

Achieving Greater Value From Your Investments in Software Delivery

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IBM Rational Software Development Conference 2008

WHERE TEAMS ARE **R-HEROES**

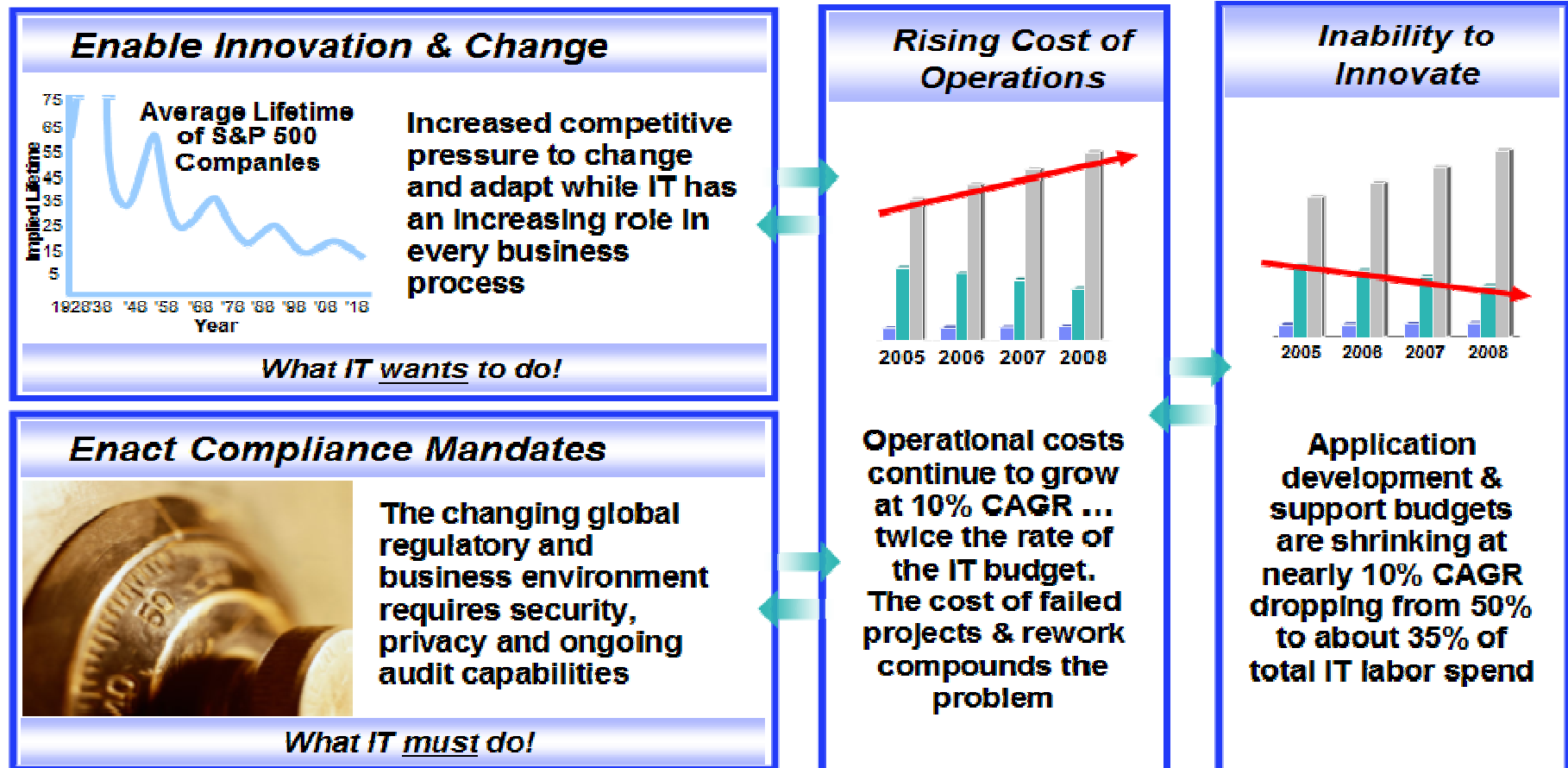


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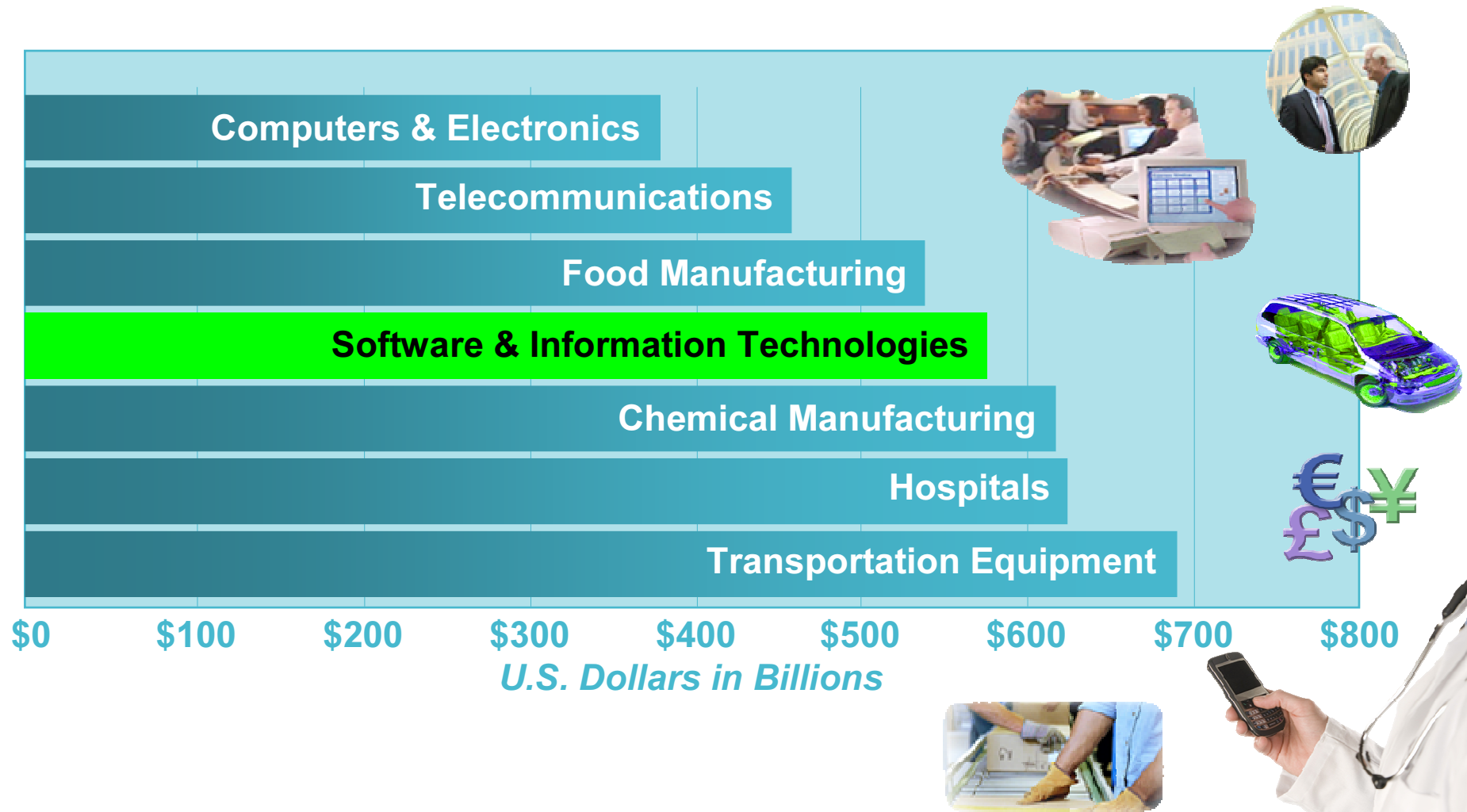
Rational. software

The Business Landscape Facing Business Leaders

The need to innovate with less



Software as a Strategic Business Asset



An Intense focus on Business Outcome



Align *IT* and business goals while enabling greater business flexibility



Take holistic approaches to sourcing software – custom, packaged, in-house



Manage value & mitigate risks/costs by improving global project management



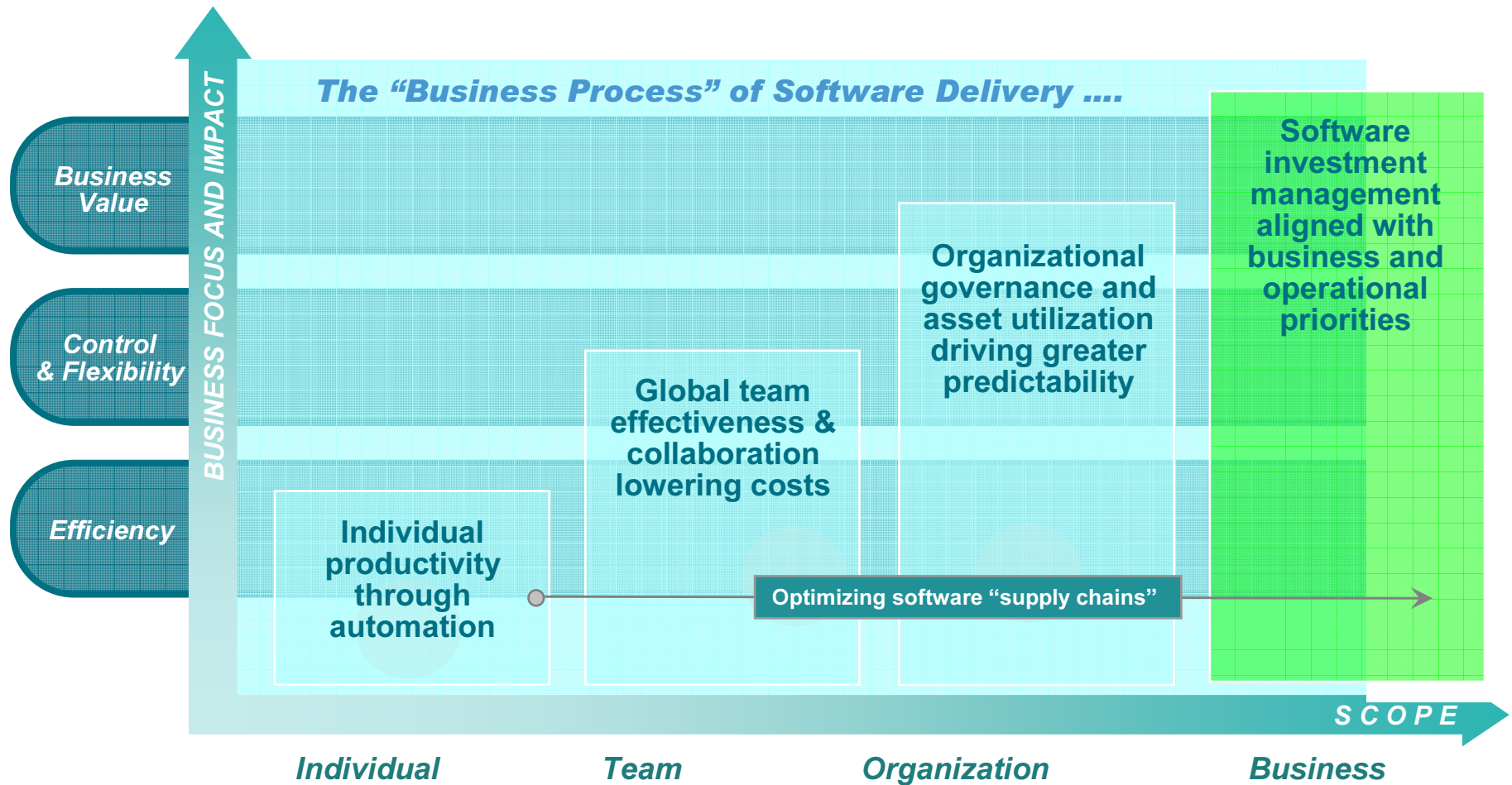
Ensure internal & external compliance in a changing global environment



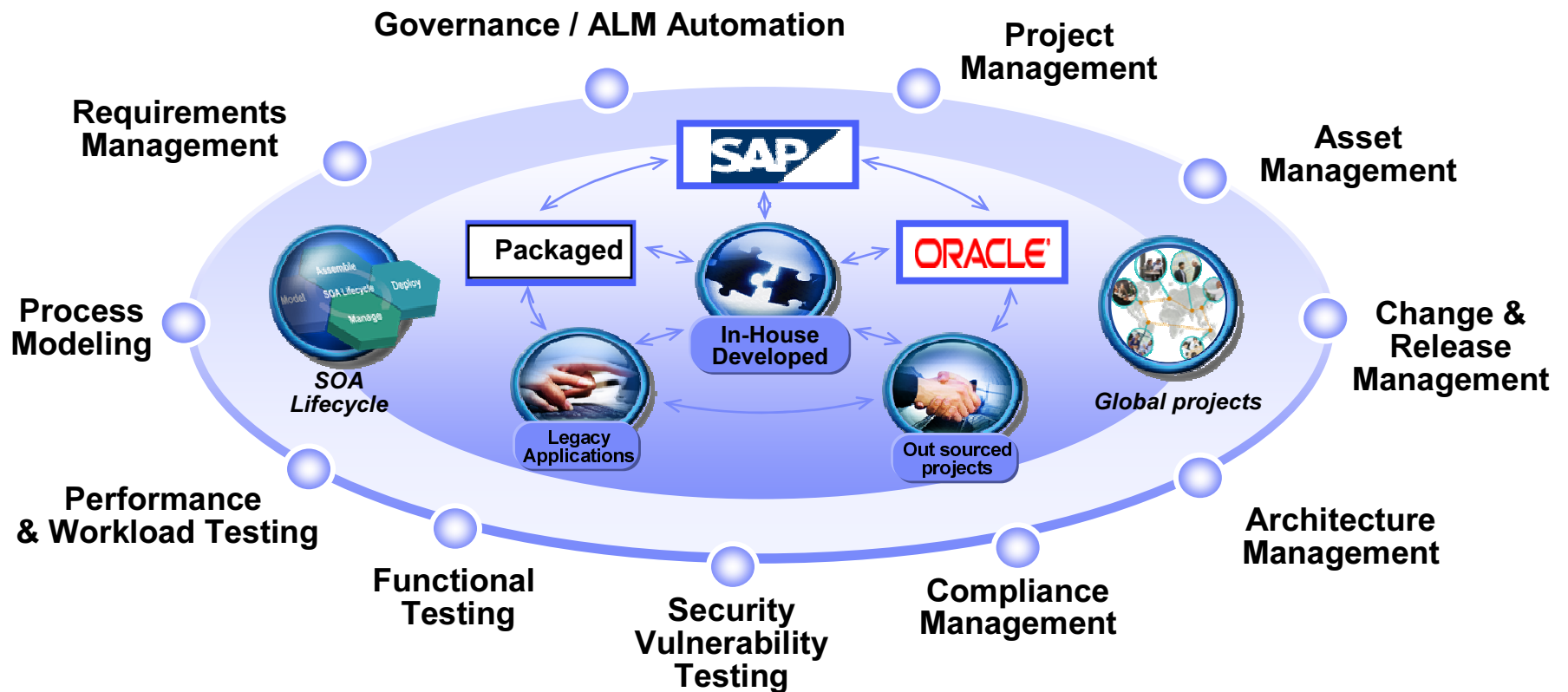
Improved global governance to optimize investments in software



A Maturing Approach to Effective Software Delivery



Focused on an integrated approach to managing purchased, outsourced & In-house built software



A consistent, integrated Application Lifecycle Management capability spanning heterogeneous application environments

The defining challenge in optimizing value in software delivery



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



*“Only **37%** are satisfied with the speed of software development”*



*“Only **42%** of users are satisfied with quality”*



*“**50%** of outsourced projects are expected to under perform”*

**Silos of people,
process, and projects**

Geographic Barriers

- Poor communication
- Language, culture, time
- Process gaps resulting in rework
- High degree of friction

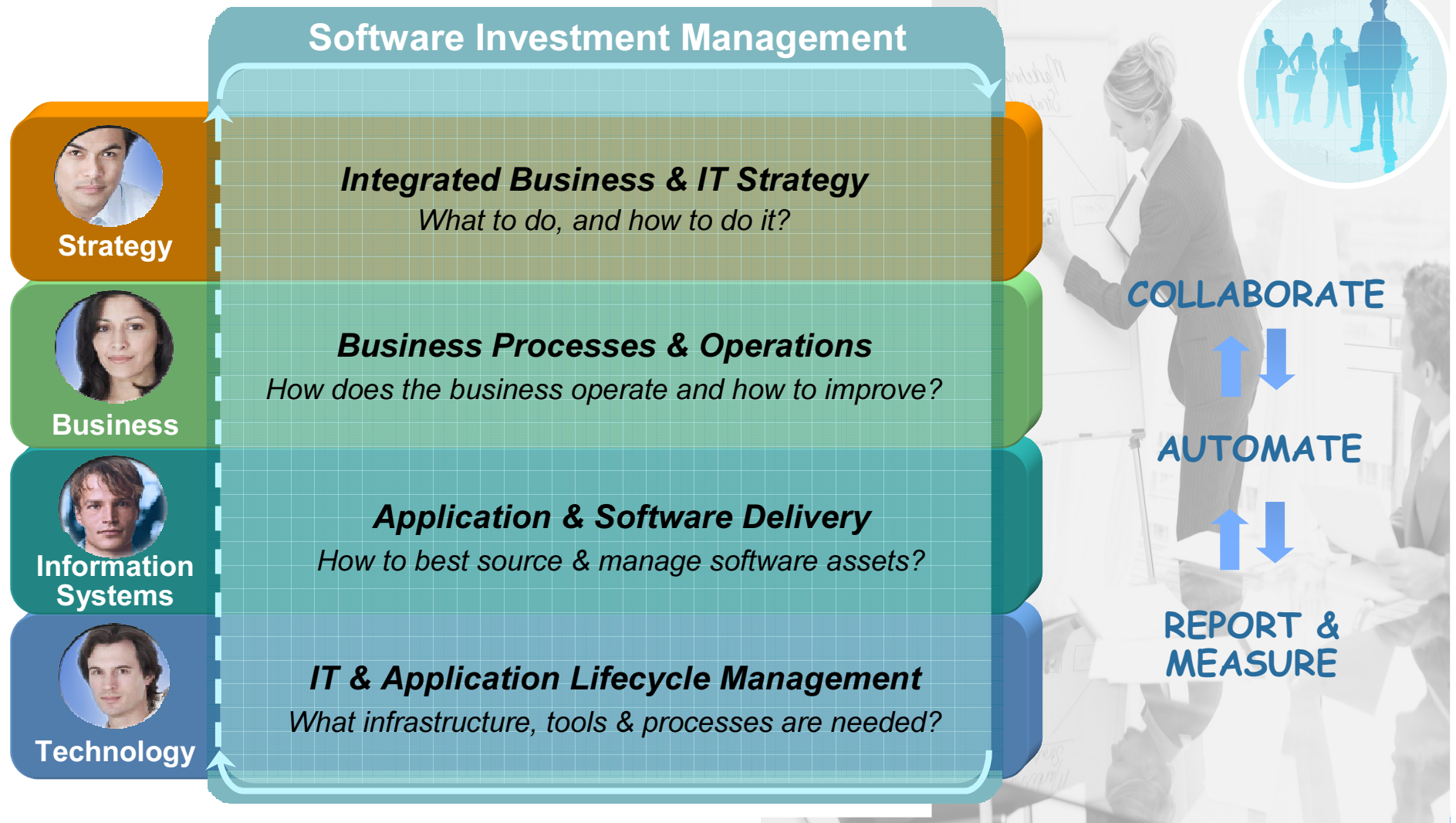
Organizational Barriers

- Lack of meaningful collaboration
- Weak project governance
- Lack of domain expertise
- Poor LOB oversight
- Security of IP when outsourcing

Infrastructure Barriers

- Incompatible tools / repositories
- Unreliable access artifacts
- Lengthy on-boarding
- Inflexible tooling integration

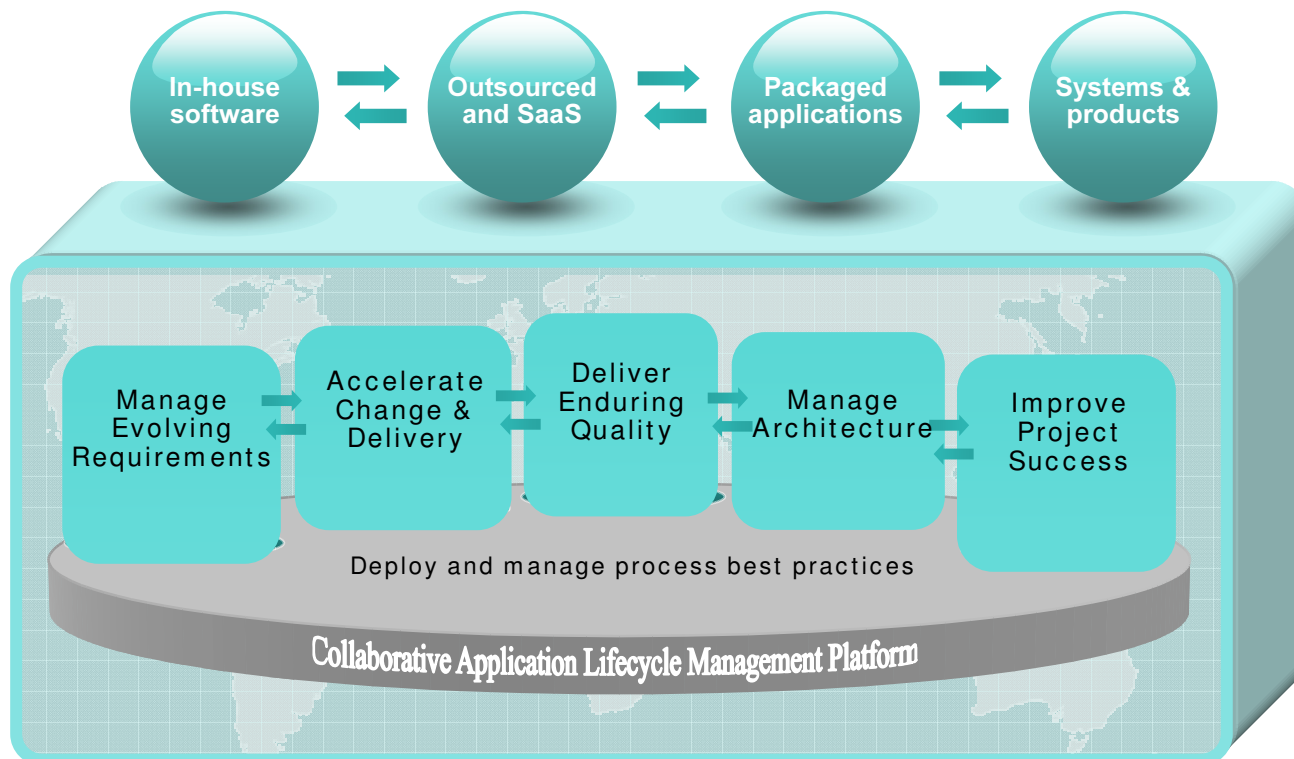
Empowering organizational and individual collaboration



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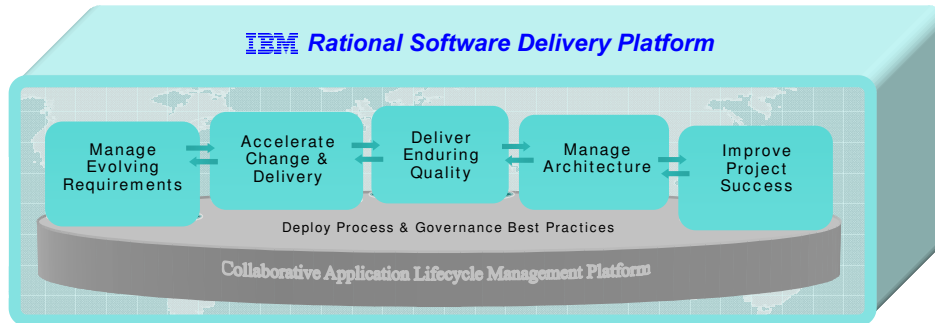
Solutions to assist customers in achieving greater value and performance from their investments in software



- *Enterprise transformation and modernization*
- *Organizational governance and best practices*
- *Skill and community development*
- *Implementation services*

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Enabling product innovation & differentiation in PLM



Integrate and extend leveraging



MANAGE COMPLEXITY IN
GLOBAL SYSTEMS AND
SOFTWARE DEVELOPMENT



Aerospace
and defense

High-rigor
electronics

Automotive

Telecom

Focused on delivering enterprise lifecycle management solutions to customers who create **manufactured products** involving a combination of electronic, mechanical and software and/or complex **systems design**

The Business Value Connection



One Example: limiting the business risk and cost of conducting business on the web



During the coding phase



During the build phase



During the QA/Testing phase



Once released as a product

As an industry, we are responsible for ensuring that security and compliance measures are **built in** not **bolted on** after the software code has been already written.

Summary: Increasing Accountability of Software

- Software is becoming a **strategic** business asset
- Ultimately, great software that is on time and under budget means nothing without the right **business outcomes**
- **Outcomes are measured** in dollars, in customer retention, business differentiation and in market share
- The **ideal organization** ensures software delivery is directly tied to business ever-evolving need



*You're all working hard,
but are you working on the right stuff?*



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The Rational 2.0 Roadmap – Powered by Jazz

Jamie Thomas
*Vice President, Development
and Customer Support
IBM Rational Software*

IBM Rational Software Development Conference 2008

WHERE TEAMS ARE **R-HEROES**



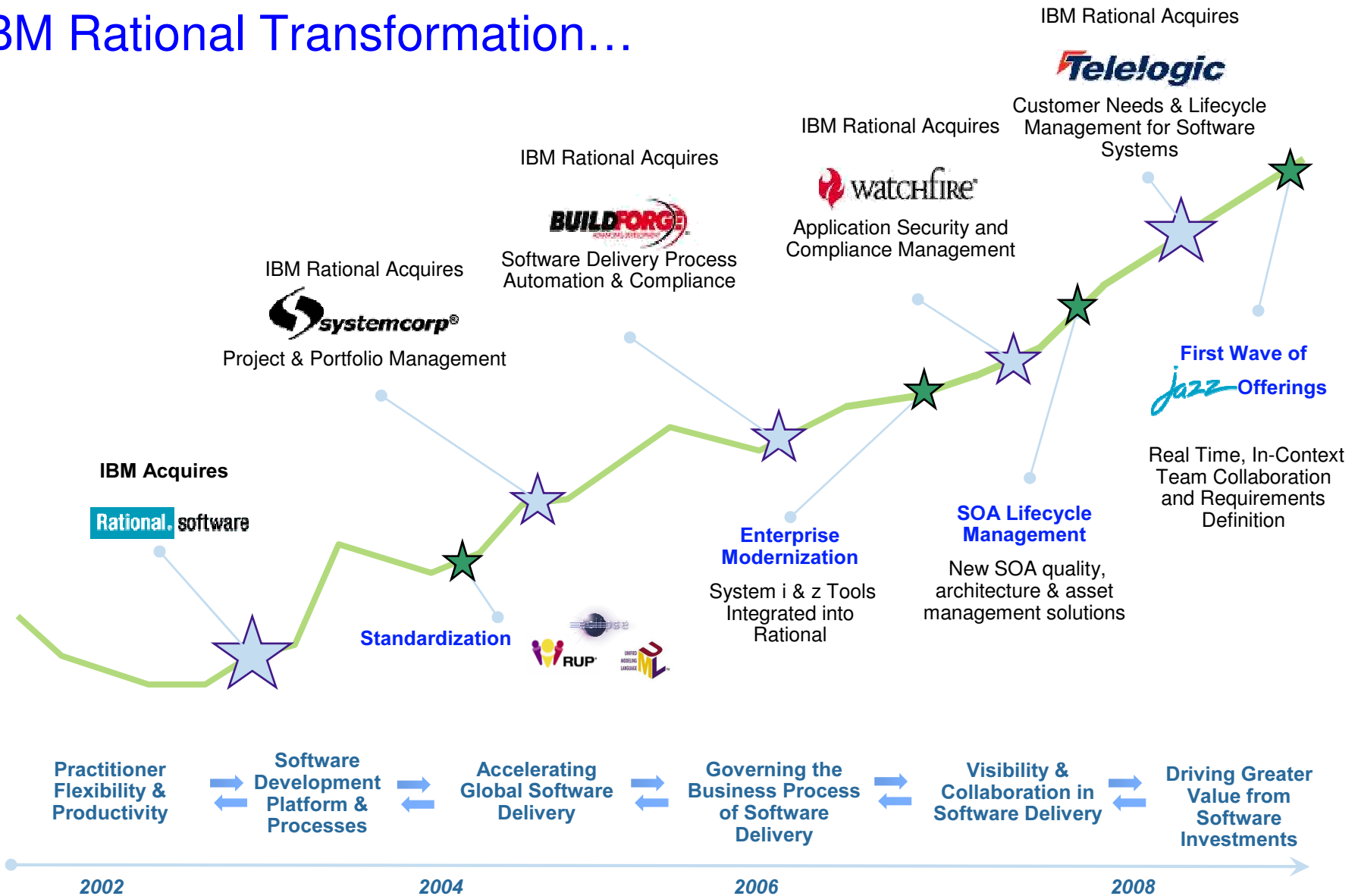
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Innovation today will require a significant investment in software

- For businesses and institutions everywhere, there have never been so many ***new possibilities*** at our disposal
- Imagine the amount of software necessary to:
 - Deliver a green world
 - Take advantage of information base explosion
 - Communicate with a trillion devices
- We are moving to a new generation of intelligent software and systems
- To accelerate innovation and take advantage of these new possibilities, clients must get better at ***managing effective software delivery***



IBM Rational Transformation...

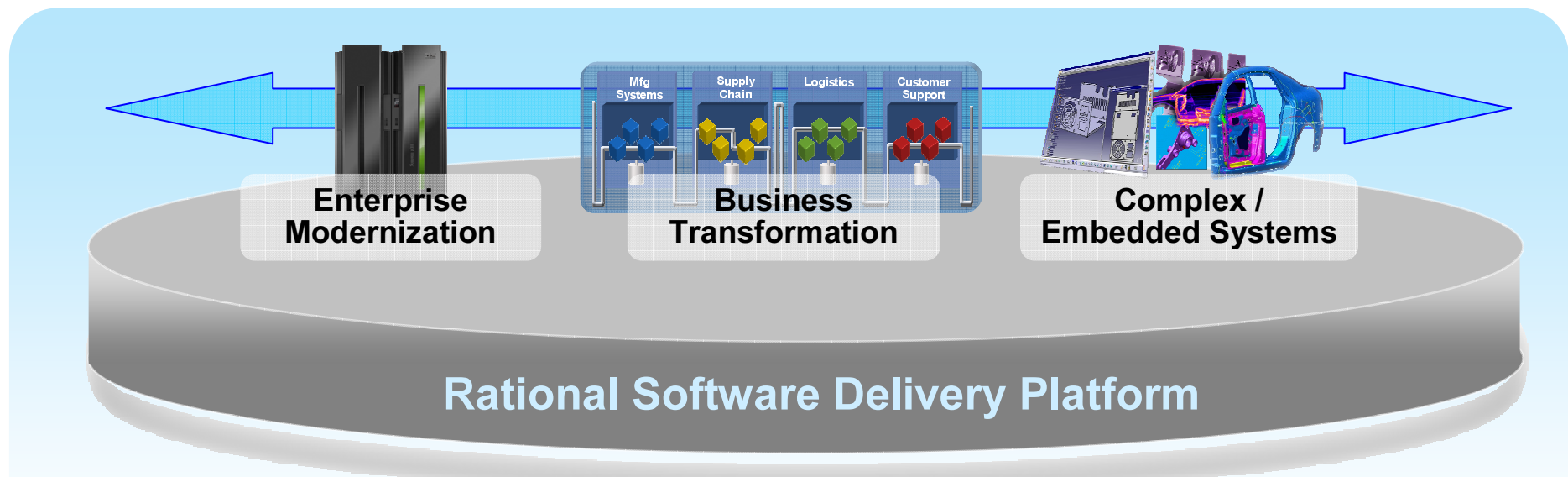


Significantly increasing the value of a software development platform



Rational strategy: Align and integrate systems and software delivery across the enterprise to drive greater business value

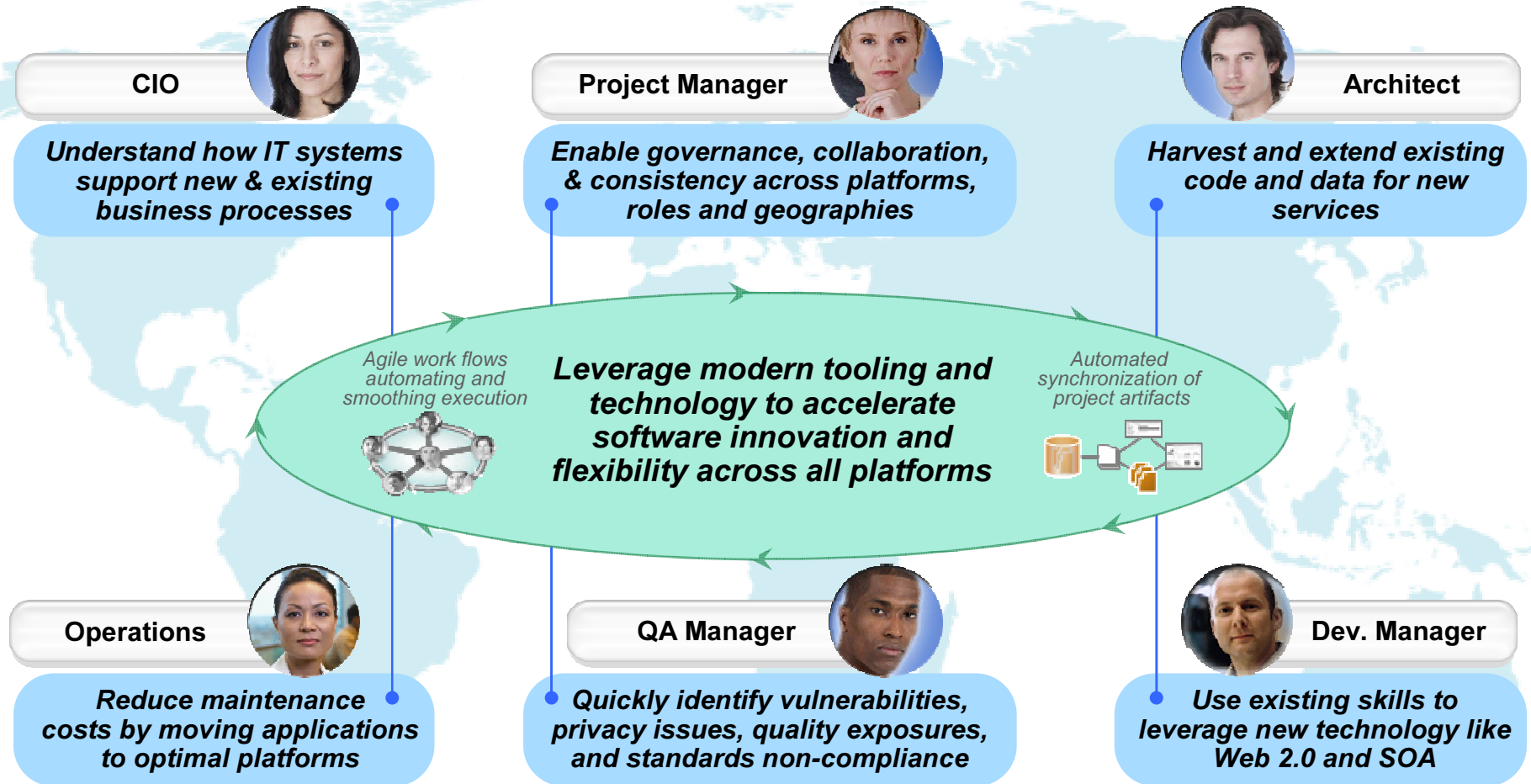
- In the enterprise (EM and IT)... software delivery is a *core business process* relied upon to drive down cost, improve customer interaction and perceived value, and provides a foundation to grow revenue
- In products and services (systems)... software delivery increasingly is the basis for driving *product differentiation and competitiveness*



Each domain has unique characteristics, business models and value expectations



Needed: Solutions that eliminate barriers to innovation



Envisioning a platform that can transform software delivery



- A major investment by IBM to create a **scalable, extensible team collaboration platform**
- IBM's vision of the **future of software delivery**
– globally distributed, fluid and dynamic
- An **evolution of the Rational portfolio**, which will evolve to support Jazz technology over time
- **A community at Jazz.net**
– where you can see Jazz-based products being built

Announcement summary

An array of new offerings transforming how people work together to achieve greater value and performance from globally distributed investments in software

- **Enable real-time, contextual collaboration and visibility across integrated business, software and outsourced project teams**
- **Deliver higher quality applications and continuously lower risk by proactively adapting to evolving business and quality objectives**
- **Improve insight into business outcomes by automating, deploying, adapting and measuring proven best practices**



TEAM
PRODUCTIVITY

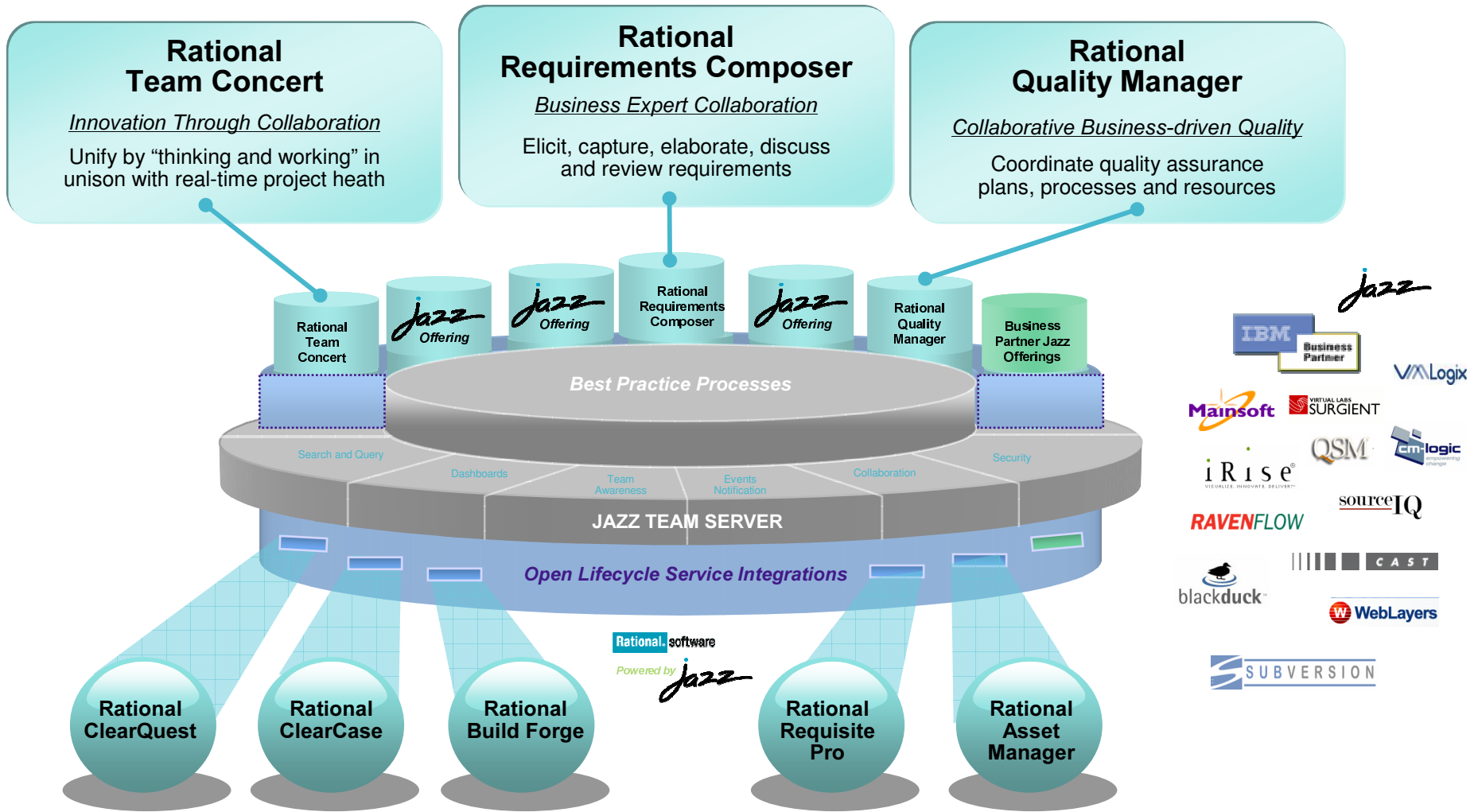
ENDURING
QUALITY

ORGANIZATIONAL
EFFECTIVENESS



Made possible by the open, community-driven innovation of the Jazz Technology Platform

Introducing the first wave of new *Jazz* offerings



Mapping business value to software delivery best practices

Based on over a decade of IBM Rational implementation experience

Example: Financial Service Company

Customer Business Challenges

- Create financial products more quickly
- Functionality of customer web falling behind competition
- Inconsistencies with integrated financial reporting
- Recent SOX audit failure

Operational Objectives

- Reduce time-to-market
- Improve productivity
- Increase innovation
- Improve consistency/predictability
- Improve oversight
- Enable flexible/global resourcing
- Satisfy compliance mandate

Software Delivery Best Practice

- Use-case driven development
- Continuous integration
- Shared vision
- Whole team
- Staged integration
- Multi-team management
- Risk-value lifecycle
- Asset-based development
- Asset governance
- Iterative development
- SOA modeling

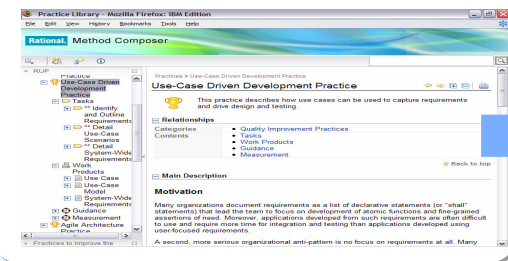
Business Metrics

Project	Time to Market (M)	Quality (Defect Density)	Productivity (SLOCS / PM)
A	22	2.3	200
B	14	1.4	160
C	18	1.6	180
D	9	0.3	150
E	6	0.4	205

Measured Iterative Practice Adoption

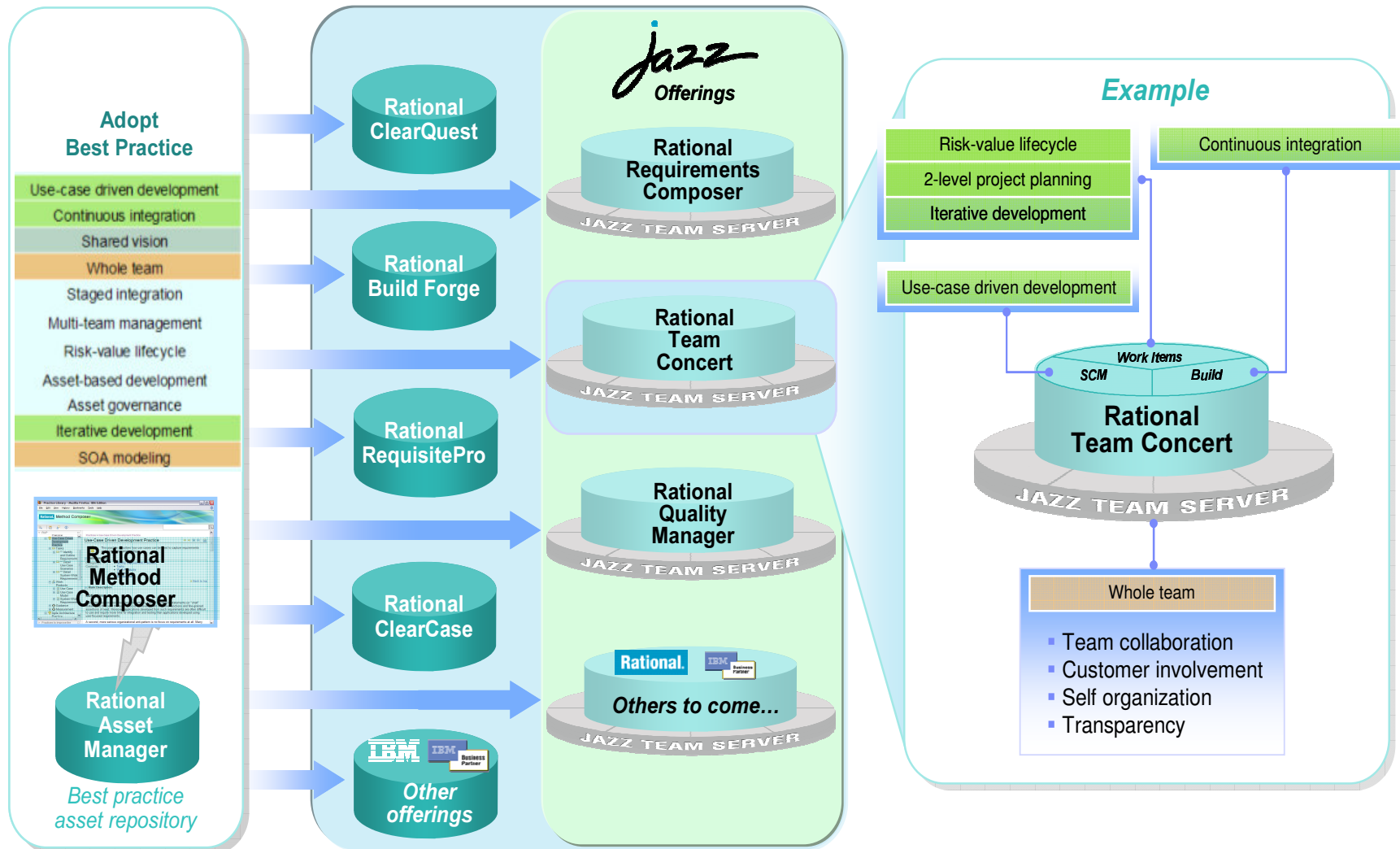


Adopt Practices



- Rational Measured Capability Framework: **Systematic approach to best practice adoption**
- Rational Health Assessment: **Benchmark against proven improvement roadmaps**
- Rational Self Checks: **Provide ongoing self assessment**

Best practices provide customizable usage models for the Rational Software Delivery Platform



IBM Rational Team Concert

Software innovation through collaboration

- **Real time, in-context team collaboration**
 - Make software development more automated, transparent and predictive
- **"Think and work in unison"**
 - Integrated source control, work item and build management
- **Assess real-time project health**
 - Capture data automatically and unobstrusively
- **Automate best practices**
 - Dynamic processes accelerate team workflow
 - Out-of-the-box or custom processes
- **Unify software teams**
 - Integrate a broad array of tools and clients
 - Extend the value of ClearQuest and ClearCase
 - Support for System z and System i servers (3Q)

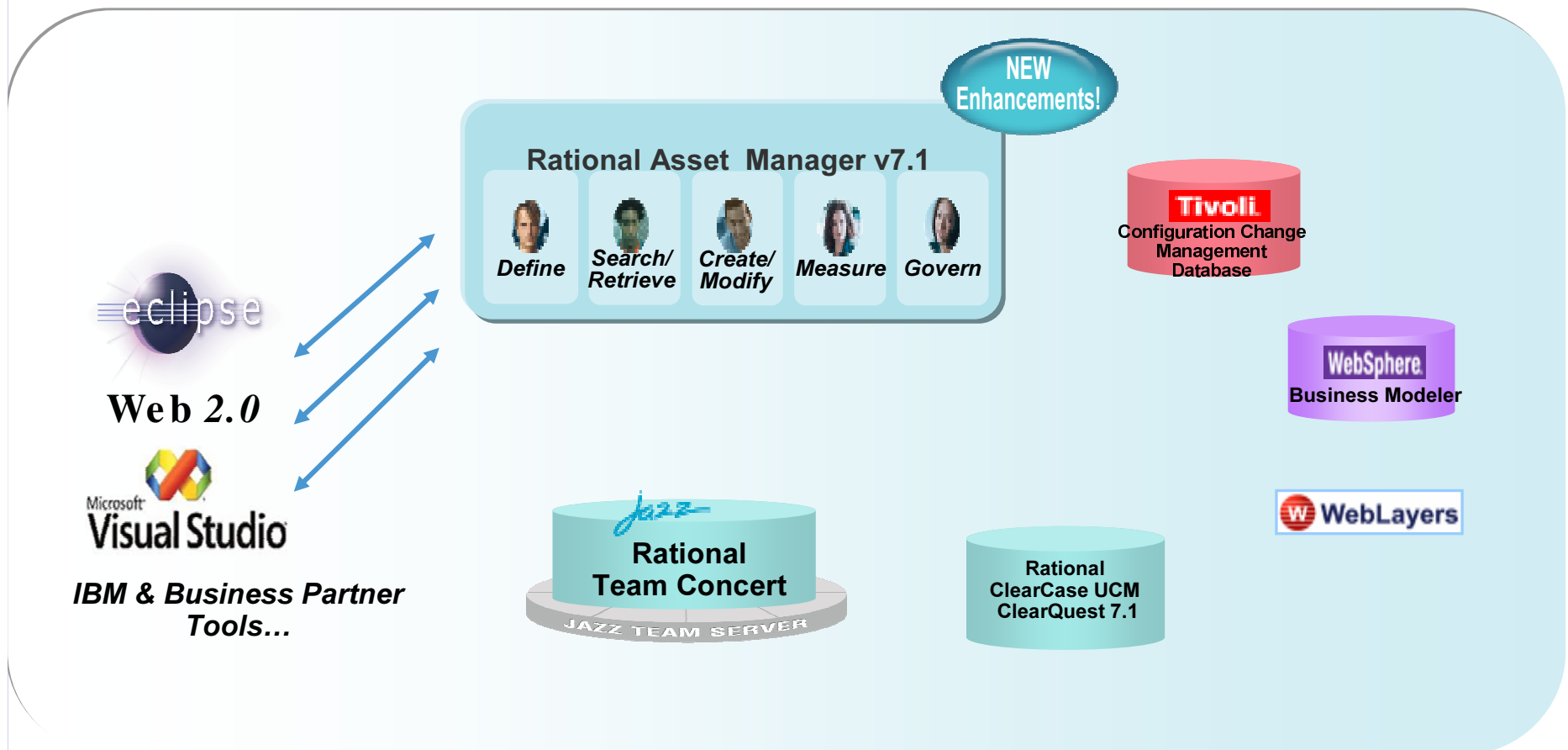


Enhanced enterprise-class change and release management

Achieving new levels of enterprise integration, scalability, security, performance and usability



Manage software asset usage and policies across the team



IBM Rational Quality Manager

Central hub for business-driven quality

- **Collaborate across the test lifecycle**
 - 100% web access and Web 2.0 style interaction
 - Team interaction and visibility on progress
 - Dynamically prioritize and filter risk information – by role
 - Test traceability linked to business requirements

- **Govern with immediate access to quality metrics**
 - Customizable process based on Industry best practices (MCIF)
 - Traceability and history across test assets maintained
 - Automated data gathering and pattern analysis

- **Automate labor-intensive test planning tasks**
 - Test Case prioritization to ensure maximum productivity
 - Manage and provision virtual and physical test lab assets

- **Use an open, extensible test platform**
 - Reuses existing, homegrown, and other vendor test assets
 - Embedded Manual Testing with data assist and asset reuse via keywords



IBM Rational Requirements Composer

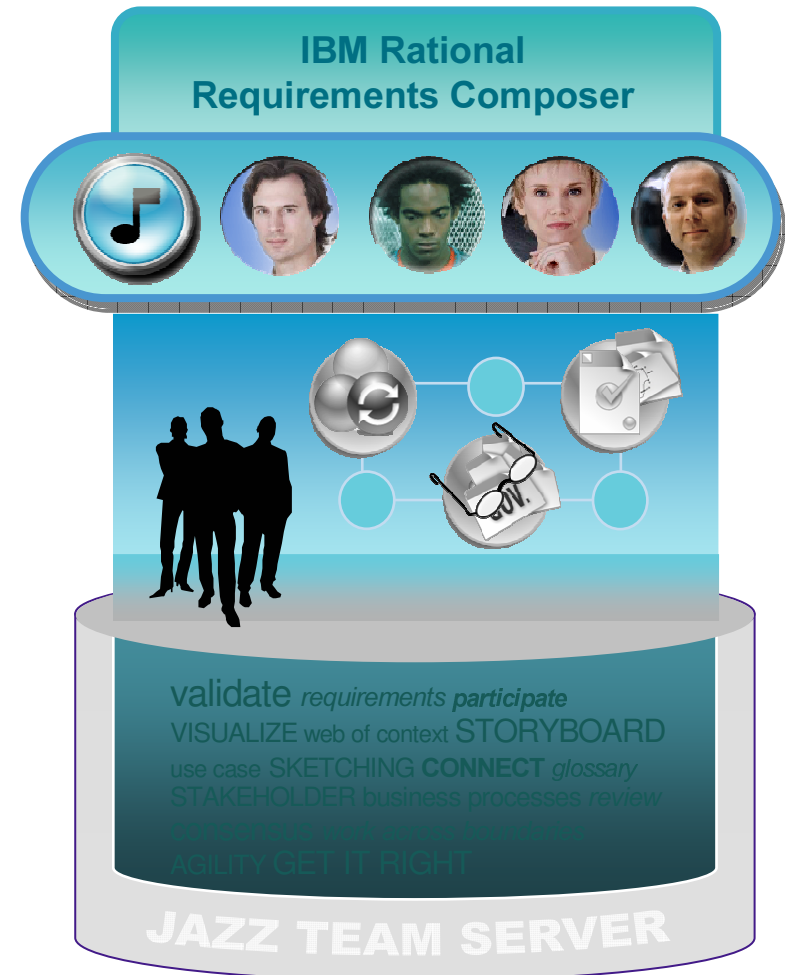
Business expert collaboration

- **Build consensus with business stakeholders**
 - Work across boundaries to elicit & validate requirements
 - Communicate clearly using business process diagrams, use cases, storyboards and sketches

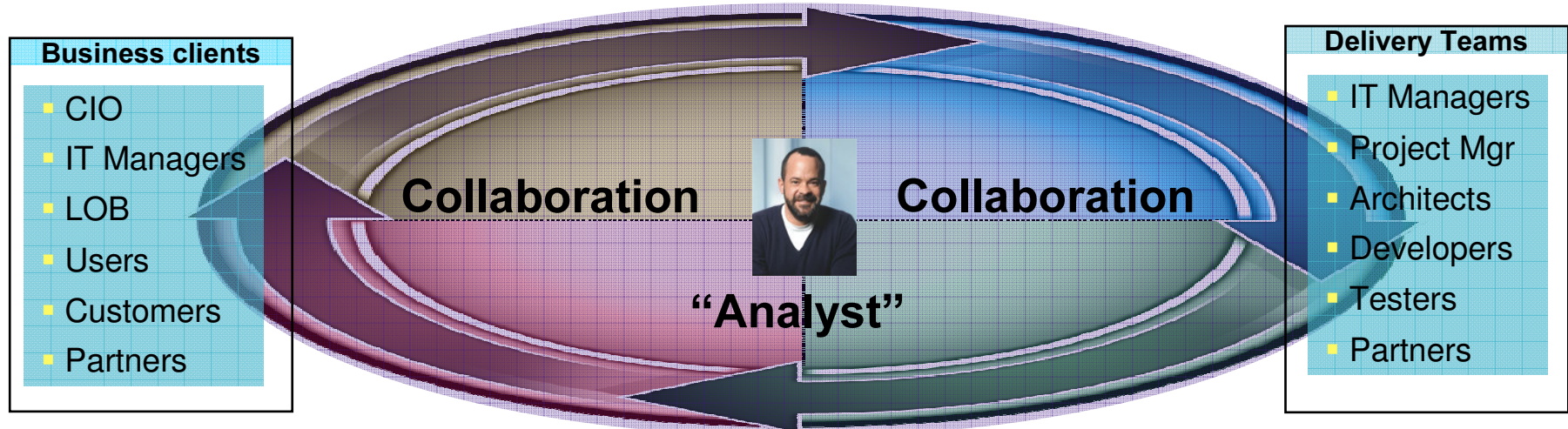
- **Productive and extensible collaboration platform**
 - Review, comment, revise, agree quickly
 - Wiki-like, Web 2.0 style interaction

- **Maximize requirements reuse**
 - Organize, query and reuse requirements artifacts
 - Synchronize with RequisitePro to connect requirements with models, work items, test cases

- **Reduce rework, time to market, and improve project predictability**
 - Better requirements & greater team visibility reduces wasted effort



Requirements Composer unifies Business and IT around shared problems and executable SW solutions



Requirements Definition Focus

Problem Space

- Are We Solving The Right Problem?
- Are The Right People At The Table?
- Are We Solving The Problem Right?

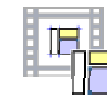
Requirements Management Focus

Solution Space

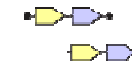
- Can We Prioritize and Execute?
- Can We Manage Any Necessary Changes?
- Can We Verify We Solved The Problem Right?

For many organizations, improving the requirements definition process will achieve more ROI than better requirements management

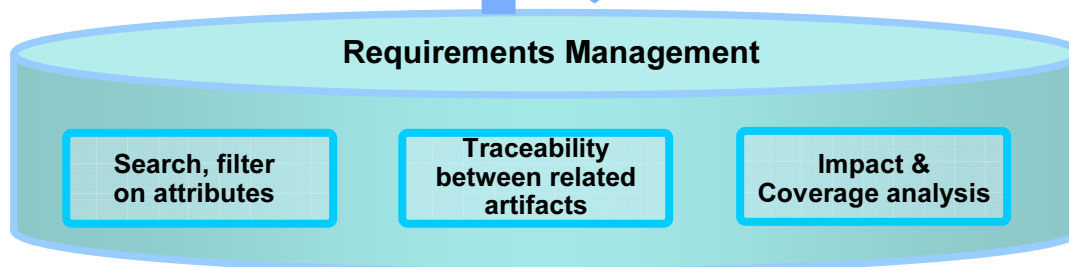
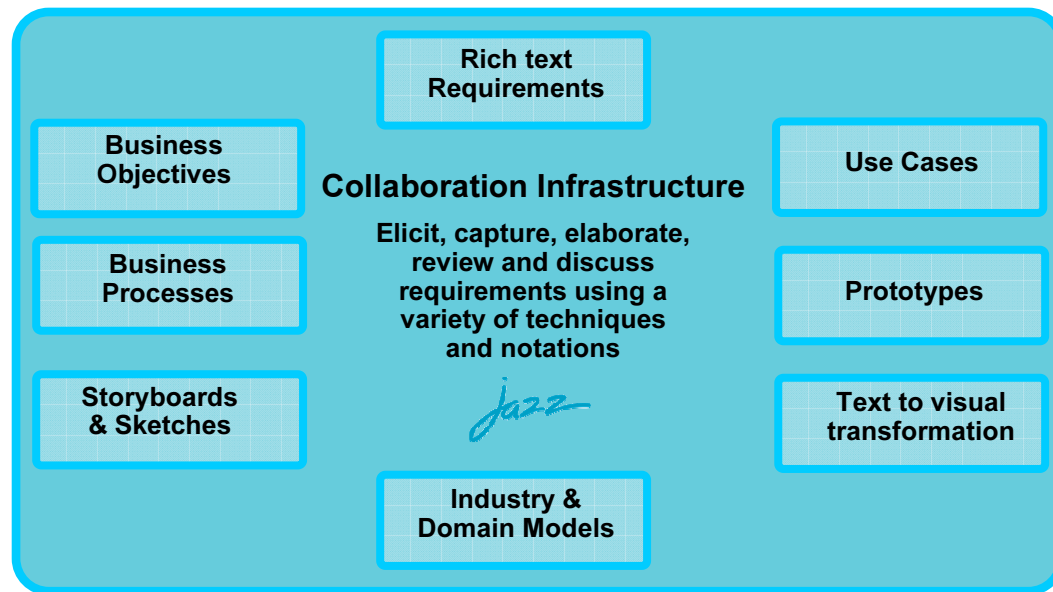
IBM Rational Requirements Composer



Sketches and storyboards



Business processes



Rich text



Use cases

Open Services for Lifecycle Collaboration

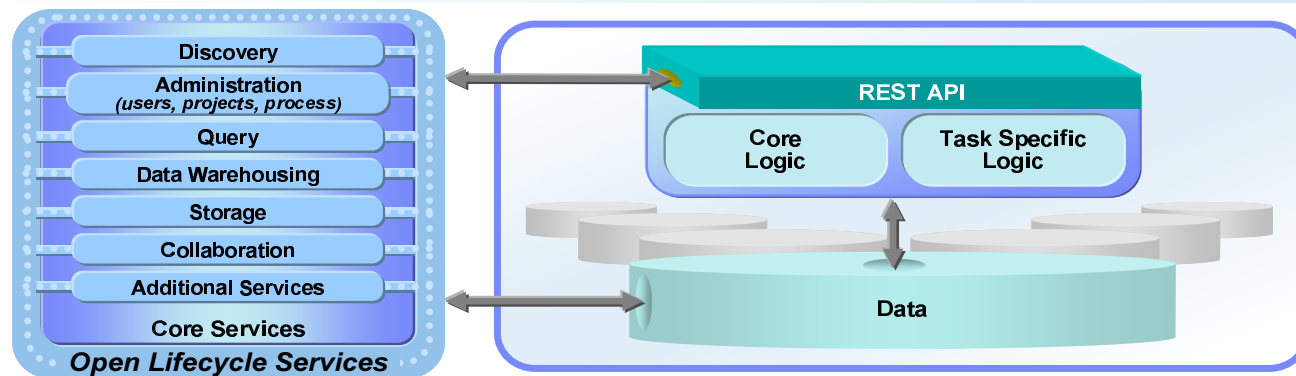
An initiative aimed at simplifying collaboration across the software delivery lifecycle

Barriers to sharing resources and assets across the software lifecycle

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

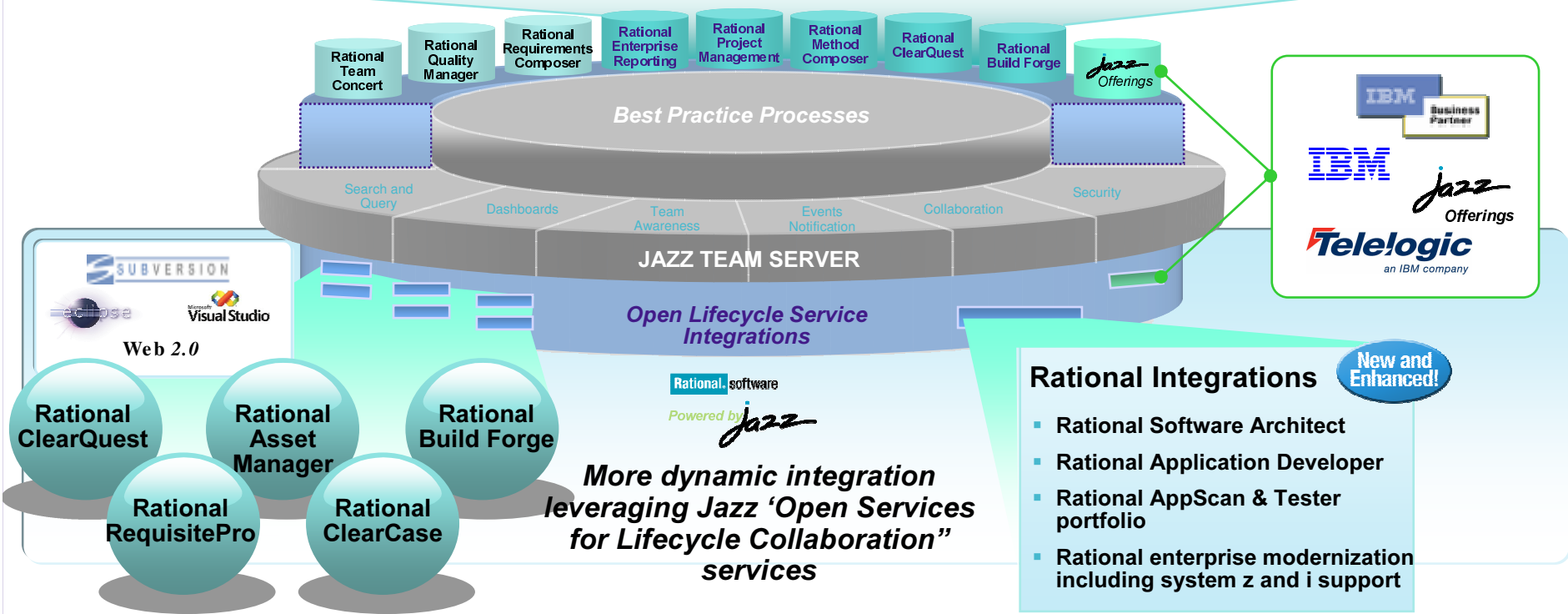
Open Services for Lifecycle Collaboration

- A proposed architecture for sharing lifecycle resources
 - Described on Jazz.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



The road ahead

Jazz offerings beyond 2008



- Rational Integrations** **New and Enhanced!**
- Rational Software Architect
 - Rational Application Developer
 - Rational AppScan & Tester portfolio
 - Rational enterprise modernization including system z and i support

Collaborate with us

Design Partner Program

Lab Advocacy Program

Board of Advisors

Voice of the Customer Events

Rational Software Development Conference

jazz.net

developerWorks

Beta Programs

RFE Community

Rational User Groups

Customer Acceleration Program



➔ Learn more at www.ibm.com/software/rational/collaborate



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- [Change and release management](#)
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