Real Insights. Real Results.

Software Development and Delivery in Competitive Times

Steve Robinson
Vice President
IBM Rational Software

Rational. software

© 2009 IBM Corporation

Go to IBM

Collaboration in Competitive Times

Today's Discussion: Real Results

- Rational Strategy Review
- Our Approach to Real Results
- Time to Get Real

The evolution of Rational strategy

Accelerating software development evolution

- Empowerment
- Modularity
- Communities

Deliver value efficiently and effectively in distributed organizations

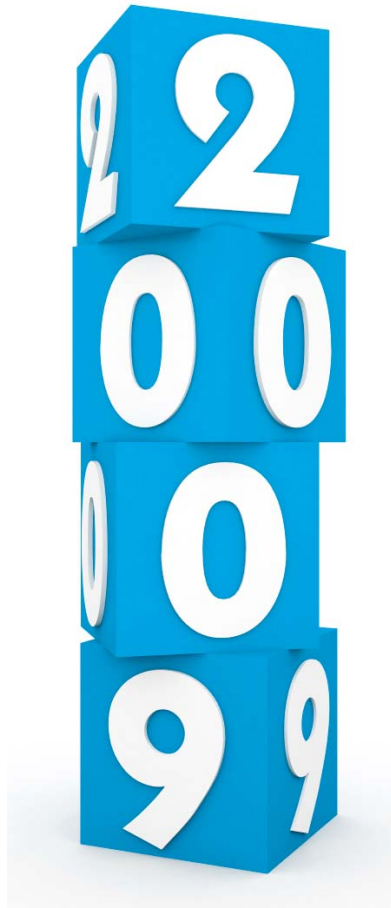
- Enabling governance
- Adopting flexible architectures
- Leveraging communities

Helping guide you from the cathedral to the bazaar

- Ship early
- Ship often
- Listen to your customers

Rational ***strategy in action*** over the past year

- CONTINUED DELIVERING on the promise and vision of a flexible Jazz architecture
  - Shipping early, shipping often with a transparent product development on Jazz.net
  - Delivering 8 Jazz-built products and 18 Jazz-enabled products
- CONTINUED EXPANDING Rational communities to listen to our customers and partners
  - Launched Open Services for Lifecycle Collaboration initiative
- CONTINUED INVESTING to evolve current portfolio
  - 73 product releases in 2008
  - Acquisition of Ounce Labs for Static Security testing
- EXTENDED REACH into systems engineering by integrating Telelogic



Rational strategy in a broader context:

The world needs to get a whole lot smarter

INSTRUMENTED

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

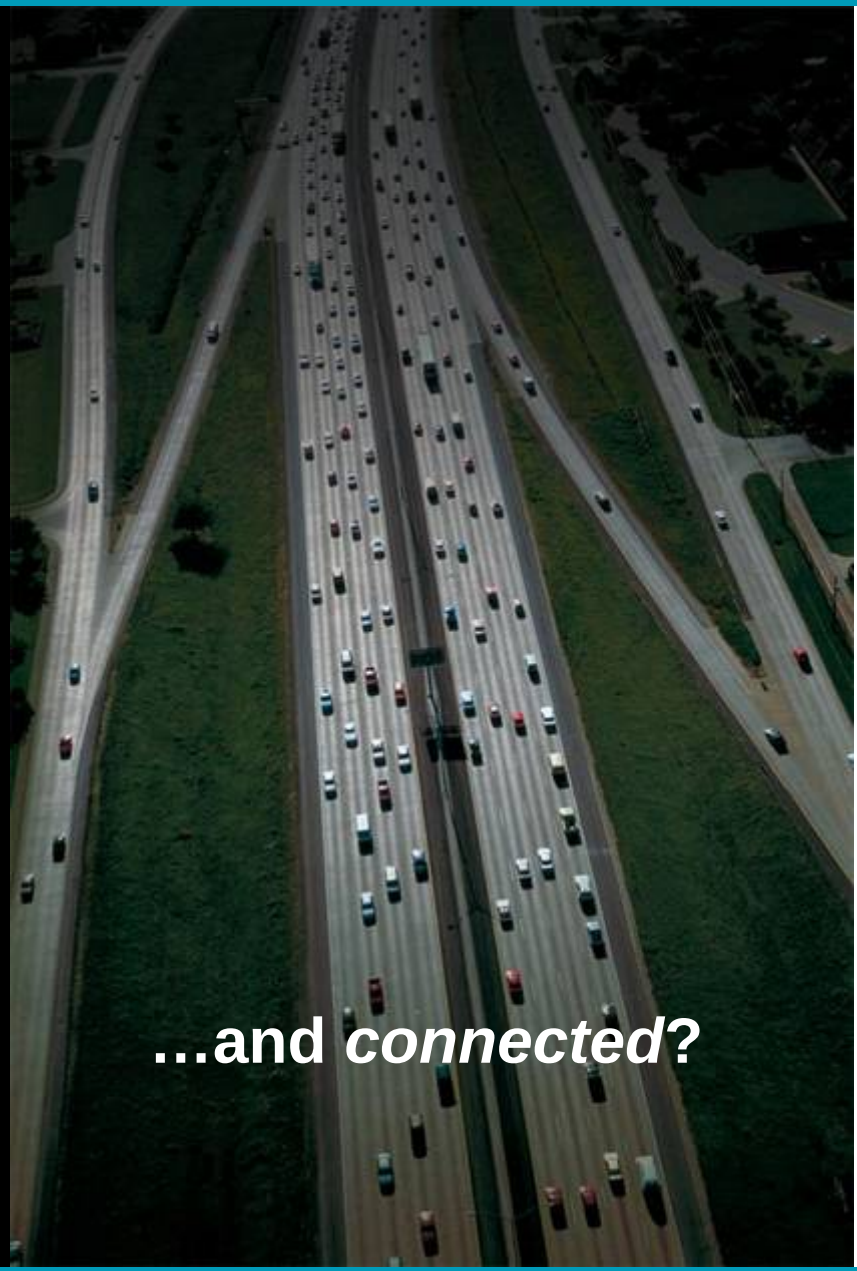
INTERCONNECTED

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

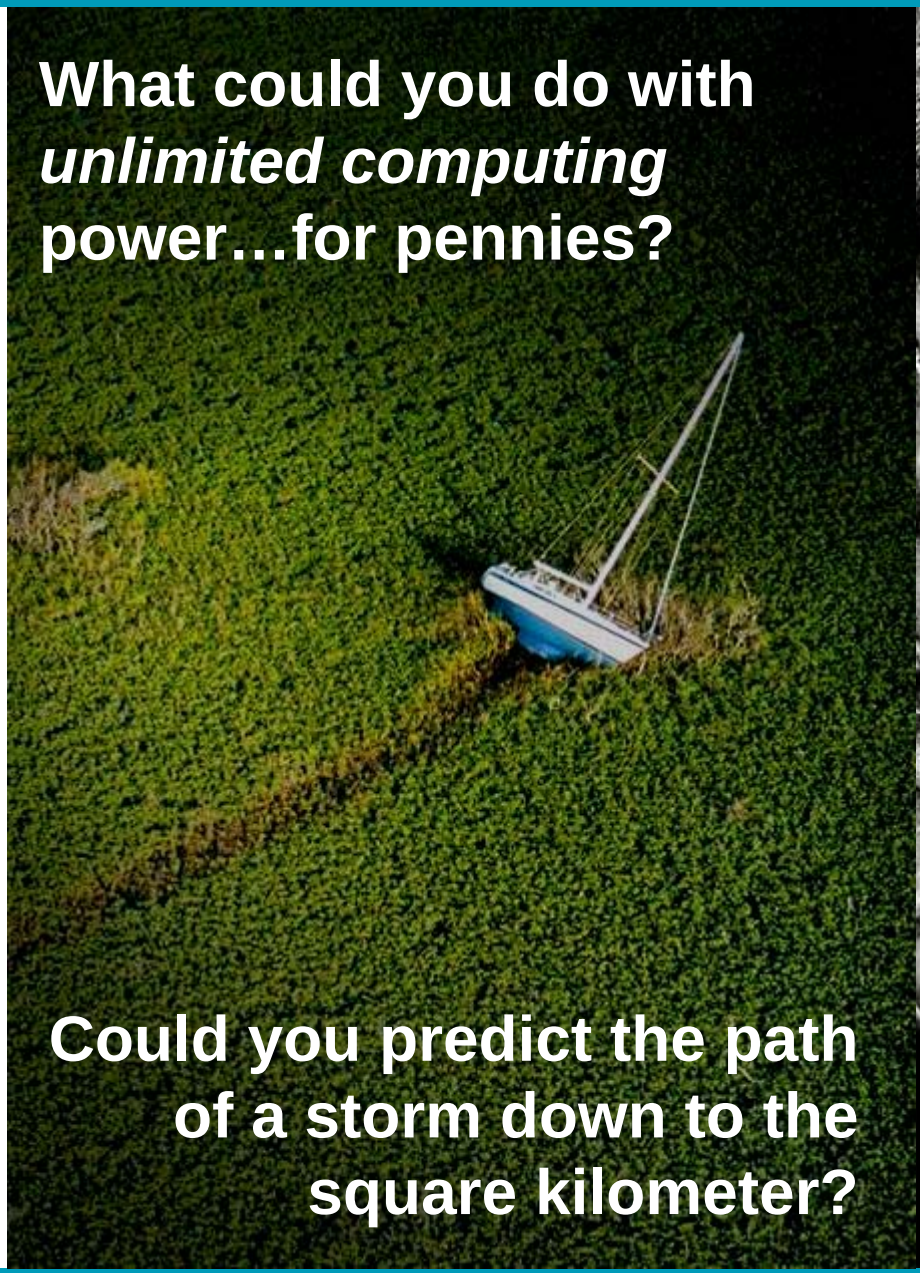
INTELLIGENT

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

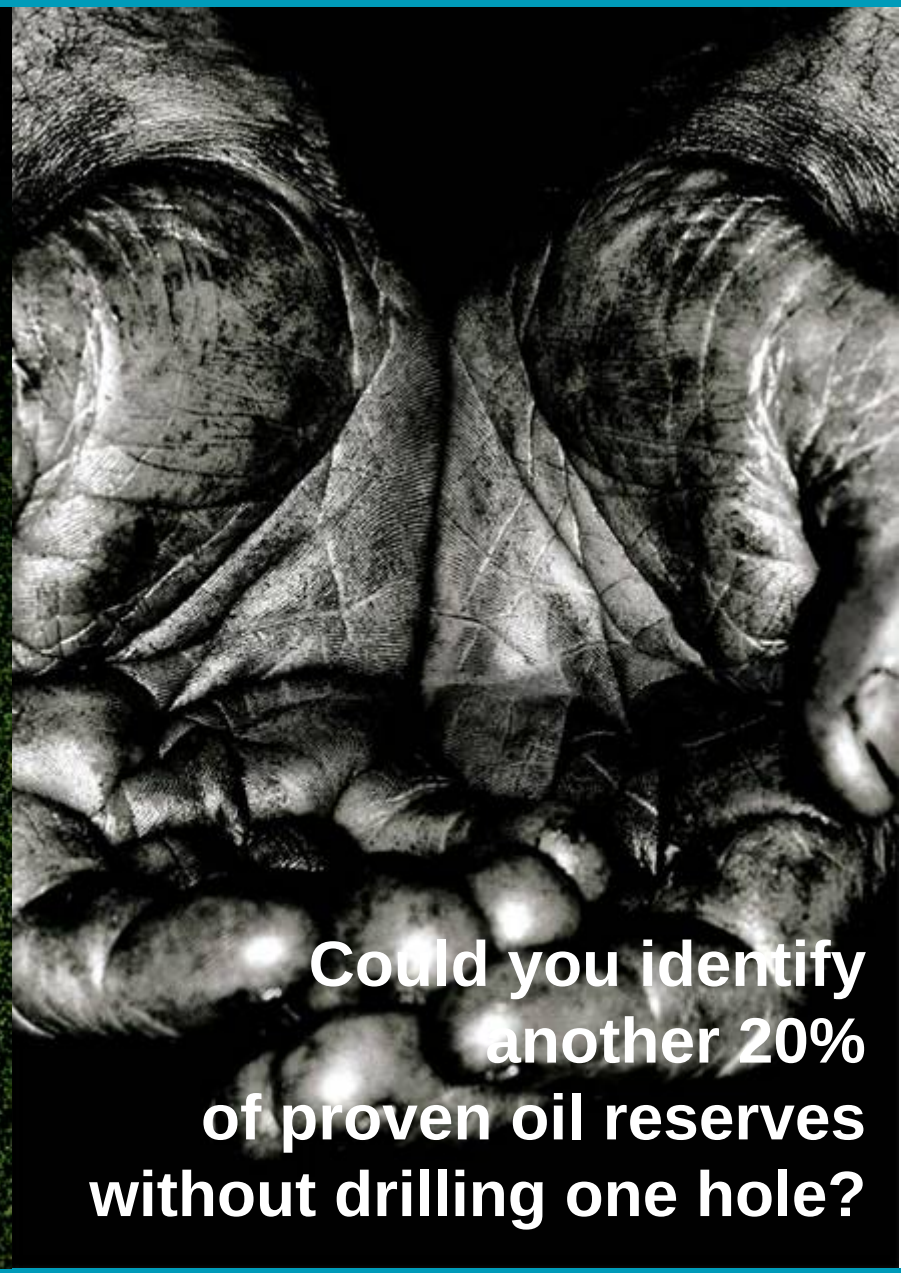
What could you do
if all objects were
intelligent…


…and *connected*?

What could you do with *unlimited computing* power…for pennies?



Could you predict the path of a storm down to the square kilometer?



Could you identify another 20% of proven oil reserves without drilling one hole?

Success in building a smarter planet is highly dependent on our ability to *manage effective software and systems delivery*

…or with a billion-person workforce?

What could you do with a million-person product development

Let's build a smarter planet

Challenges to effective software delivery remain and expand

Individual Challenges

- **Lack of standards** impacts ability to collaborate, automate and report
- Frequent asset updates and **complex dependencies**

Team Challenges

- **Geographically dispersed teams**
- Effective **cross-organizational visibility** and synchronization

Organizational Challenges

- Greater need for **market experimentation**
- **Blind adherence** to process insensitive to potential business trade-offs
- Need for **agility@scale**

Business Challenges

- More granular service functionality and **composite applications**
- **Growing number of assets** including custom, outsourced and packaged

Economic conditions add significant pressure to the reality of software and systems delivery

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****.*

Barbara Gomolski, Gartner
October, 2008

Companies successfully addressing the challenges [of delivering product innovation from software] ***are driving higher profitability****.*

Michelle Boucher, Aberdeen Group
March, 2009

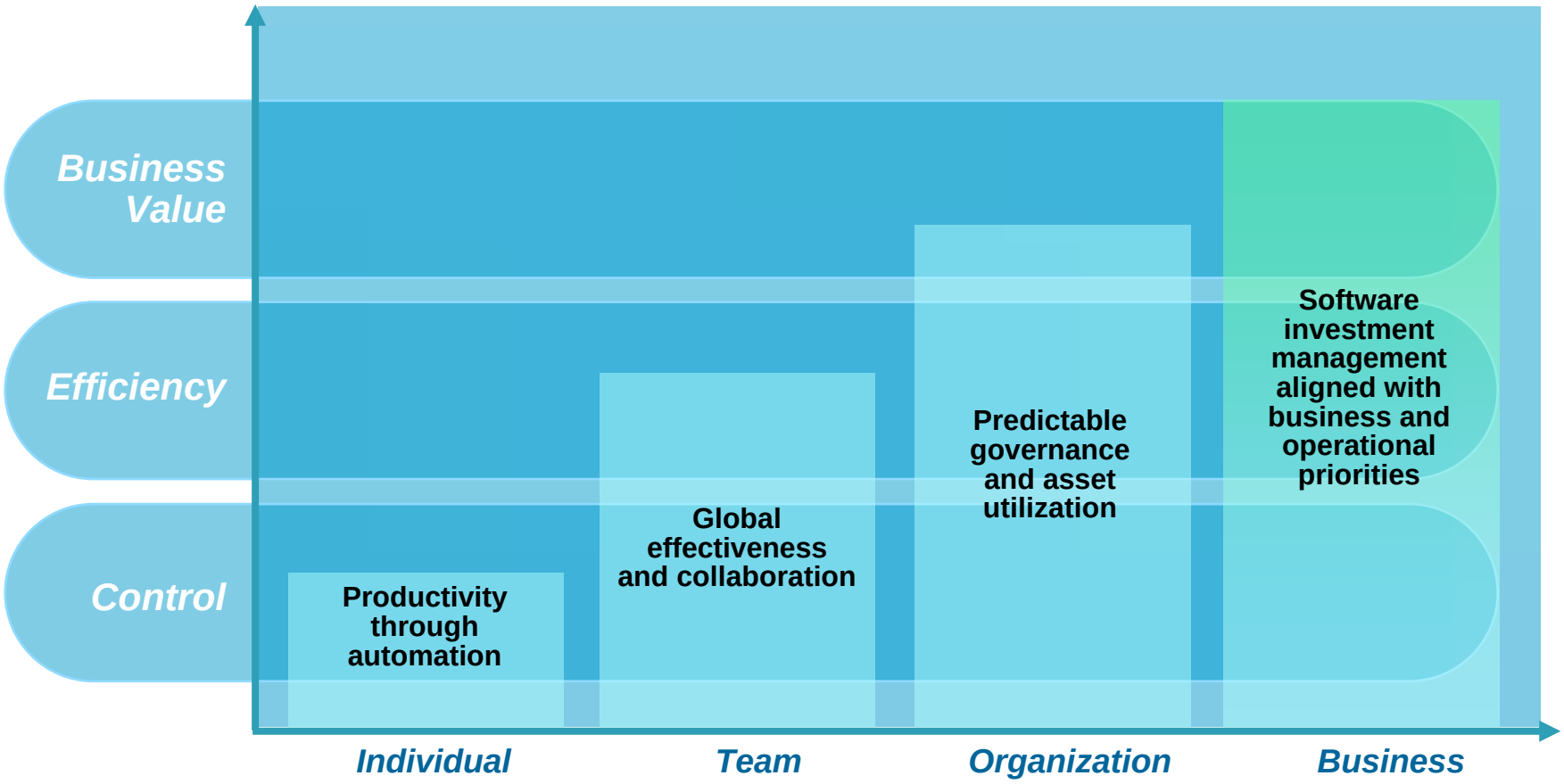
Transformation and innovation will lead recovery. *When we come out the other side of this crisis, companies will look different –* ***technology will have been a catalyst*** *in those changes.*

George Colony, Forrester Research,
October, 2008

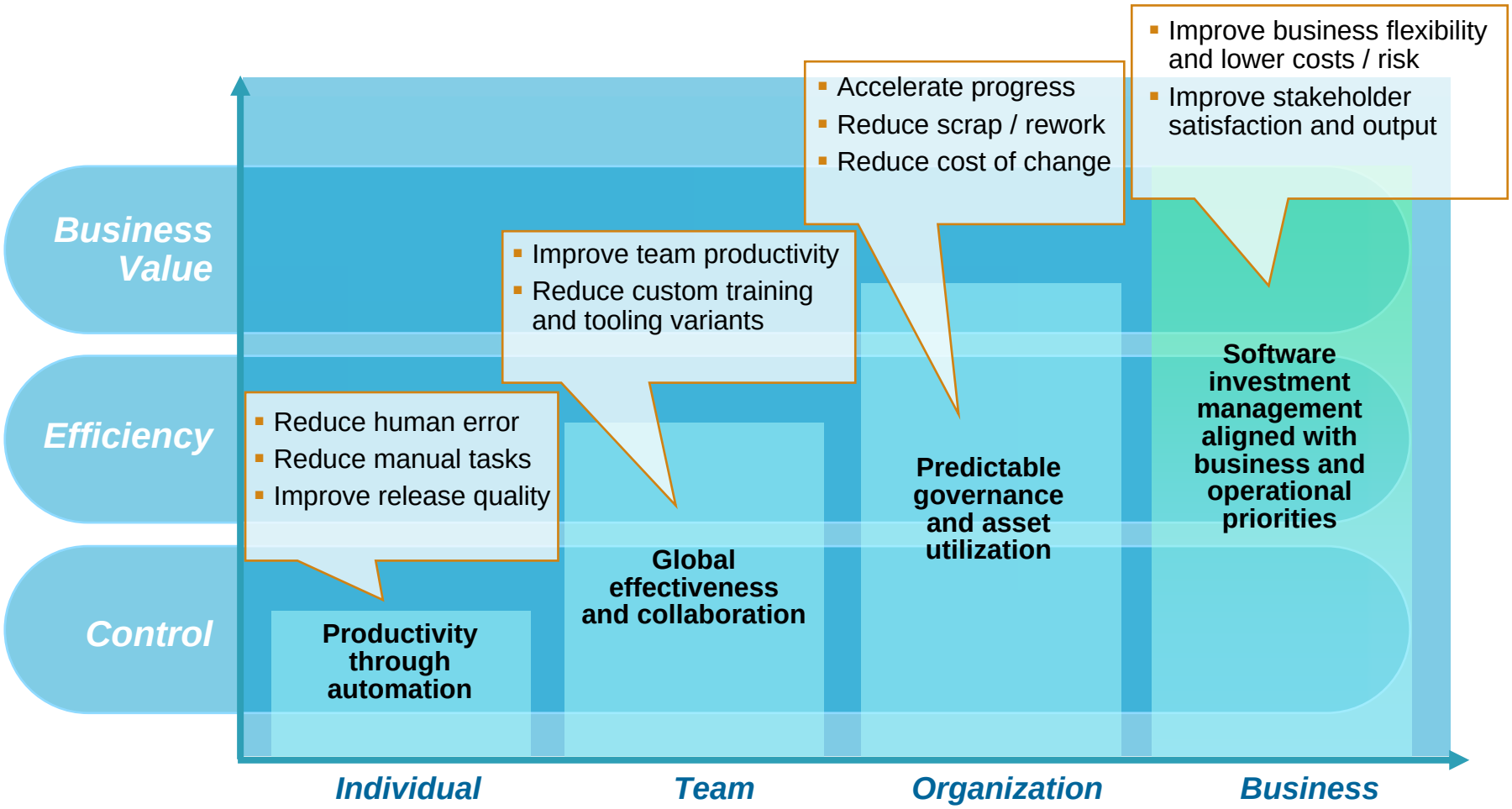
Rational strategy can bring focus in uncertain times

- Provides measured, short-term *Return on Investment*
- Enables longer-term management of *Return on Assets*
- Delivers a platform and processes to make those returns come to life
- Encourages and informs, rather than dictates
- Supports incremental improvement, leading to faster decision making

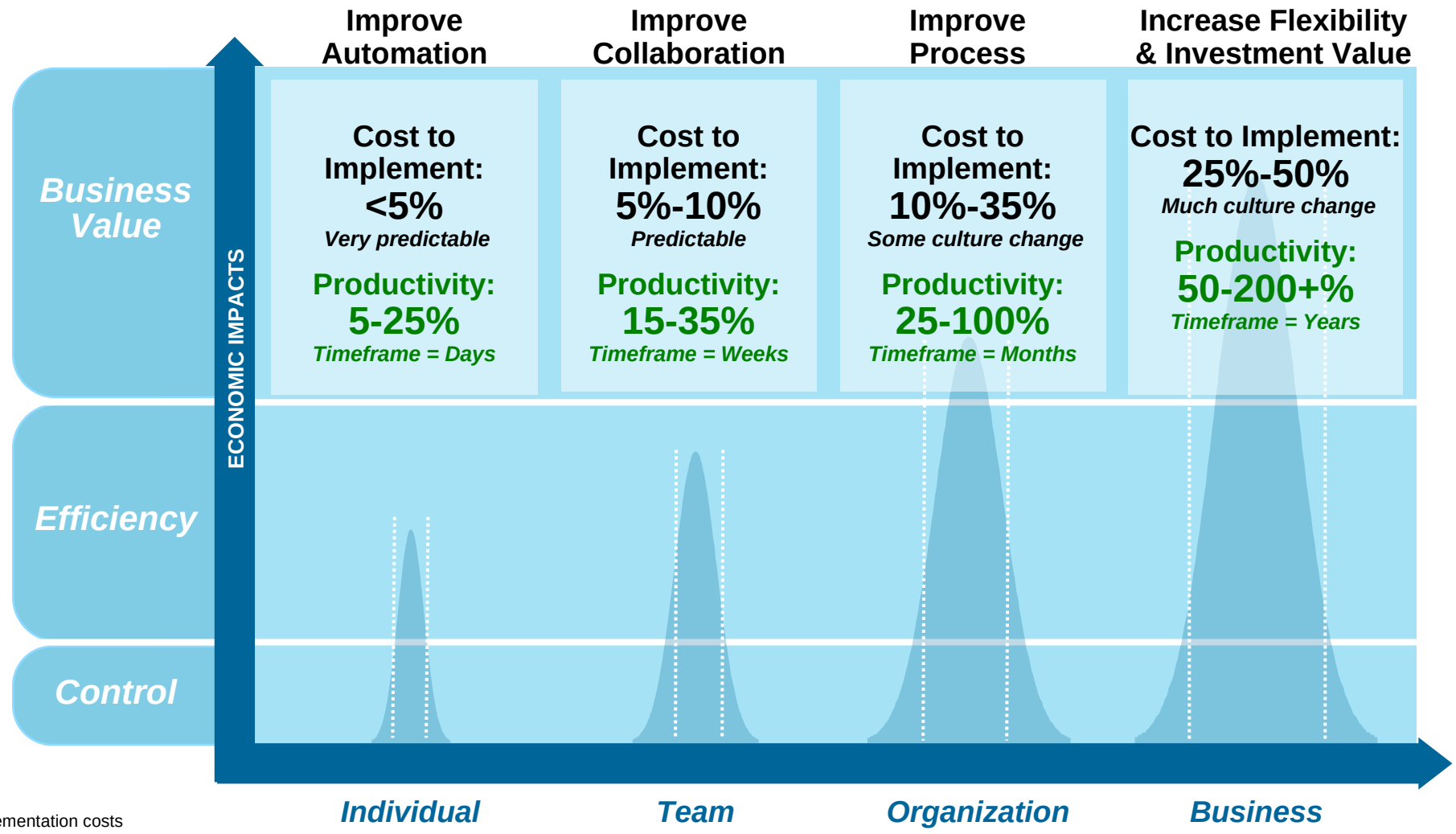
A maturing approach to software and systems delivery based on ***measurement***



Realized by continuous improvement on ***business*** objectives



Invest to manage risks and optimize measured ***outcomes***

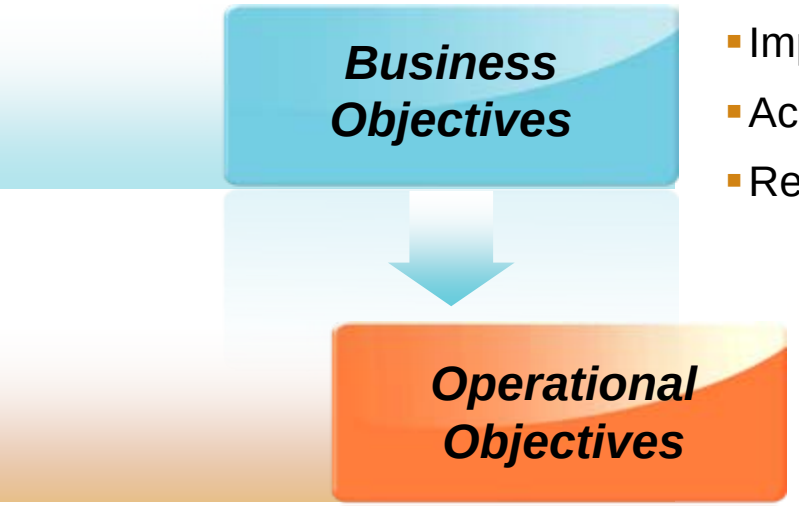


Implementation costs are per person per year

Pragmatic steps we took to mature our own software delivery

1. Established business and operational objectives
2. Prioritized practices and defined implementation roadmap
3. Accelerated practice adoption with Rational products and programs – “Tools, Not Rules”
4. Reported, analyzed, and regularly acted on our results

1 Established business and operational objectives



- Improve market share
- Achieve profit margin
- Reduce time-to-value

- Heighten responsiveness and increase linkage to customers
- Innovate to differentiate and capture new value
- Increase quality
- Shorten project development cycle times
- Improve schedule predictability

2 Prioritized practices and defined implementation roadmap

Initial Rational Focus Area

Change and Release Management
- Team Change Management
- Formal Change Management

Requirements Management
- Shared Vision
- Use-Case-Driven Development
- Requirements Management
- Business Process Sketching

Governance and Compliance
- Risk-Value Lifecycle
- Practice Authoring and Tailoring
- Performance Measurement

Agile Core
- Iterative Development
- Two-Level Project Planning
- Whole Team
- Continuous Integration
- Test-Driven Development

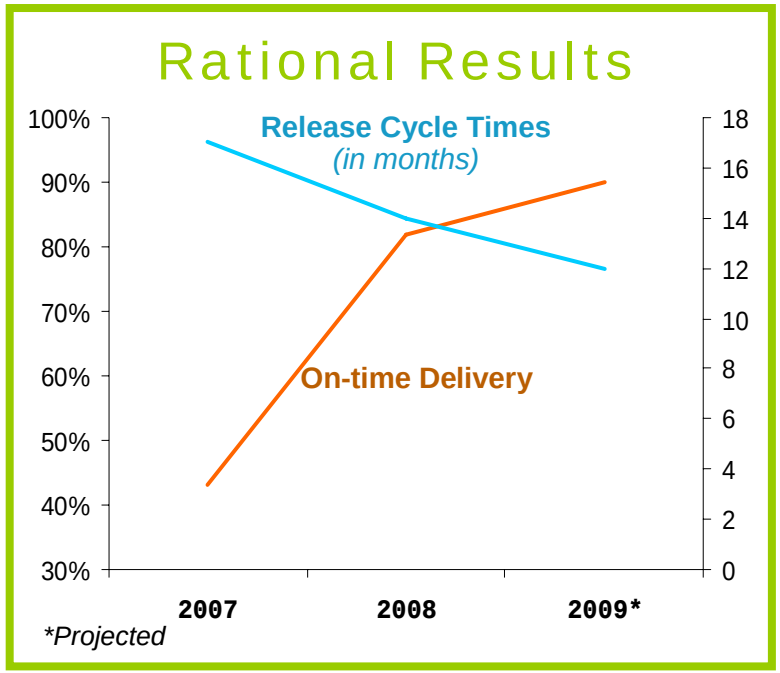
Quality Management
- Concurrent Testing
- Test Management
- Independent Testing
- Performance Testing
- Application Vulnerability Assessment

Architecture Management
- Evolutionary Architecture
- Evolutionary Design
- Component Based Software Architecture
- Design Driven Implementation

3 Accelerated practice adoption with Rational products

Leveraged Agile Core practices to improve cycle times and predictability

- *Required* adoption of agility@scale
  - 2,000+ developers, testers, managers
  - Varying team sizes
  - Geographically distributed locales
  - Diverse development contexts
    - from mature products to Web 2.0 apps
- *Embraced* Rational Team Concert
  - In past year, RTC:
    - Projects grew by 291%
    - Number of users grew by 321%

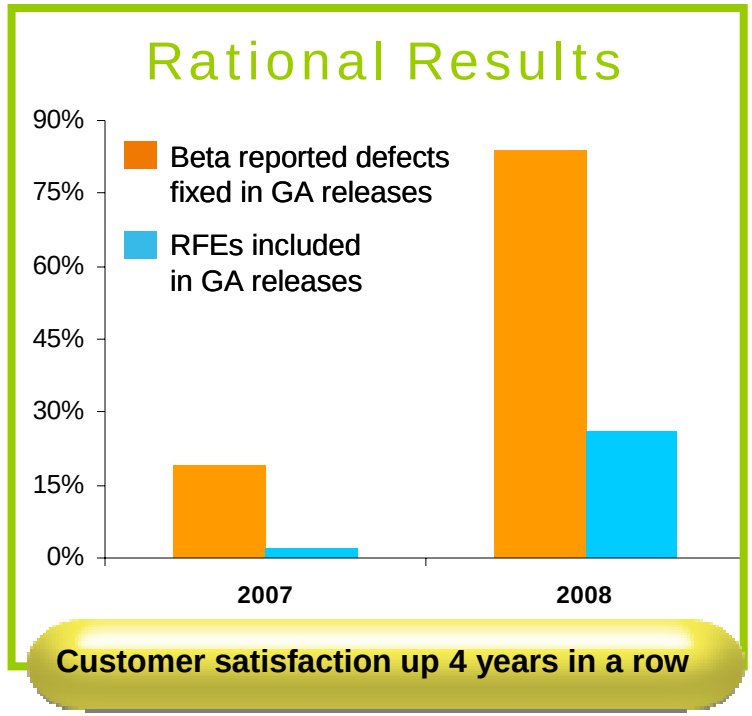


3 Accelerated practice adoption with Rational programs

Leveraged Requirements and Change & Release Management practices

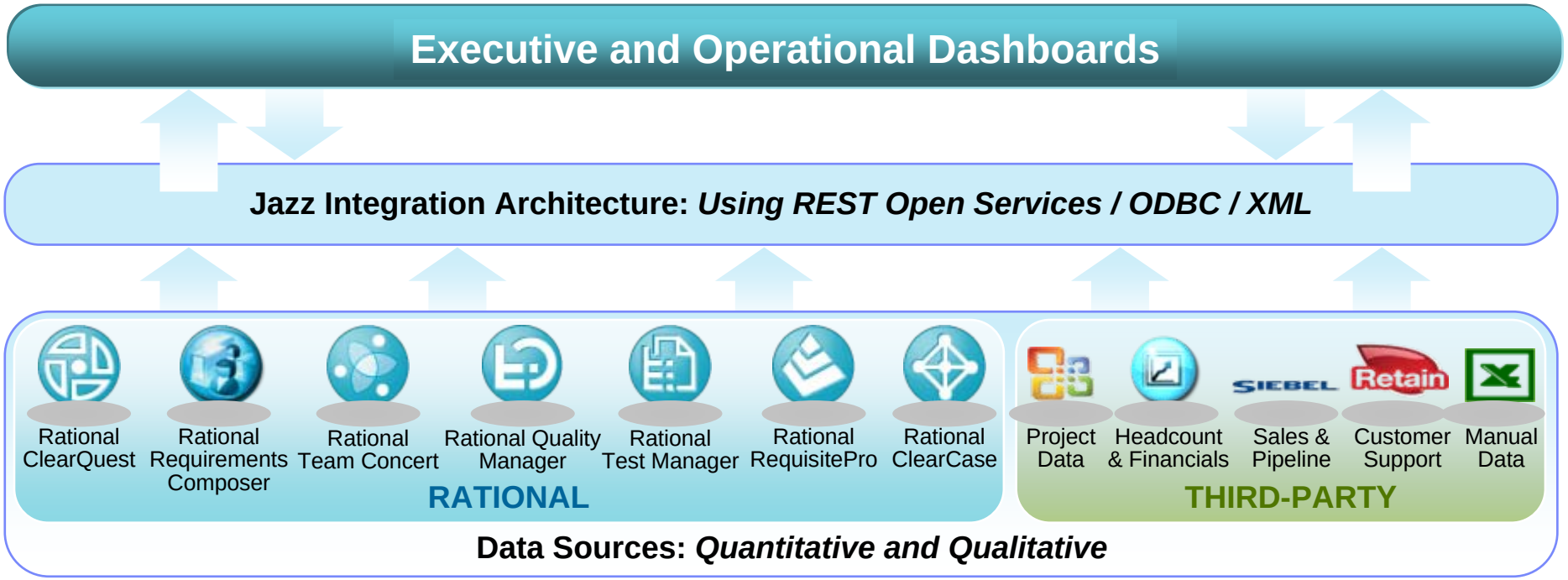
Increased customer involvement, building on “Whole Team” agile practice

- Design Partner Program growth of 352% since 2006
- Transparent, iterative development on Jazz.net
  - 5 products available today
  - Over 17,000 participants in Jazz forums
- VoiCE sessions expanded to India and China
- Lab Advocacy program has grown 567% since 2005
- Beta programs doubled in 2008 to 35
  - 12x growth in open beta downloads



4 Reported, analyzed, and regularly acted on our results

Aggregated data from multiple sources to provide new insight



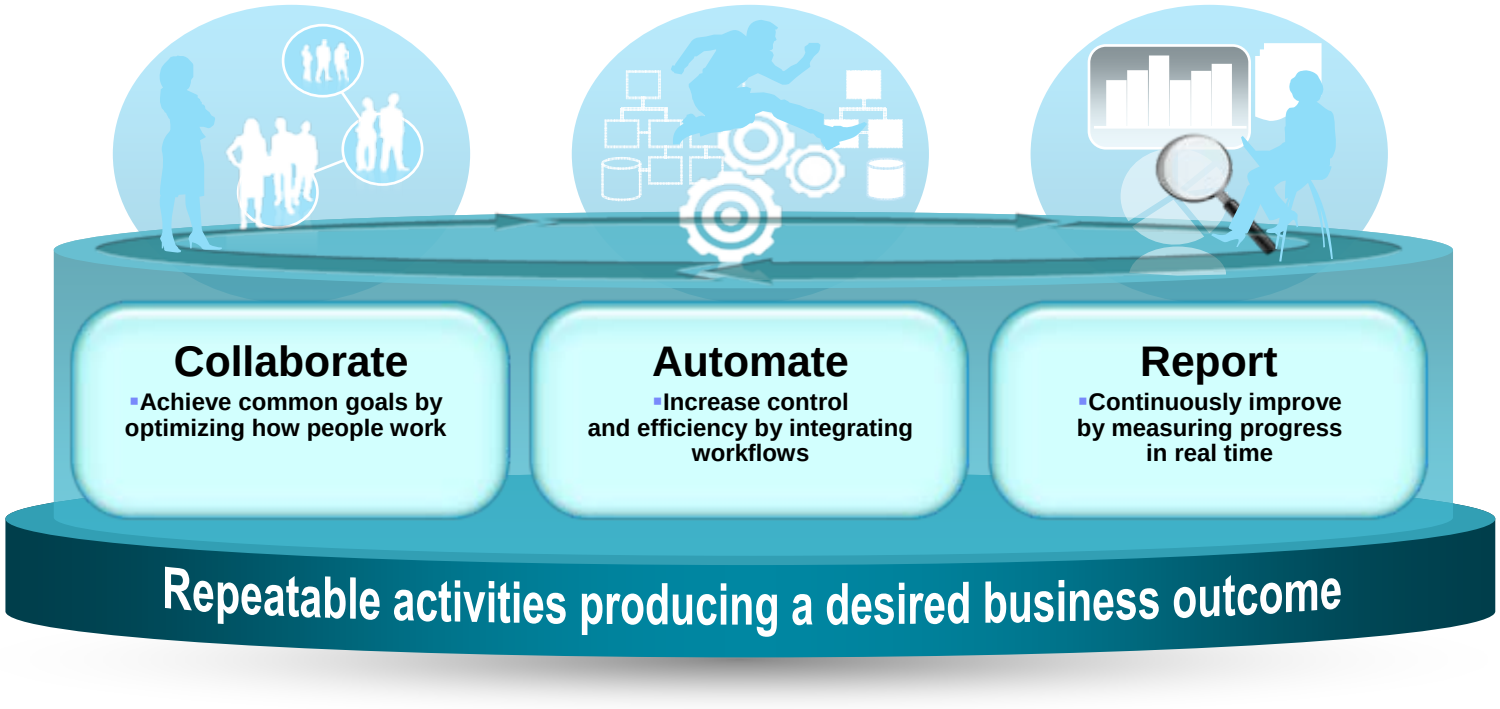
Align business and operational measures

Drill down into real-time data from disparate source repositories

Segment	Product	Revenue Year-To-Date (M)	Revenue % of Plan	Pipeline (M)	Release	eGA Plan	eGA Outlook	eGA Plan-Outlook	Headcount (PY)	Project Health	Overall Profit Margin	Overall Market Share
Application Lifecycle Management (ALM)	Jazz Foundation	75.7 ▼	96% ▼	87.9 ▼	Jazz Foundation 1.0	May 28, 2009	Jun 12, 2009	15 days	52 ◆	71% ◆	◆	▲
					RTL XYZ	Mar 31, 2009	Jul 7, 2009	98 days	118 ▼	50% ▼	▼	▼
	RTC	115.2 ▲	99% ◆	109.6 ◆	RTC 2.0	Jun 15, 2009	Jun 19, 2009	4 days	12 ◆	90% ◆	◆	▲
					RTC 2.0.0.1	Sep 22, 2009	Sep 30, 2009	8 days	72 ▼	86% ◆	◆	◆
Governance Solution	Focal Point for Project Management	29.1 ◆	93% ◆	84.2 ▲	FPjM 1.0	Oct 15, 2009	Nov 17, 2009	33 days	60 ◆	74% ▲	◆	◆
	Rational Insight	108.7 ▼	98% ▼	162.7 ▼	Insight 1.0	May 26, 2009	May 26, 2009	0 days	40 ◆	83% ▼	▼	◆
Quality Management (QM) Solution	RQM	35.2 ▲	112% ▲	79.6 ▲	RQM 2.0	Jun 15, 2009	Jul 31, 2009	46 days	56 ◆	89% ▲	◆	▲
	RRC	28.1 ◆	83% ▲	45.1 ▼	RRC 2.0	Nov 4, 2009	Nov 24, 2009	20 days	32 ▲	85% ◆	◆	▼

Leveraging our experiences to help you…

Rational experience demonstrates incremental improvement in software delivery



Time to Get Real – Starting Today

Align teams to business and operational objectives

Gain insights to incrementally improve software and systems delivery

Measure, monitor and steer to desired results

Thank
You