



How to Make it Real and Innovation Today  
*How software helps companies embrace change,  
deliver smarter products and drive profit*

**Hayden Lindsey**  
**Vice President & Distinguished Engineer**  
**Enterprise Modernization, Modeling, Construction and Compilers**  
**IBM Rational Software**

**Rational.** software

## How does one change and improve?



*Where do we start?*



# Drive business innovation and reduce costs through measured and continuous process improvement

## Measured Capability Improvement Framework

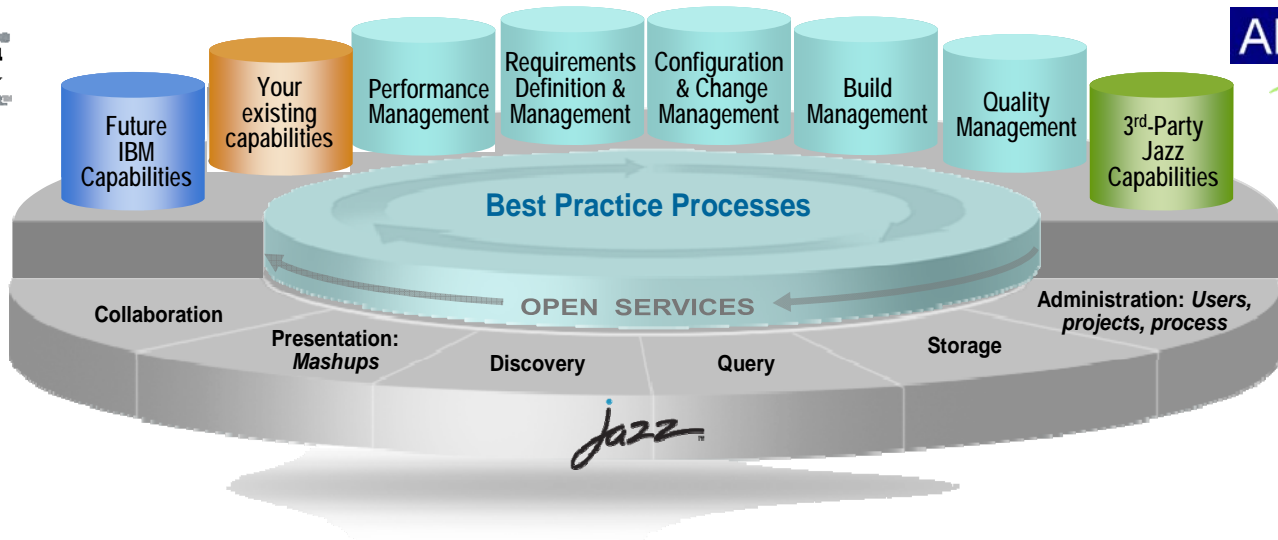


**Captures over 10 years of Rational experiences in incremental adoption**

- Used in over 80 IBM agile projects
- Used in conjunction with RUP, XP, Scrum and other processes
- Demonstrated in the Rational Insight executive dashboard



# Unifying platform: Jazz



## Phases 1 & 2: Deciding where to start

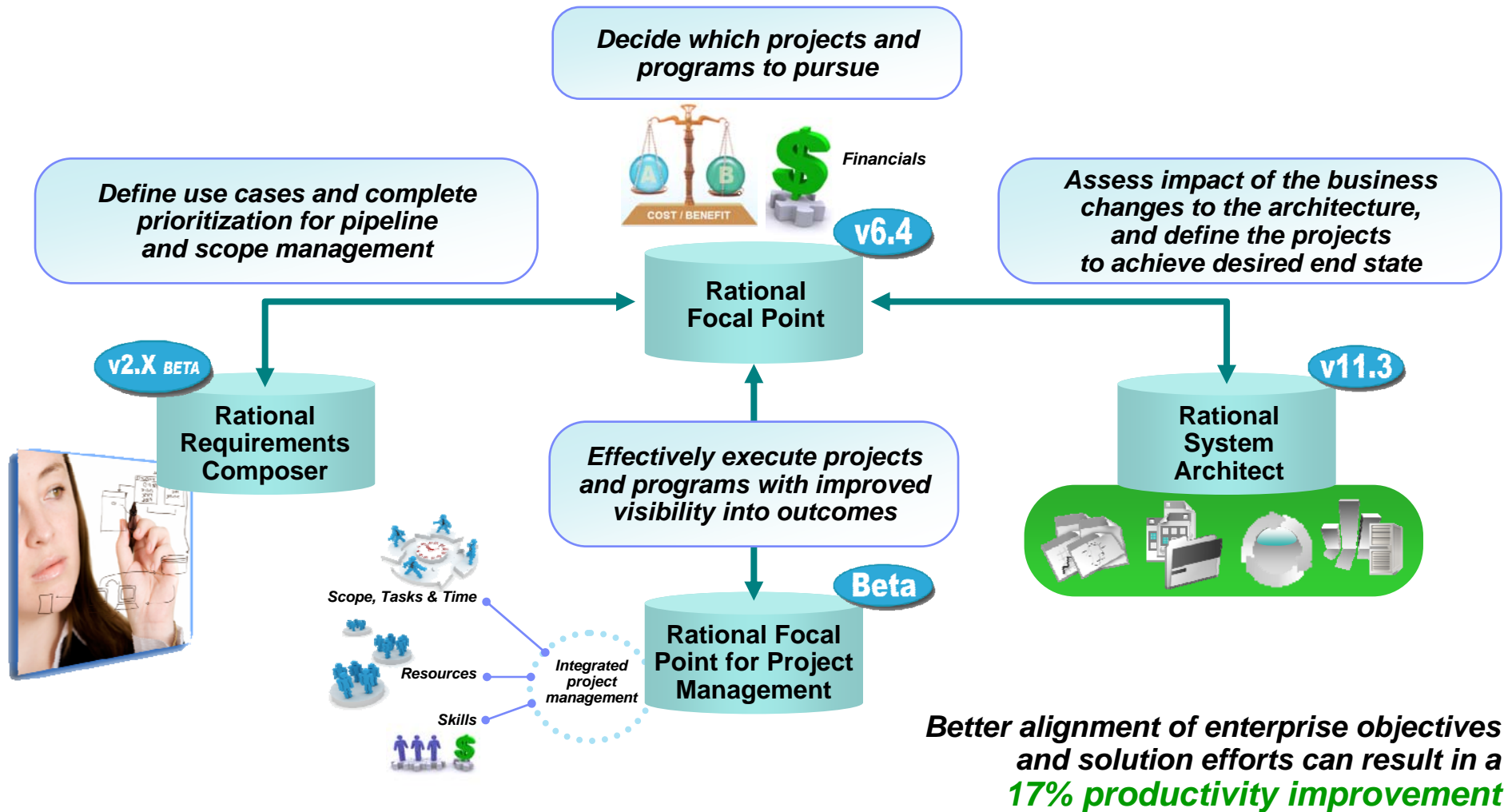
### *Establishing an improvement roadmap*

- **Executive Business Value Workshop**
  - ▶ Service offering to elicit business and operational objectives and delivery strategies
- **SDLC Health Assessment**
  - ▶ Service offering that assesses current health of target projects and organizations
  - ▶ Provides a measurable and incremental improvement roadmap



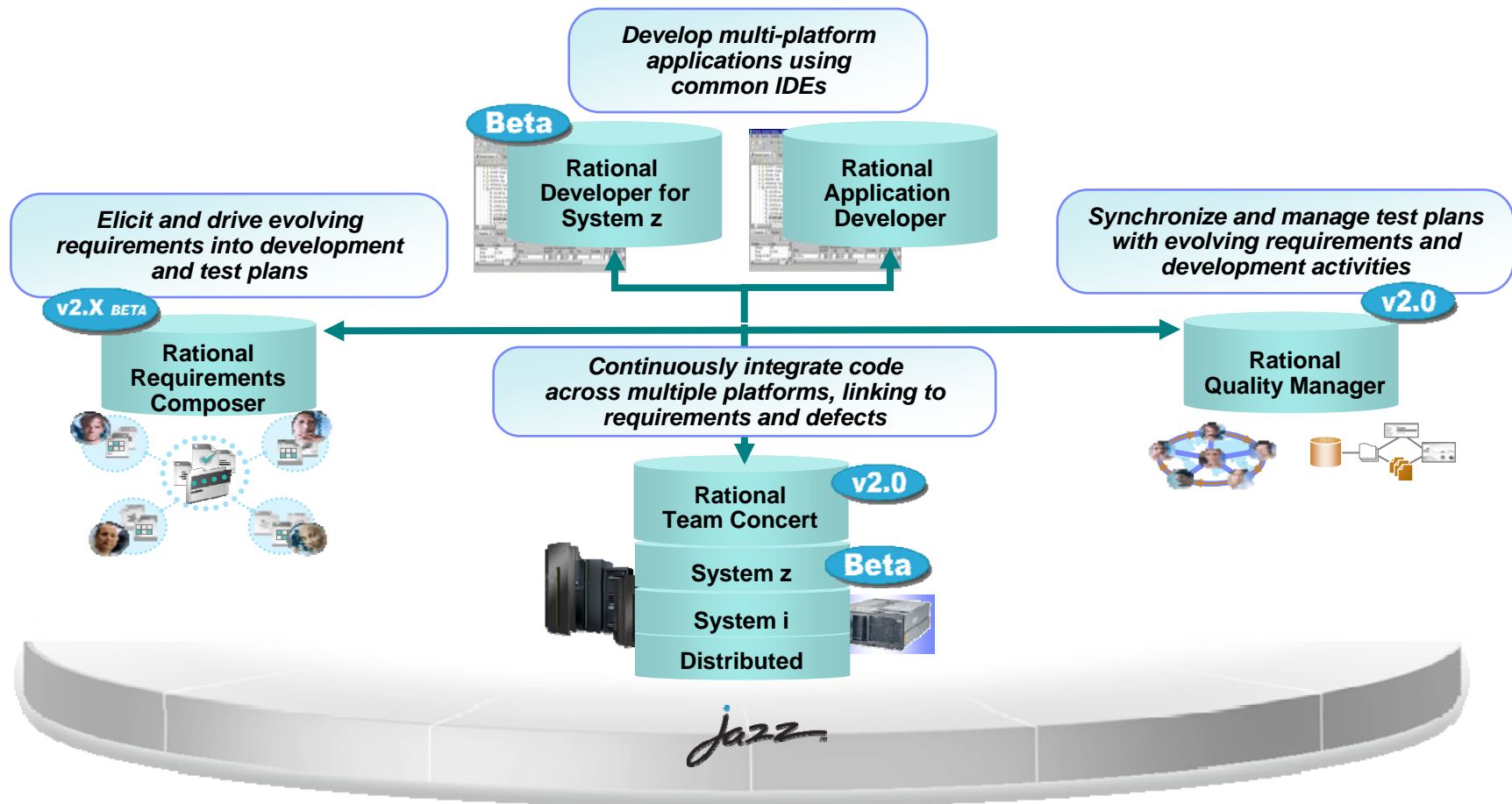
# Phase 3: Improving development and business alignment

## *Requirements management, enterprise architecture*



# Phase 3: Reducing time-to-market and improving quality

## *Consolidated multi-platform development, test management*



**By reducing requirements rework,  
we cut costs up to 30%**

# Phase 4: Report and analyze business results

New!

Rational Insight

**Integrated lifecycle intelligence**

**Executive Dashboard View**

**Project Cost Performance**

**Developer Productivity Index**

**Project Performance Scorecard**

Overall Status	Target	# of Blocking D	Current
Account Opening	0	38	
Auction	0	42	
Bid Management	0	51	
Others			

**Actual vs. Budget Expenditure**

**Customer Defect Arrivals**

**Delivery Schedule**

**Enhancement Request Backlog**

**Control Settings**

**Better**

**Results**



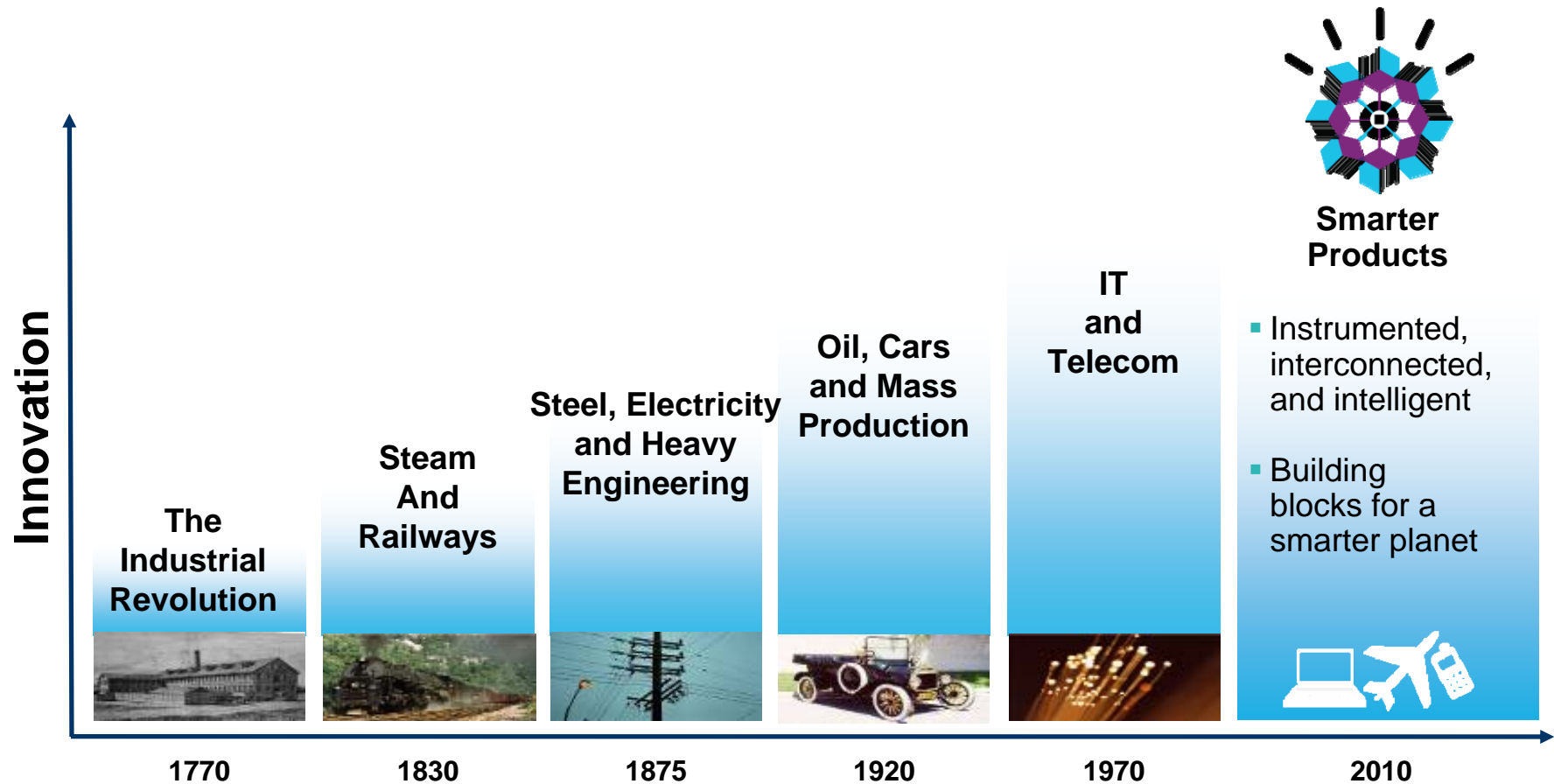
## Innovation today



*How do we innovate?*



We are on the verge of a new wave of innovation...



...where embedded software becomes even more crucial for product innovation and differentiation

## Electronics



- Apple's iPhone is completely instrumented, with GPS positioning software that helps the device know where you are

## Automotive



- 90% of innovation is based on electric and electronic systems
- 80% of this innovation is based on embedded software

## Aerospace and Defense

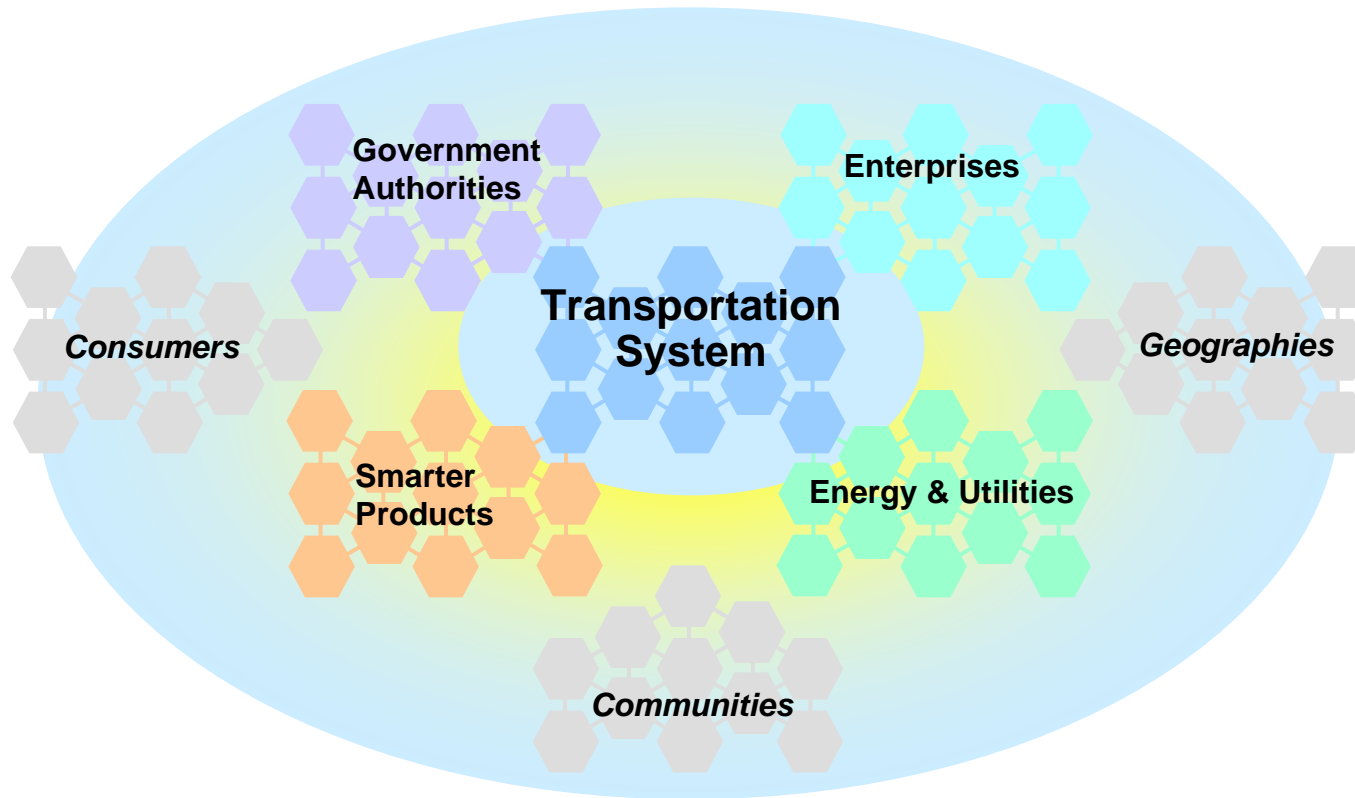





- F-22 Raptor (2003) contains 1.7 million lines of code
- F-35 Lightning II will have 5.7 million lines of code

### **Key benefits**

- ✓ Create new opportunities
- ✓ Increase revenue / profit
- ✓ Enhance customer loyalty
- ✓ Faster time-to-market

These smarter products will play a major role for enabling tomorrow's ecosystems, such as for smarter transportation



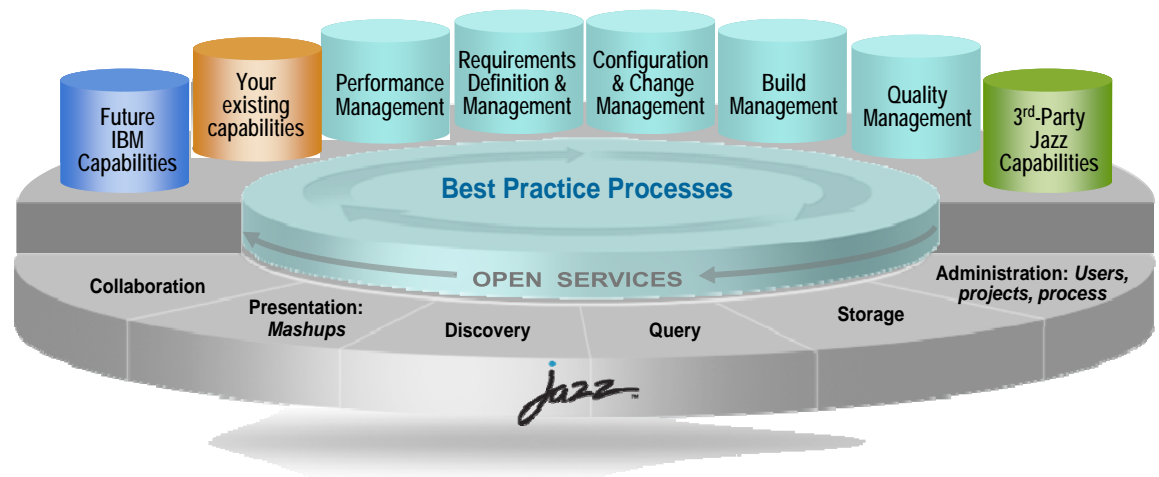
-   
*INSTRUMENTED*
-   
*INTERCONNECTED*
-   
*INTELLIGENT*

...with a core foundation of software delivery offerings that enable smarter products

- Rational DOORS Web Access **New!**
  - Rational Rhapsody **New!**
  - Rational Team Webtop **New!**
  - Rational MCIF for Systems **New!**
  - Rational Focal Point
  - Rational System Architect
  - Rational Team Concert
  - Rational Synergy / Change
  - Rational ClearCase / ClearQuest
  - Rational Quality Manager
  - Rational Build Forge
  - Rational Harmony
- Plus... **New Integrations**



**The Rational Software Platform for Systems**

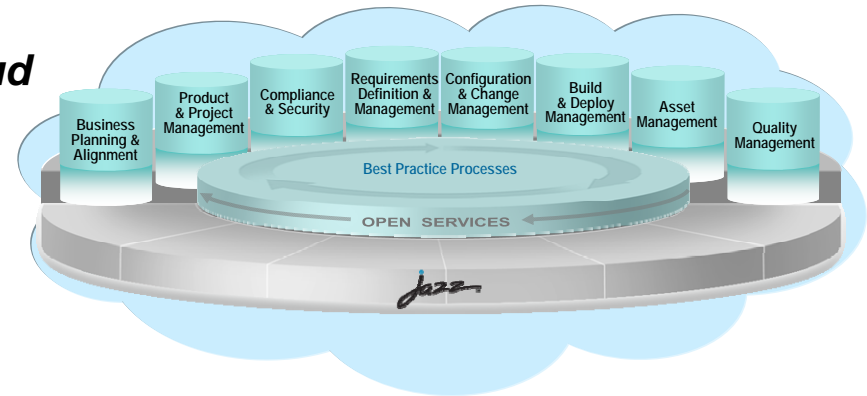


## Innovation journey continues

### *IBM Software Delivery Services for Cloud*

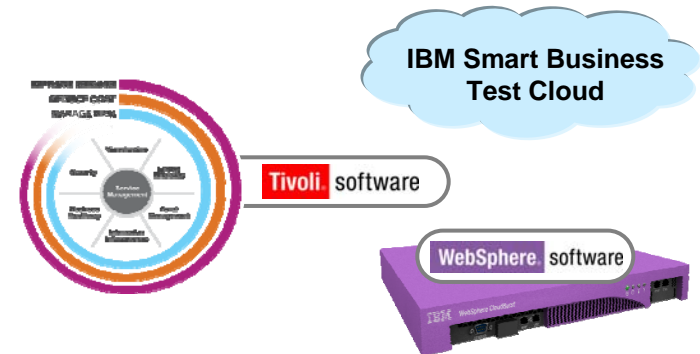
#### **Rational Software Delivery Services *ON* the cloud**

- Turnkey Collaborative Application Lifecycle Management solution for software and systems delivery
- Rational Team Concert, Quality Manager, Requirements Composer, Insight, and Build Forge hosted in the Cloud



#### **Rational Software Delivery Services *FOR* the cloud**

- Support WebSphere CloudBurst and IBM Smart Business Test Cloud
- Leverage Cloud resources with Rational Software Architect and Rational Build Forge
- Manage Cloud assets with Rational Asset Management, Quality Management and Tivoli Solutions





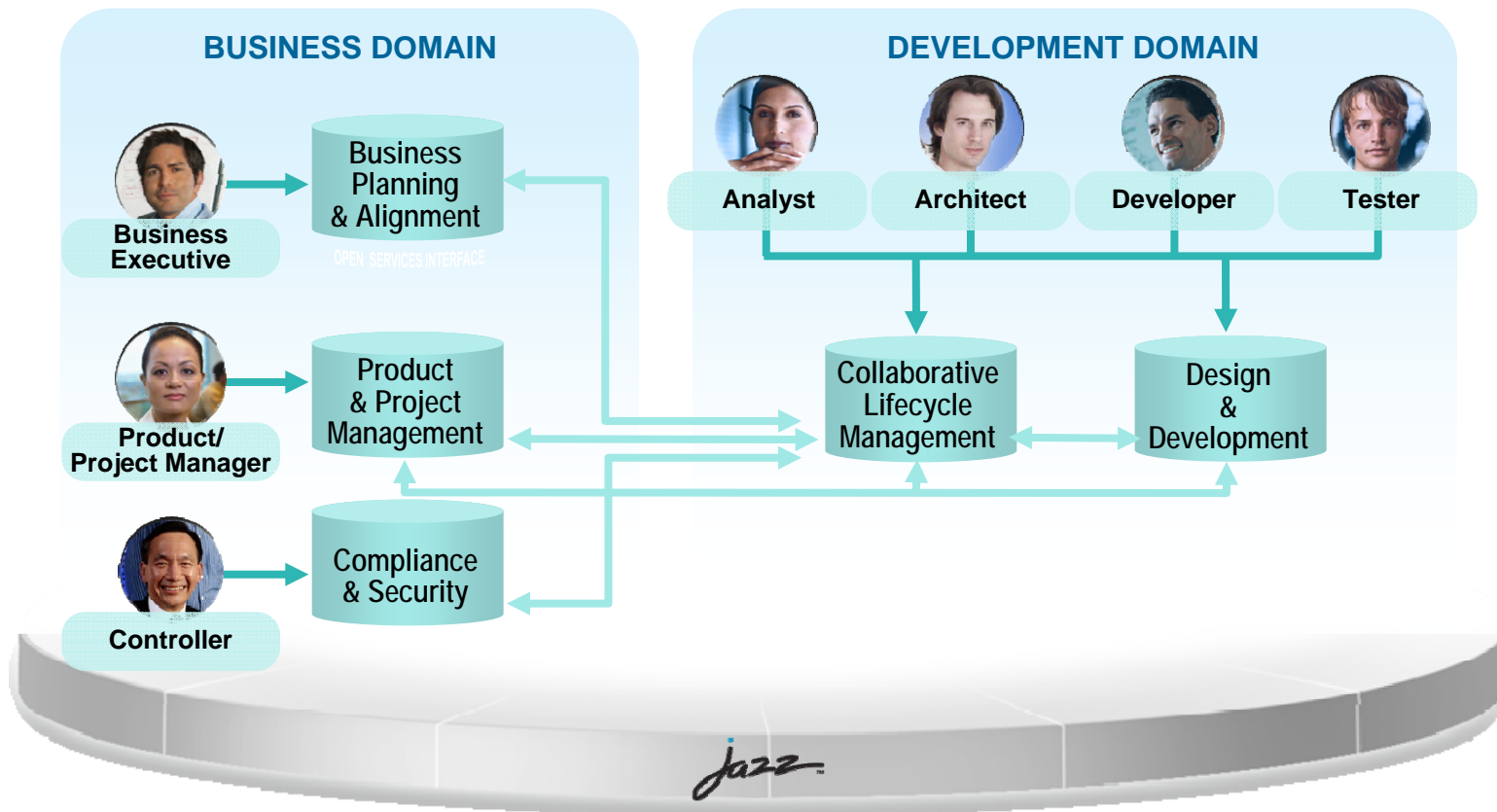
### Learn more at:

- [IBM Rational software](#)
- [Rational launch announcements](#)
- [Rational Software Delivery Platform](#)
- [Accelerate change & delivery](#)
- [Deliver enduring quality](#)
- [Enable enterprise modernization](#)
- [Ensure Web security & compliance](#)
- [Improve project success](#)
- [Manage architecture](#)
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## Phase 3: Deploying best practices and tools



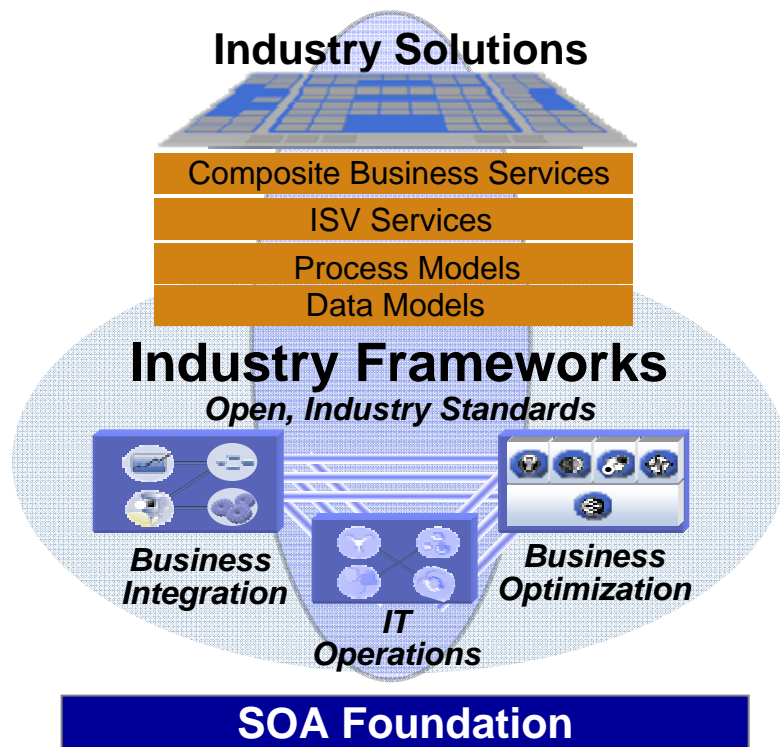


Innovation is about taking deep insight to create new value –  
for business and society



**Innovation resides at the intersection of invention and insight, leading to the creation of social and economic value.**

IBM continues to invest in industry assets and frameworks to help develop and deploy smarter products



## IBM Industrial Sector Industry Frameworks

- 
  - PDIF Product Development Integration Framework
- 
  - MIF Manufacturing Integration Framework
- 
  - IIF Integrated Information Framework