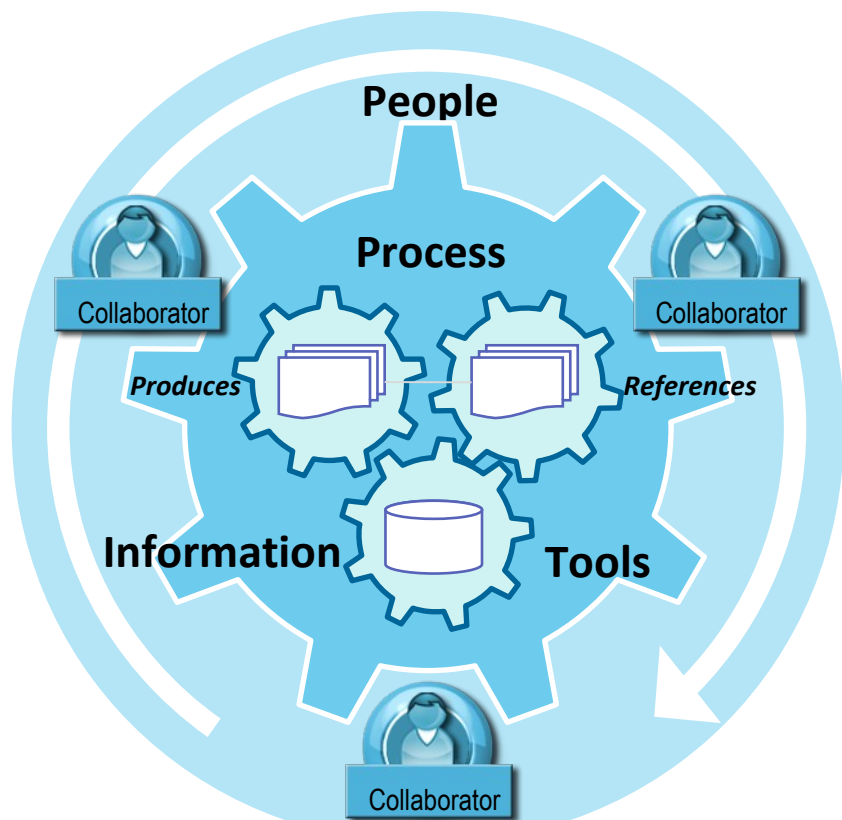
- ◆ **A scalable, extensible team collaboration platform**
- ◆ **Role-based support for entire project team**
- ◆ **End-to-end, asset traceability and enforceable process workflows**
- ◆ **Makes software asset reuse practical with integrated asset management**
- ◆ **Predictable software release management & measurable improvement through full lifecycle reporting**

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

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What is Application Lifecycle Management (ALM)?

- In its simplest form, ALM is really just the integration and coordination of **people, tools, information, and process**....enabling development and maintenance of software applications



*In ALM, **Jazz** is the "oil" that lubricates the gears.*

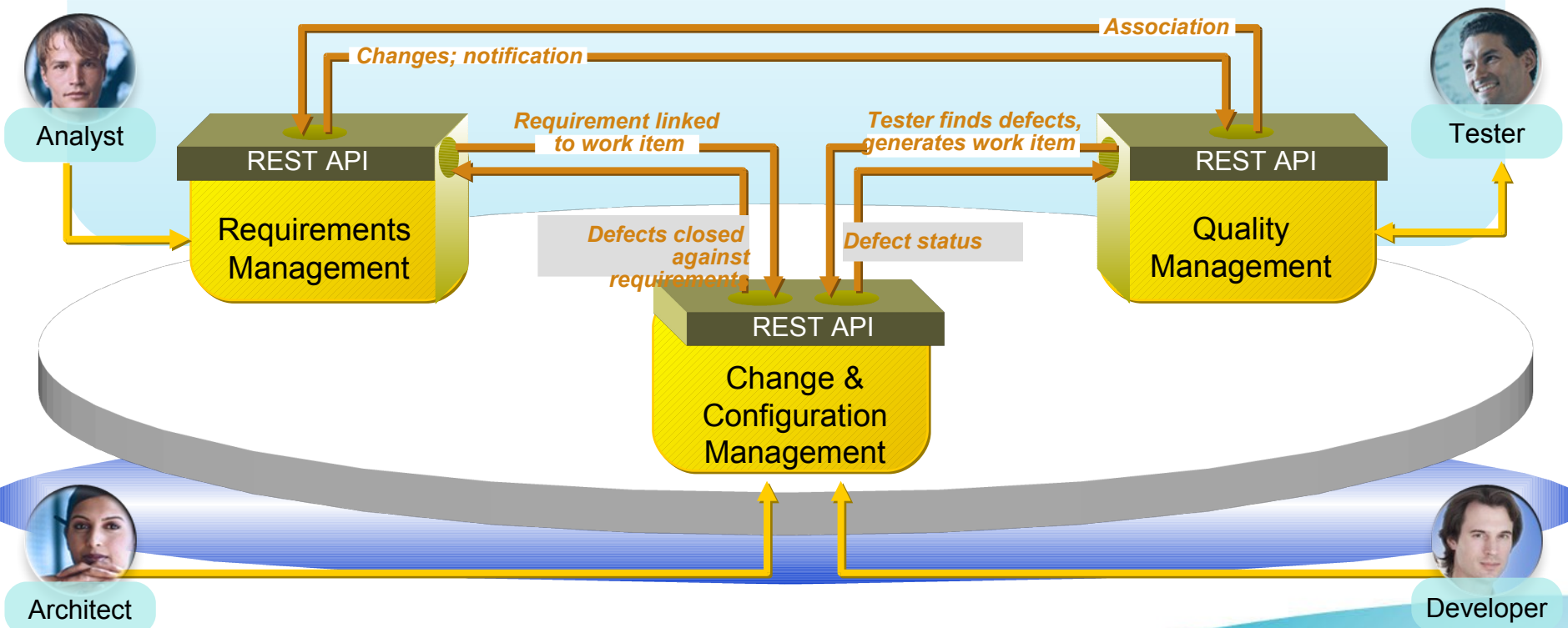
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The Foundation of Collaborative Lifecycle Management

Rational Requirements Composer
Business expert collaboration
 Elicit, capture, elaborate, discuss and review requirements

Rational Team Concert
Core team collaboration
 "Think and work" in unison and provide real-time project health

Rational Quality Manager
Quality team collaboration
 Coordinate quality assurance plans, processes and resources



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Collaboration fosters business alignment & high quality

Requirement links foster clarity



Analyst

Rational Requirements Composer



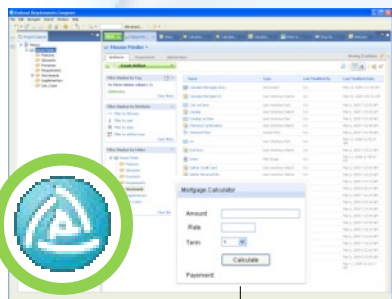
Developer

Rational Team Concert

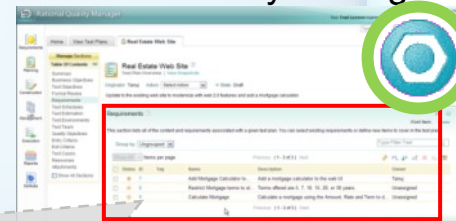


Tester

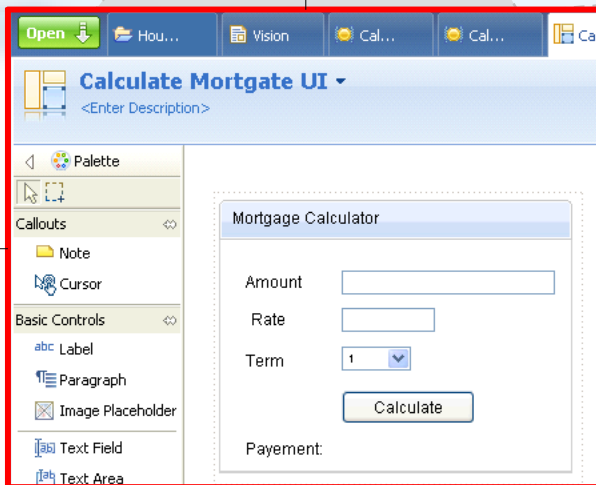
Rational Quality Manager



Developers link to requirements from work-items



Testers link to requirements from test plans and test cases



Analysts communicate requirements with links to development and test plans

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Collaboration fosters business alignment & high quality

Defect links speed time to resolution



Analyst

Rational Requirements Composer



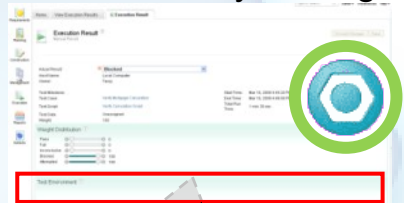
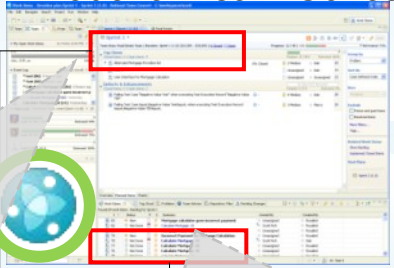
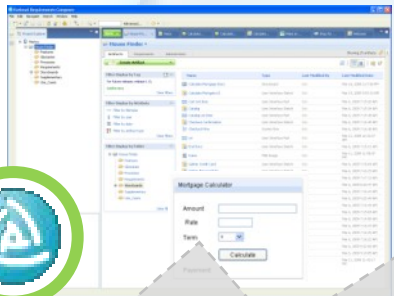
Developer

Rational Team Concert

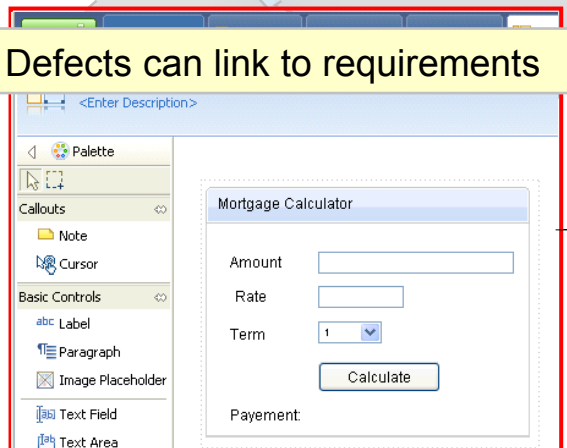


Tester

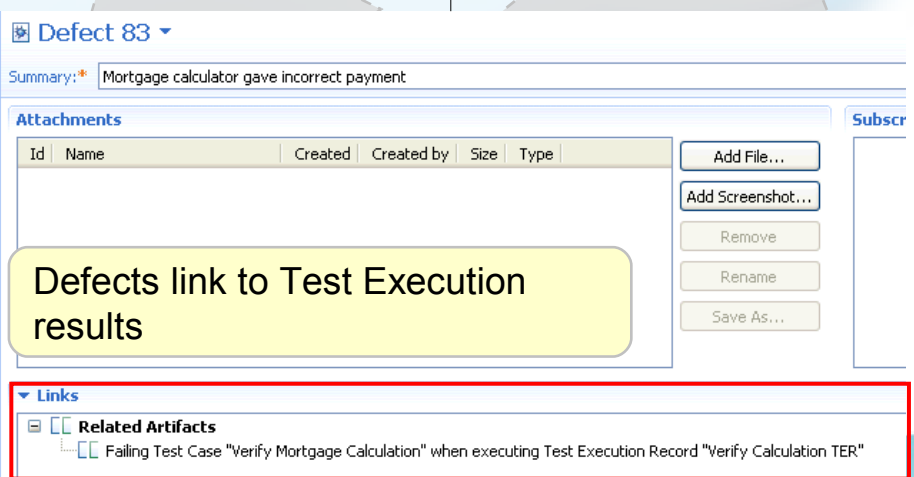
Rational Quality Manager



Defects can link to requirements



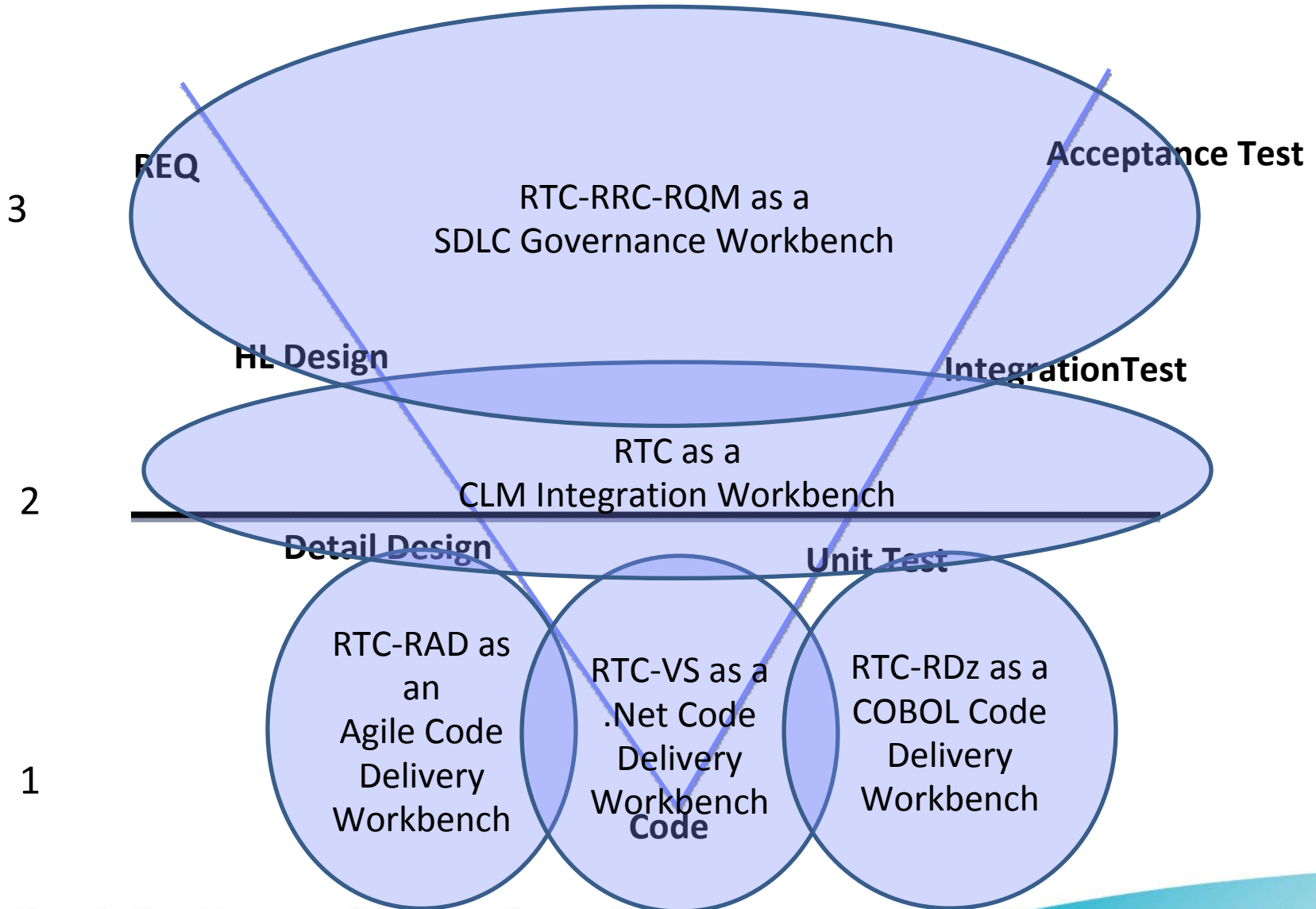
Defects link to Test Execution results



Test Execution Results link to defects

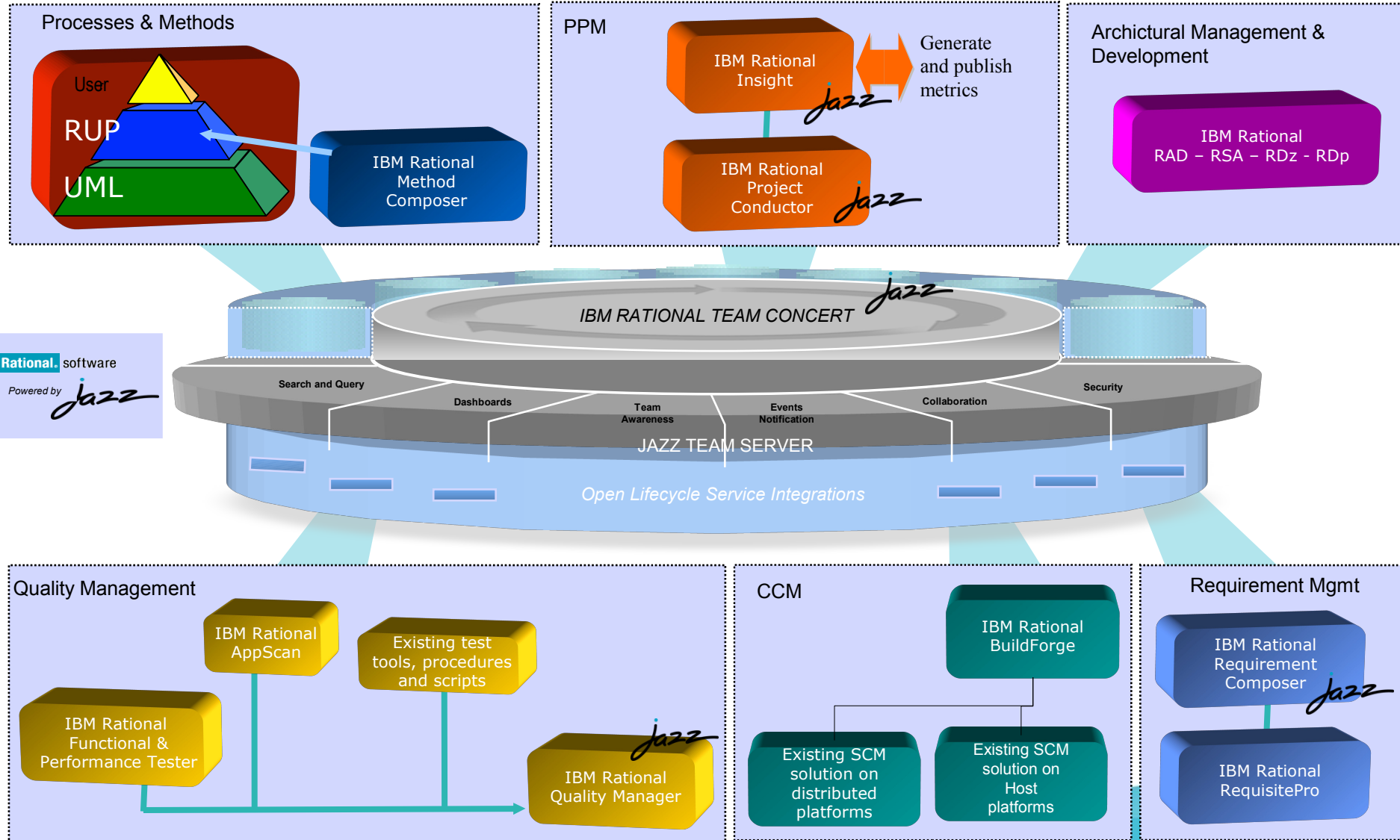
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Value Proposition



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RTC/Jazz as a central “hub” for existing tools & solutions



Designed to integrate both partner and competitor resources

Simplifying collaboration across the software delivery lifecycle

Barriers to sharing resources across the software lifecycle

- ◆ Multiple vendors, open source projects, and in-house tools
- ◆ Private vocabularies, formats and stores

Open Services for Lifecycle Collaboration

An industry initiative to create a universal integration architecture for software delivery.

- ◆ An architecture for sharing lifecycle resources
 - ✓ Described on open-services.net through illustrative resource definitions, service implementations, and use cases
- ◆ Inspired by Internet architecture
 - ✓ Loosely coupled integration with “just enough” standardization
 - ✓ Common resource formats and services
- ◆ Innovation from the Jazz technology platform

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Rational partner solutions extend the value of Jazz



Estimates cost, effort, duration of projects and determines probability and inhibitors of success



Analyzes project and resource data and automates of task-level work breakdown structures



Synchronize business and IT goals with TOGAF process library



Enhance team collaboration with direct, per-project document linkages to Microsoft® SharePoint® and Lotus® Quickr® libraries



Allows bi-directional synchronization of defects and workflows



Support heterogeneous environments with bidirectional integration with the JIRA change management system



Enables breakthrough development economics, while minimizing the associated risks and challenges



Automated assessment and metrics for technical quality and team performance



Enable automated governance to insure compliance and minimize business risk around highly flexible and distributed development environments



Eliminate risk of project failure with visual requirements definition through simulation



Validate business requirements visually for desired outcome



Learn more on Jazz.net

Jazz Projects

Projects >

Collaborative ALM

Features

Product Versions

Related Resources

Library

Collaborative ALM

Surf the Collaborative ALM Web

Collaborative ALM coordinates the s

Jazz Projects

Projects > Collaborative ALM >

Collaborative ALM

Features

Product Versions

Related Resources

Library

Collaborative ALM Features

Features

Configuring your C/ALM

Improve productivity and co project areas. Once establish surf the Collaborative ALM V

[Learn More >](#)

Artifact Linking and Creation

Teams collaborate by sharing information. What o making it easy for team members to find and link r changing their context. Thanks to the Jazz integra collaboration specifications, linking artifacts across

[Learn More >](#)

Tracing C/ALM Relationships

Team transparency involves knowing what everyo

Supported Product Versions

The C/ALM integrations provide the freedom to gr integrations, Rational Collaborative ALM gives you Whether it's just two teams collaborating or many teams grow, simply add capability. No "big bang"

Which versions do I choose?

The integrations exist in each of the products, products. When you deploy any two products access to the Collaborative ALM features. Have offer.

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Increasing Accountability of Software: One Example

What is the cost of a defect?

\$25/defect

During the coding phase

\$100/defect

During the build phase

\$450/defect

During the QA/Testing phase

\$16,000/defect

Once released as a product

\$241,000/defect

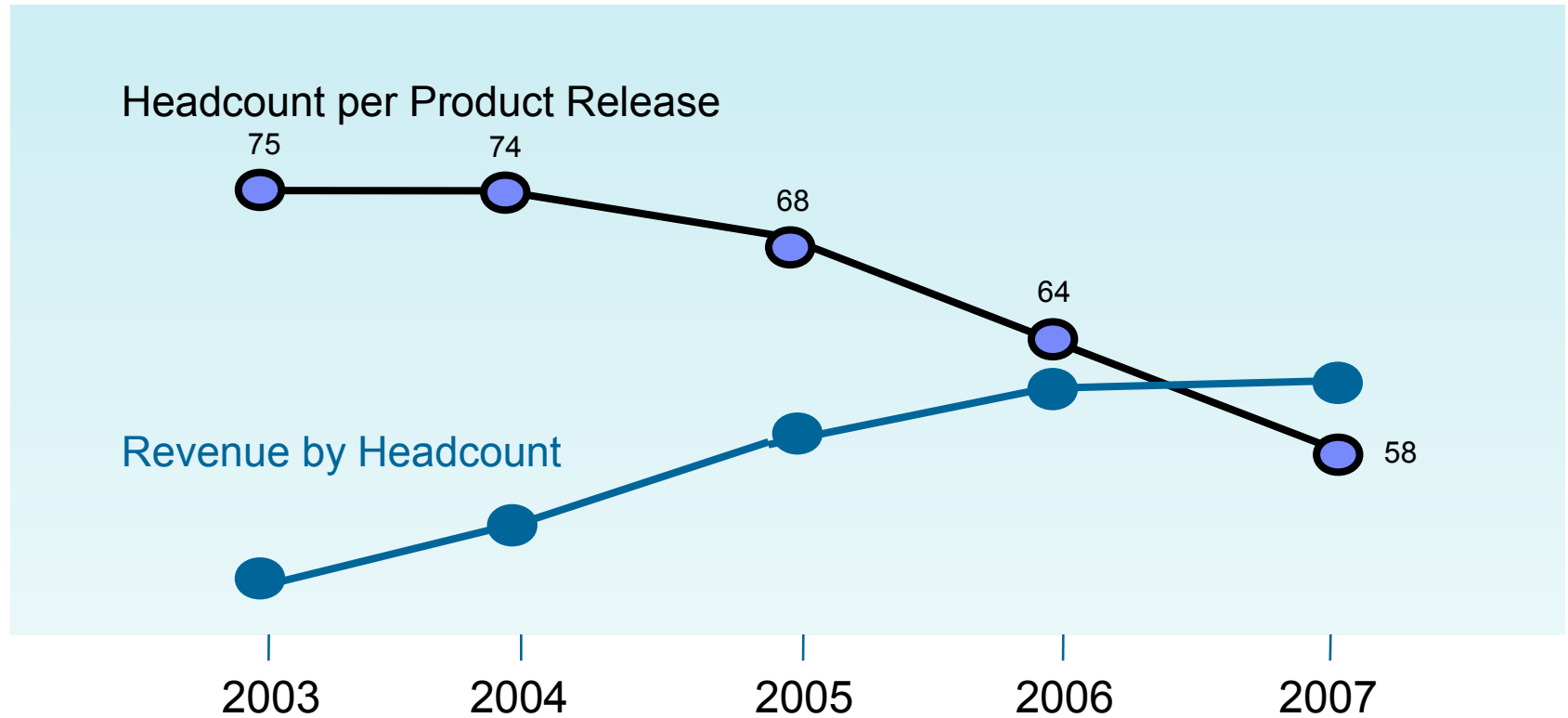
Product has a critical situation

For us to continually improve, we must reduce the overall burden of poor quality in the field

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Improving productivity in IBM SWG through improved agility



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Meeting our dates

Using early releases, iterative development practices, continuous integration and best practices, we've dramatically improved our release timings.

2006 and 2007

- § 47% of all products released on schedule or within 30 days of original plan
- § 86% of maintenance vehicles released on schedule or within 7 days.

2008

- § 82% released on schedule or within 30 days (including all 6 new products)
- § CC/CQ 5 months late which forced a "ReqPro and Suites slippage"
- § 98% of maintenance vehicles on schedule

1H 2009

- § 100% released on schedule or within 30 days
- § 72% of maintenance vehicles on schedule

Quality Metrics YE 2008 results

- ↓
 - PMR (calls) arrivals down 14.2% YTY
 - ▶ 109,537 in 2007 down to 93,973 in 2008
- ↓
 - APAR (defects) arrivals down 20.1% YTY
 - ▶ 4,825 in 2007 down to 3,857 in 2008
- ↓
 - PMR (calls) backlog down 12.5% YTY
 - ▶ 8,898 in 2007 down to 7,787 in 2008
- ↓
 - APAR (defects) backlog down 25.6% YTY
 - ▶ 2,277 in 2007 down to 1,693 in 2008
- ↑
 - 634 of 717 (88%) of client-found beta defects were fixed prior to GA
 - ▶ Up from 19% in previous year
- ↑
 - Ship readiness scores up by 1.9 points out of 10
 - ▶ 5.4 over 3 products in 2007 up to 7.3 over 18 products in 2008

Summary

- **Data integration** via linked artifacts across repositories
- Leads to increased **collaboration** among team members
- And enables **automation** such as real-time reports and queries

- Helping you to reduce cost, improve quality, and deliver more value to your stakeholders

Open
Enterprise-ready
Collaborative ALM