

Taking the Pulse of Software Delivery

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IBM Rational Software Development Conference 2008

WHERE TEAMS ARE **R-HEROES**



Rational. software

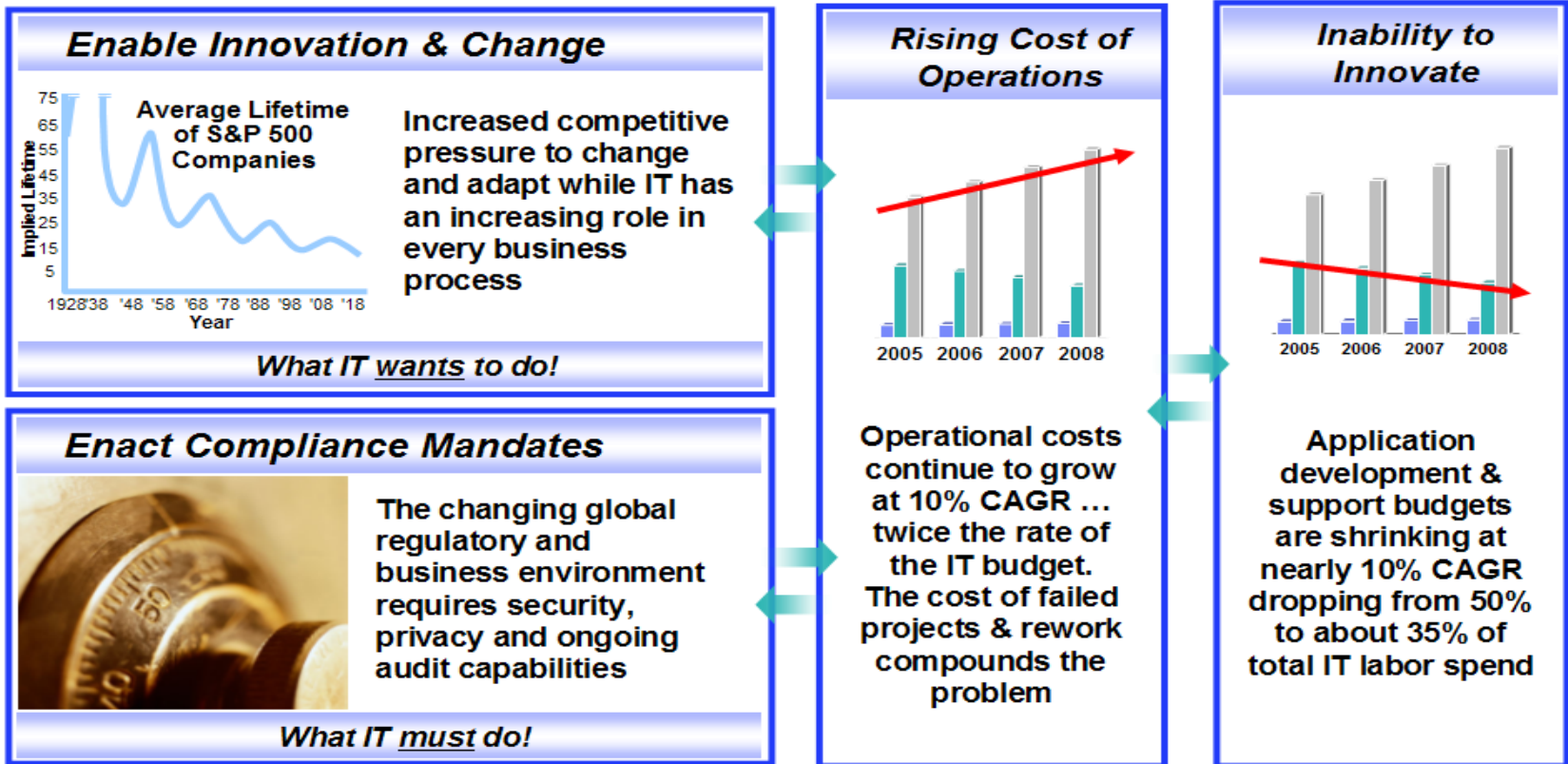
Today's Discussion

- Realities of Software Delivery
 - Business and Organizational Trends
 - Impact for Software and Systems
- Leading by Example
 - A Rational State-of-the-State



The Business Landscape Facing Business Leaders

The need to innovate with less



Bottom Line: Enable Business Flexibility...

Increasing Accountability of Software

- Ultimately, on time and under budget means nothing without the right business outcomes
- Outcomes are measured in dollars, in customer retention, in market share
- The ideal organization ensures software delivery is directly tied to business need

**Only 34%
of software projects
are deemed successful**

**Software related
downtimes cost
the industry nearly
\$300 Billion annually**

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

Increasing Accountability of Software: One Example

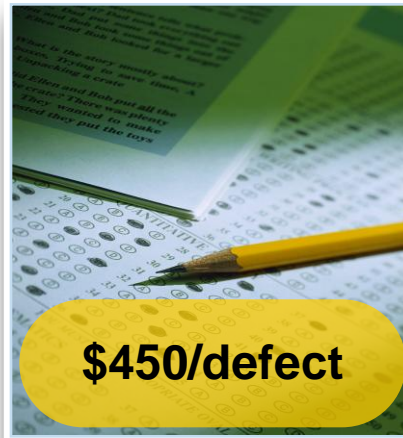
What is the cost of a defect?



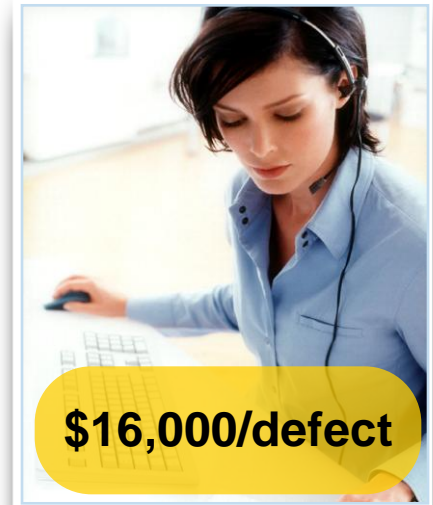
During the coding phase



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.

2008 and Beyond

Latest shifts in software delivery

- Increasingly diverse, cross organizational global project teams
- Popularity of agile development and social networking models
- Interest in replicating the proven models of community governed software delivery models
- Embrace of automation to enable rapid tuning of business models

From Shifts to Opportunity

Embracing these shifts enables one to move from the

**Rigors of the
'cathedral'**



**Openness of the
'bazaar'**



*A market-driven, agile development approach
characterized by the notions of:*

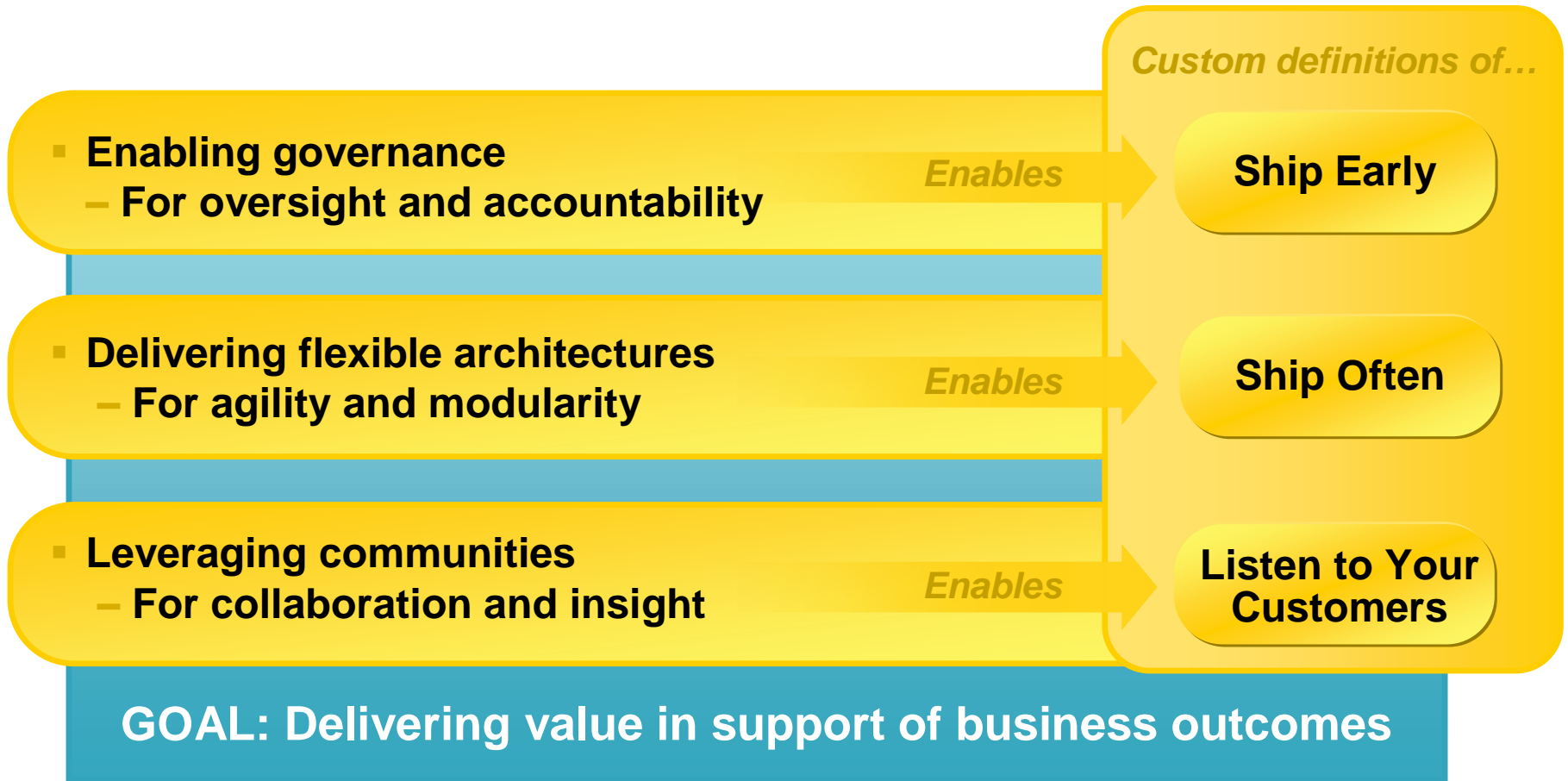
Ship Early

Ship Often

**Listen to Your
Customers**



Fundamentals of Software Strategy Today



Why Governance?

Business Challenges → *Business Objectives*

- Increasing competitiveness → Agility
- Globalization → Customer-centricity
- Increasing impact of technology → Innovation
- Recessionary markets → Efficiency

ENABLE GOVERNANCE

Continuous fact-based analysis to achieve a dynamic balance between competing interests

Ship Early

Why Flexible Architectures?

DELIVER FLEXIBLE ARCHITECTURES

Adopting principles of modularity and reuse to ensure rapid deployment of business-aligned technology

Ship Often

New Solutions *Software Archaeology*

Why Leverage Communities?



Listen



**LEVERAGE
COMMUNITIES**

Continuous customer
conversation with measurements
to capture the inevitable
evolution of need and desired
business outcomes

The Business Value Connection

**ENABLE
GOVERNANCE**

Respecting compliance/security concerns without undermining utility



**DELIVER
FLEXIBLE
ARCHITECTURES**

Modernizing assets & people's skills to leverage existing systems & business knowledge



Anticipating innovation through openness & service orientation



**LEVERAGE
COMMUNITIES**

Getting the most out of collaboration in distributed environments



Ensuring every individual's work matters, every day, across the hall or across the globe

Today's Discussion

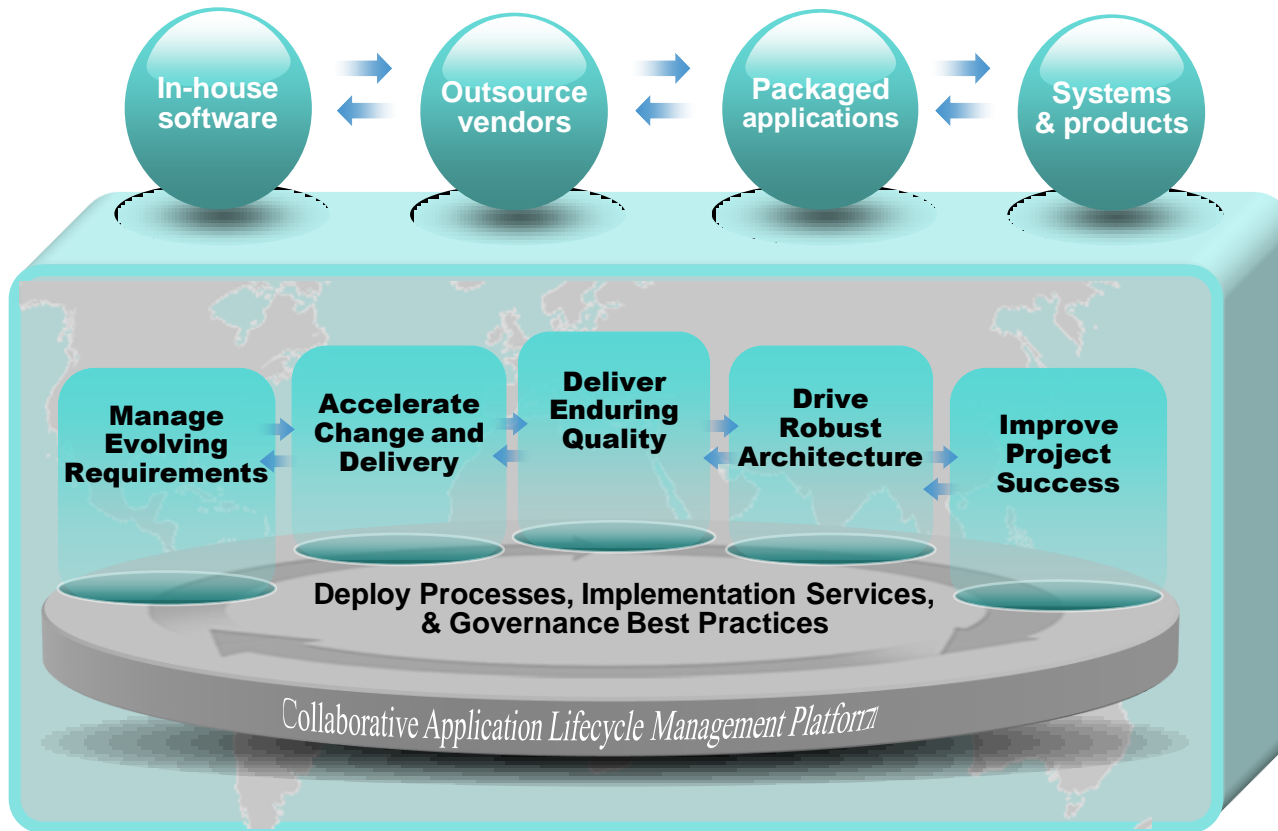
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IBM Rational Software Evolution

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***Solutions** to help customers achieve greater value and performance from their investments in software*



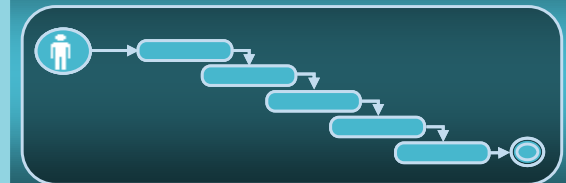
- *Enterprise Modernization and Transformation*
- *Organizational Governance*
- *Skill Development and Community*
- *Implementation Services*

Selecting the Right Approach

Waterfall development

When *stability* is the primary driver

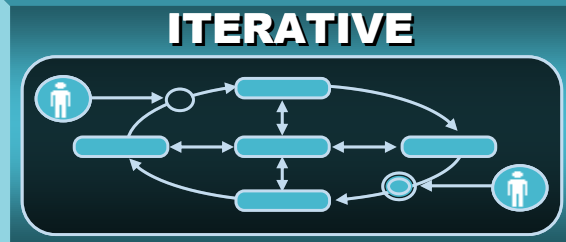
- Example: Rational ClearCase kernel



Iterative development

When *stability and change* are equal players

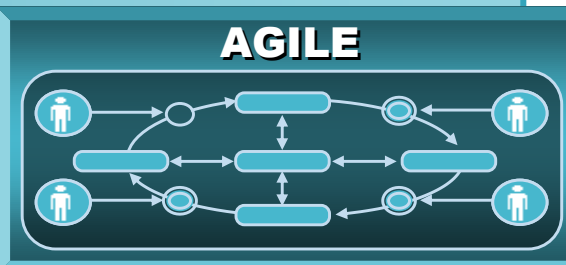
- Example: Rational Software Architect, Rational Business Developer



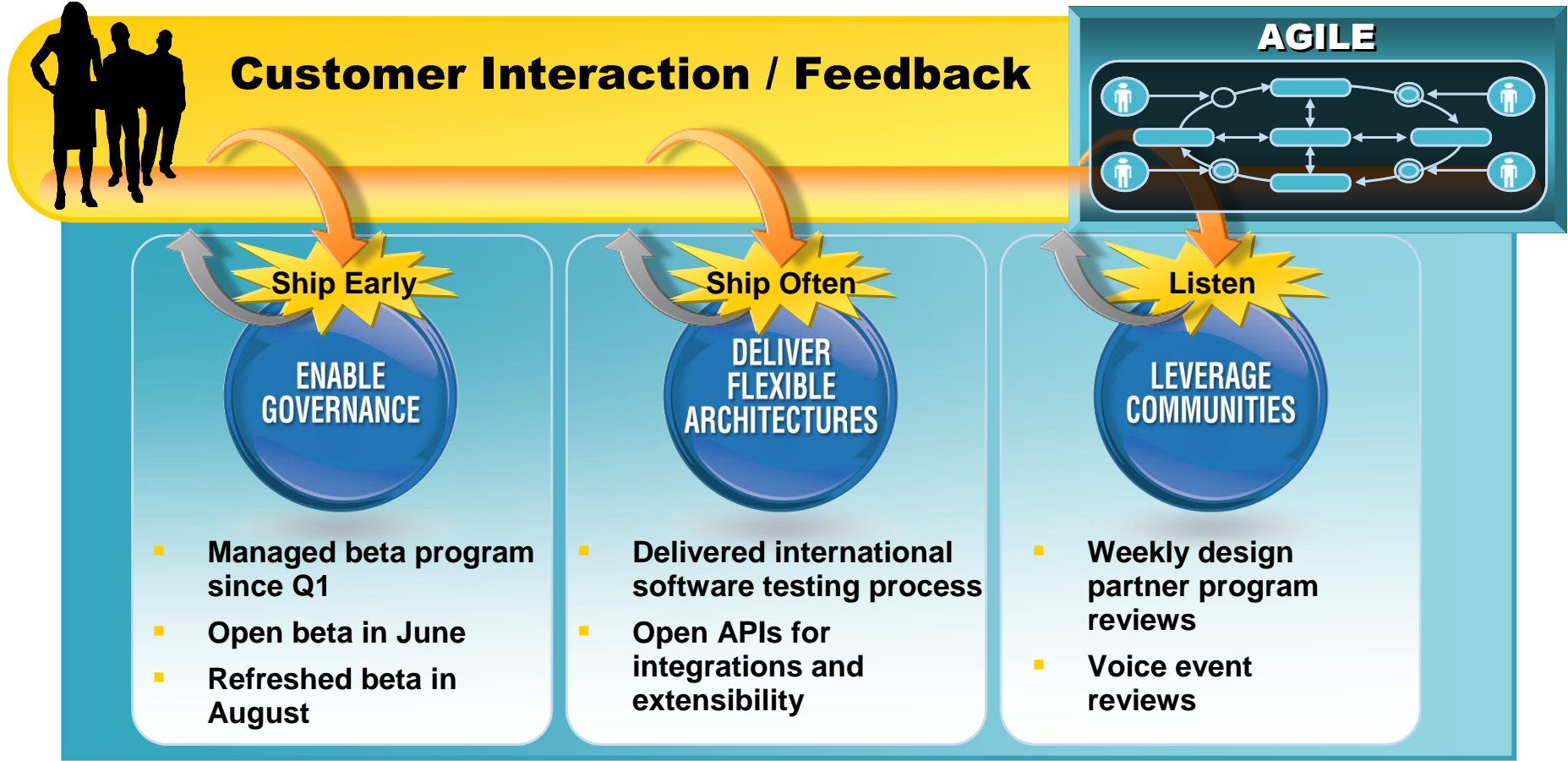
Agile development

When *change* is the primary driver

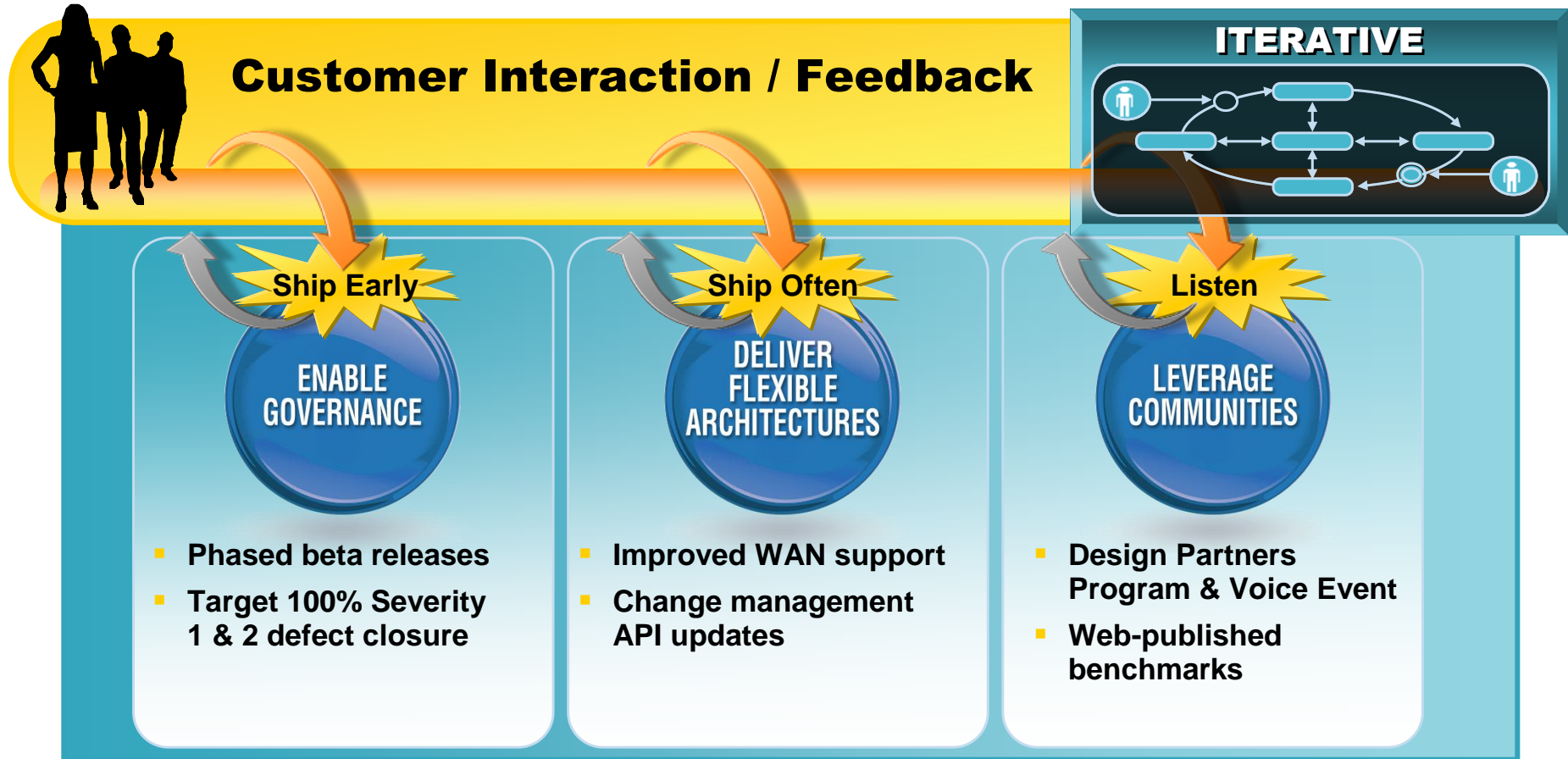
- Example: Rational Team Concert, Rational Quality Manager, Rational Requirements Composer



Example: Rational Quality Manager



Example: Rational ClearCase enhancements



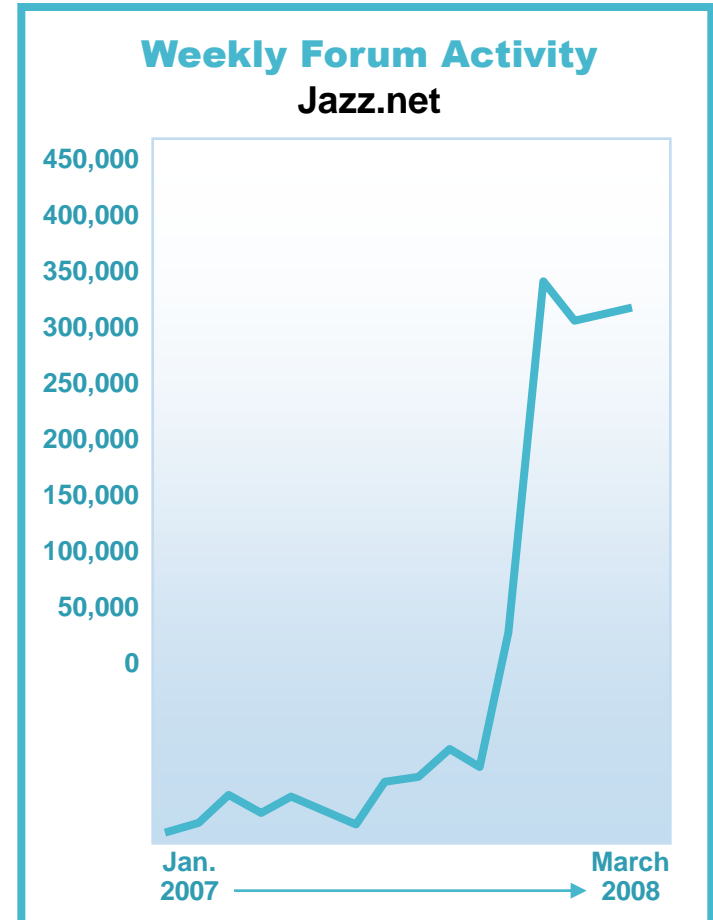
It All Starts With a Conversation

	Premium Support	Online Communities	Beta Programs	Quality Initiatives	Design Partner	Board of Advisors	Advocate Program	VoiCE Events	Social Networks
<i>Year Established</i>	1997 2005 2008								
<i>Production Issues</i>	●	●		●			●	●	●
<i>Futures</i>	●	●	●	●	●	●	●	●	●
<i>Cross-Rational Product Groups</i>	●	●		●		●	●	●	●
<i>Business Goals & Objectives</i>	●				●	●	●	●	
<i>Industry Issues & Trends</i>						●		●	
<i>Competitive Issues</i>						●		●	
<i>Governance & Compliance</i>						●		●	

Founding Jazz.NET

To Embrace our Community

- 17 customer pilots across industries
 - e.g. Finance, Consumer Electronics, Automotive, Telecommunications
- 15 business partner integrations
 - e.g. Black Duck, CM Logic, Source IQ, CAST, Mainsoft, WebLayers
- 10 Jazz research projects
 - e.g. Bluegrass, Emergent Teams
- Widespread internal RTC adoption
 - 28 Rational projects with 800 users
 - Over 100 IBM teams



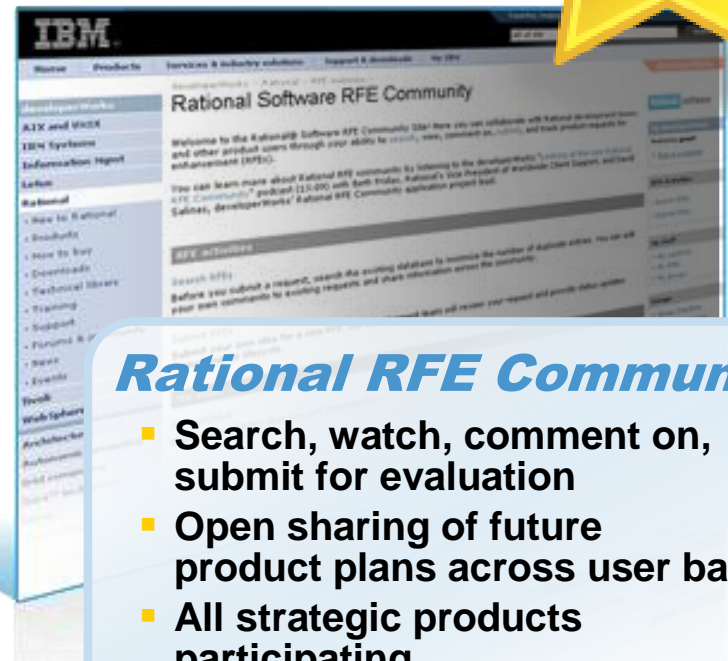
Building Interactive Portals *To Embrace Our Community*

**IBM SWG Consumability
Excellence Award Winner!**



EGL Cafe

- Capture community wisdom in global knowledge base
- Encourage sharing and re-use to reduce effort
- Open participation for System z, IBM i and distributed developers



Rational RFE Community

- Search, watch, comment on, submit for evaluation
- Open sharing of future product plans across user base
- All strategic products participating

Use of Metrics for Self-improvement

To Embrace Governance

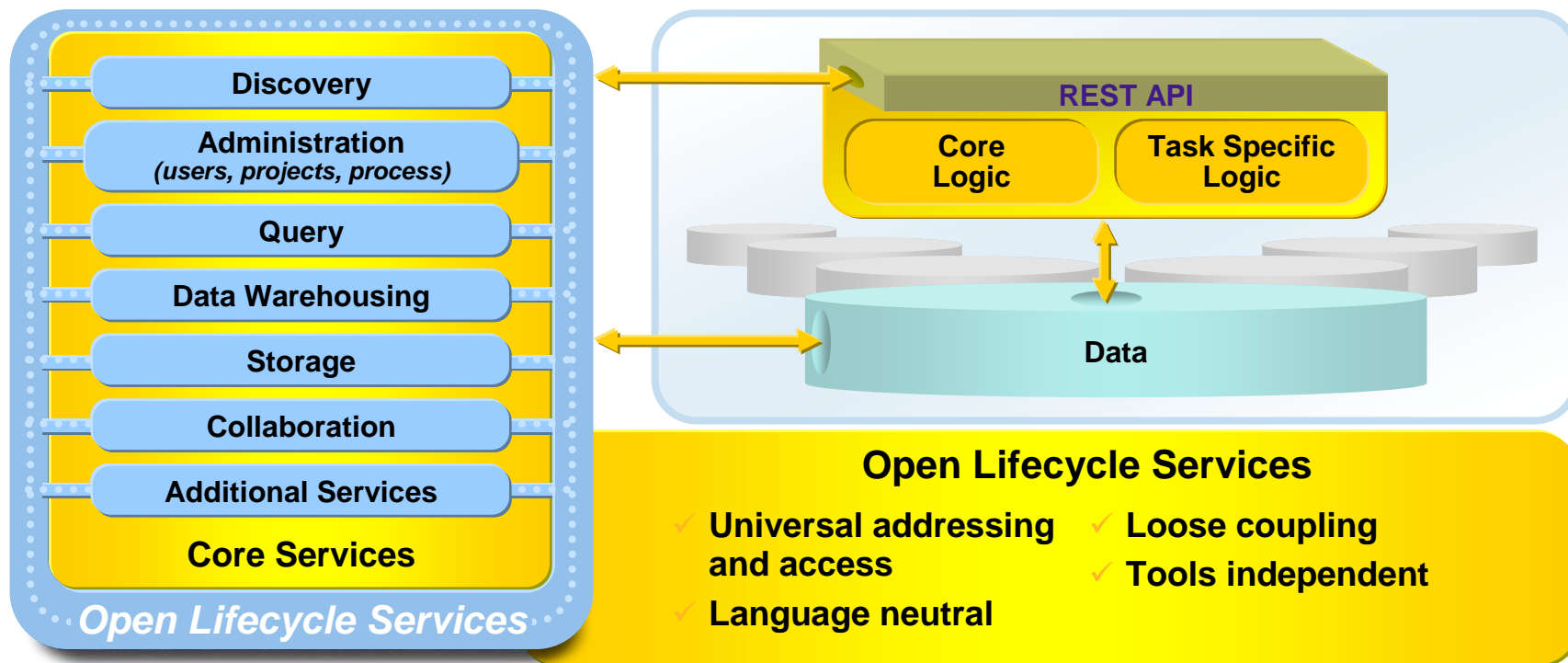
In comparison to 2007

- **9% reduction in Problem Mgmt Record (PMR) arrivals**
- **21% decrease in reported defect arrivals across all products**
- **9 more Beta Programs**
- **56% increase in number Lab Advocacy Program clients**
- **75% increase in number of Design Partner clients**
- **3% increase in Customer Satisfaction Index for Tech Support**

Using The Internet As Inspiration To Embrace Flexible Architectures

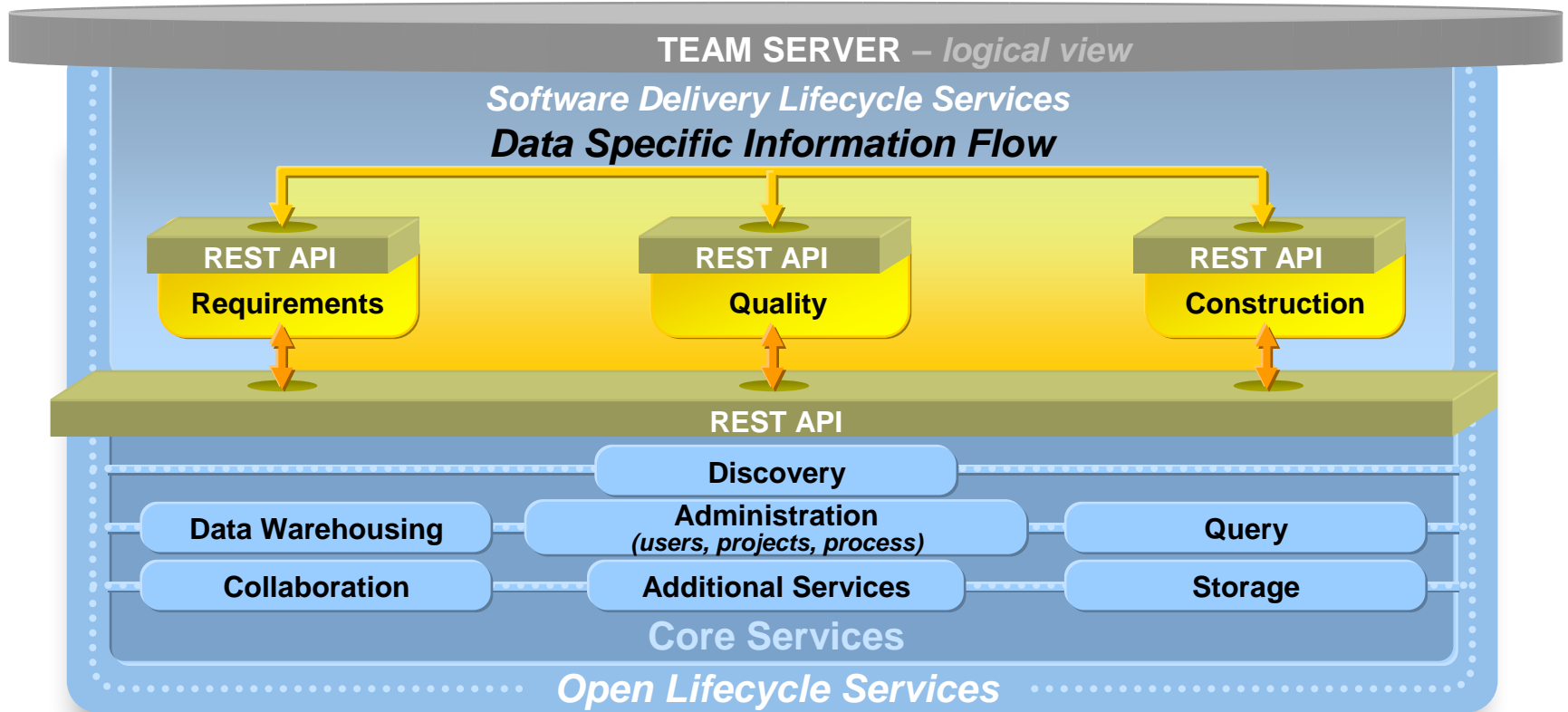


Open Services for
Lifecycle Collaboration
Initiative



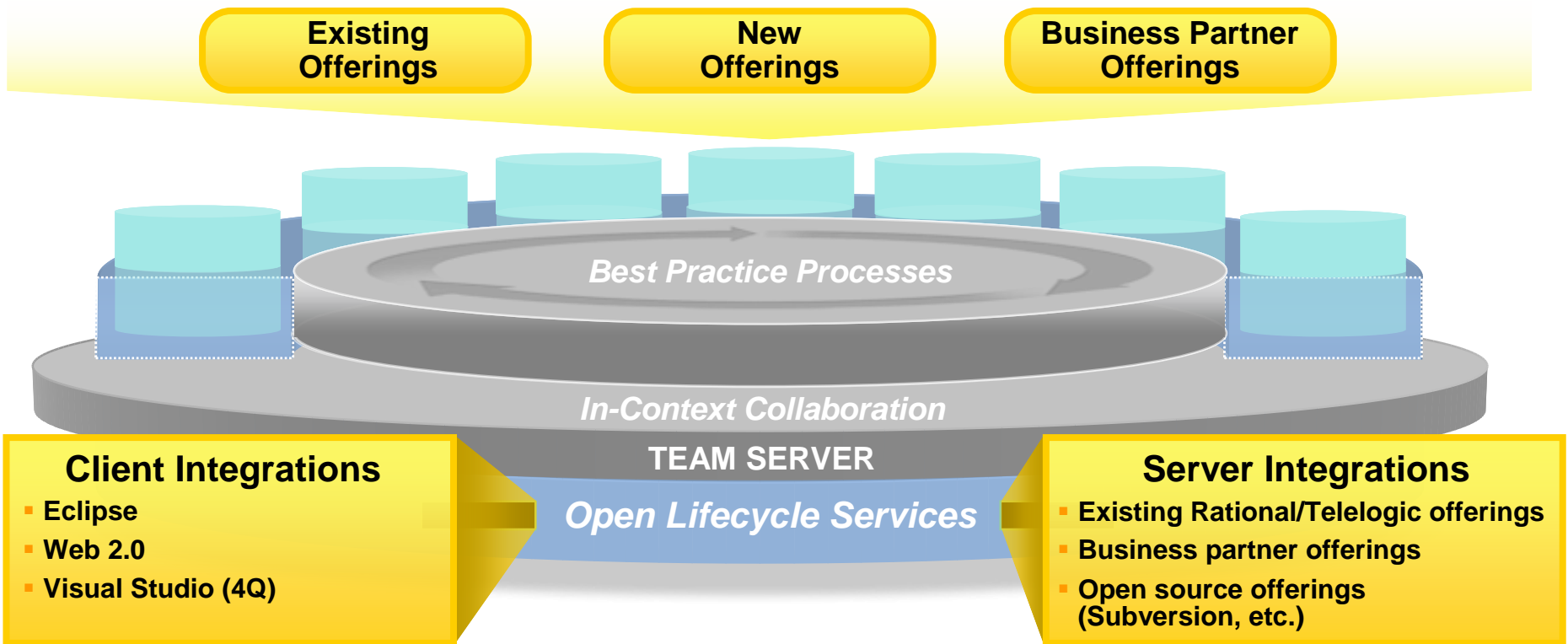
Software Delivery Lifecycle

Via Web-based Architecture



Rational's Vision

Open, Web-centric, Services-based



From Vision to Reality

2007

*Announced our new
Rational strategy*

- Enabling Governance
- Adopting Flexible Architectures
- Leveraging Communities

2008

*Strategy in action: Helping guide you
from the 'cathedral' to the 'bazaar'*

- Ship Early
- Ship Often
- Listen to your customers

See it here at RSDC 2008



THANK YOU

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](#)
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