Modeling, Architecture, and Construction Keynote

Daniel Berg
STSM, IBM Rational Software
danberg@us.ibm.com

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The Rational Software Conference

Let's build a smarter planet.

The premiere software and product delivery event.

Originally presented in Orlando by
Greg Sikes
Director, Architecture & Modeling
IBM Rational Software
George LeBlanc
Program Director,
Architecture, Design & Construction
IBM Rational Software

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Agenda

- Vision for Architecture Management
- Portfolio evolution and roadmap

Customer Success: Create and sustain market demand
Hydraulic hybrid delivery vehicles - Eaton / UPS

What's smart?

- Innovative technology for urban delivery trucks in stop-and-go traffic
- Smart software to optimize energy usage and reduce greenhouse gases

Smarter business outcomes

- 60-70% increase in fuel economy, according to EPA
- 40% reduction in CO_2 emissions

How Rational enables smarter products

- Systems architecture and software design and development to optimize system performance
- Automatic generation of in-vehicle software code

"The suite of Rational tools, including Rhapsody, DOORS, ClearCase and ClearQuest, provides Eaton ***an integrated software framework that allows us to deliver innovative products more quickly and efficiently."***

Ikerlan

Smarter wind power solutions

What's smart?

- Wind turbine systems that automatically optimize performance based on environmental factors
- Customized product variations that address the needs of a global energy market

Smarter business outcomes

- 90% reduction in development time for each customized wind turbine model
- 25% reduction in cost of development for wind turbine control systems

How Rational enables smarter products

- Model driven development for optimization of wind turbine control systems
- Product line engineering to manage software-based product variations

"Our use of Rational Rhapsody for model-driven development, integrated with BigLever Gears for product line engineering, allows us to reuse software assets and manage variations at a pace that lets us keep up with market requirements."

Businesses are facing unprecedented challenges

Shifts from Operational to Strategic IT

Globalization

Mergers and Acquisitions

Differentiation

Business Continuity Management

Business transformations

Regulatory mandates

Market shifts

Continual customer innovation

IT Saturation

Transparency, Regulatory Compliance

Seize business opportunities

Achieve precision in desired business outcomes

Execute with reduced risk and cost

How can architecture help your business?

Understand What You Have
- Current state analysis
- Your IP and Assets

Improve What You Have
- Find incremental improvements
- Manage business transformation

Satisfy Mandated Compliance
- Regulatory or contractual
- DoDAF, TOGAF, FEA (iRMA), etc.

Pass an Audit
- Architecture & business transparency
- Repeatable, documented

Manage the Portfolio
- Applications/Products
- Improved reuse across organization

Return on Assets
- Leverage elements across subsystems and product lines

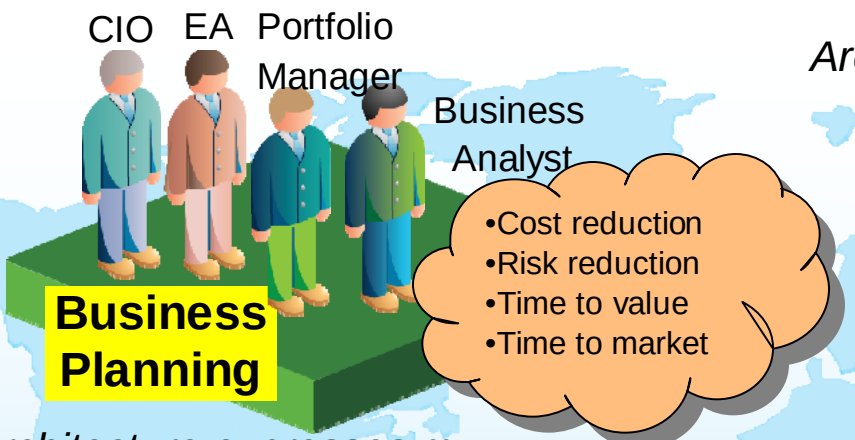
Visualize and Communicate
- Beyond basic drawing tools

Common Project Starting Points
- Initiate new projects from a common starting point based on an EA model

Manage Outsourcing
- Customer: Req'ts, specs, testing
- Vendor: Actual architectures

Manage Packaged Applications
- Integrate with rest of architecture

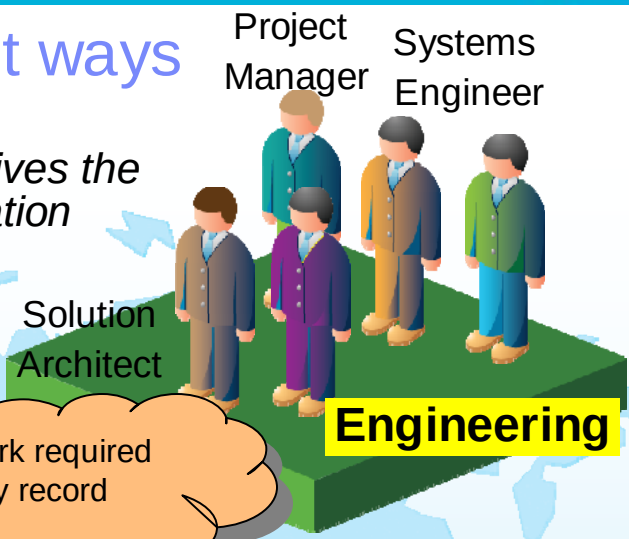
Customers value architecture in different ways



- Cost reduction
- Risk reduction
- Time to value
- Time to market

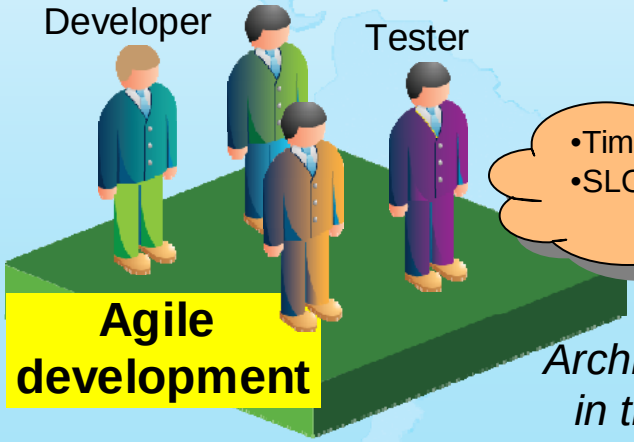
Architecture expresses my business needs and the collaboration between various stakeholders

Architecture drives the implementation



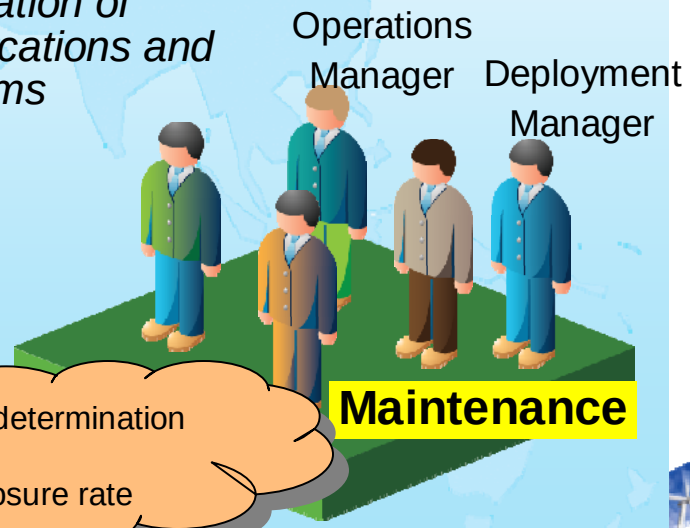
- Rework required
- Safety record

Architecture is documentation of deployed applications and systems



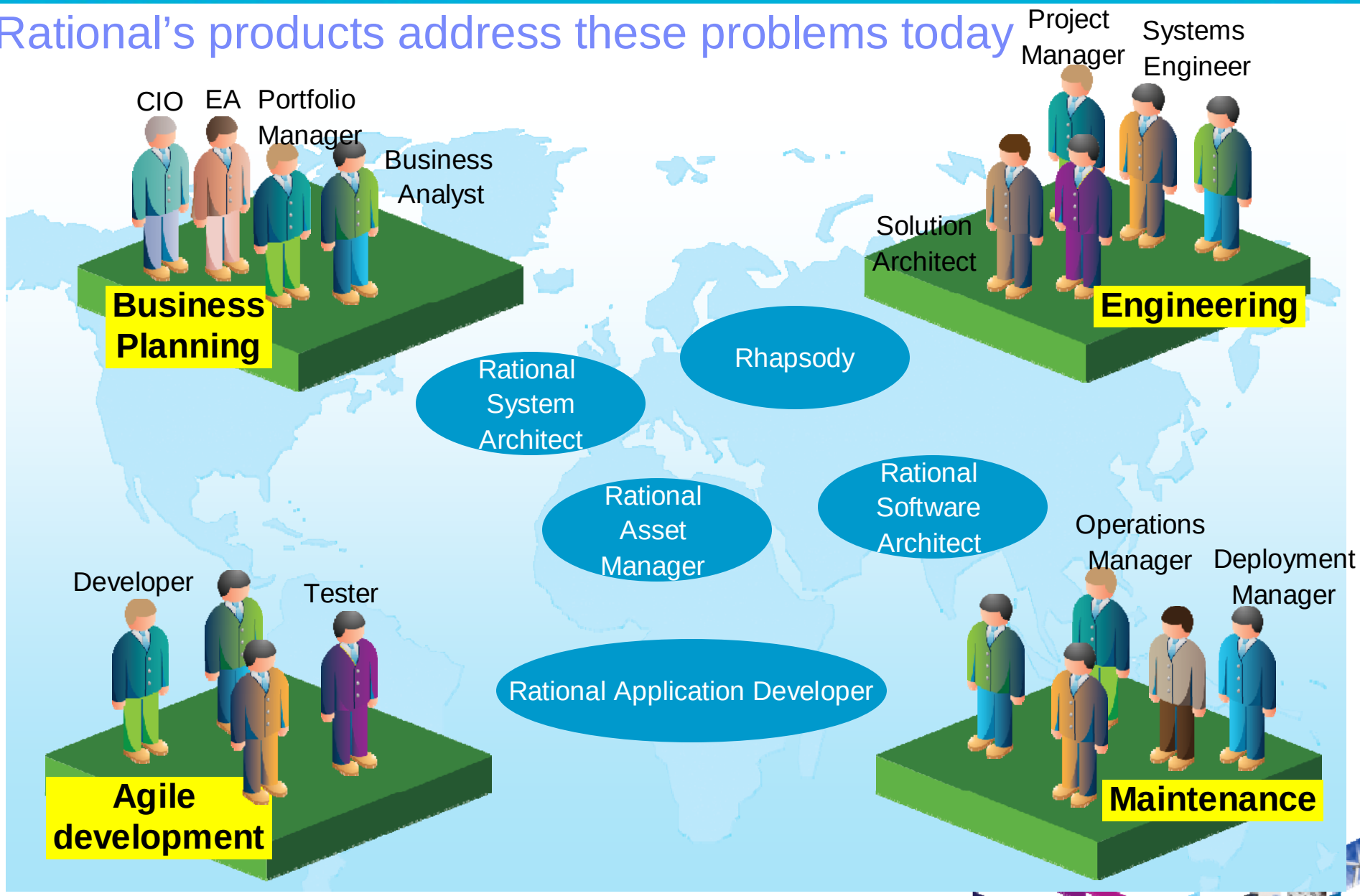
- Time to release
- SLOC productivity

Architecture is in the code



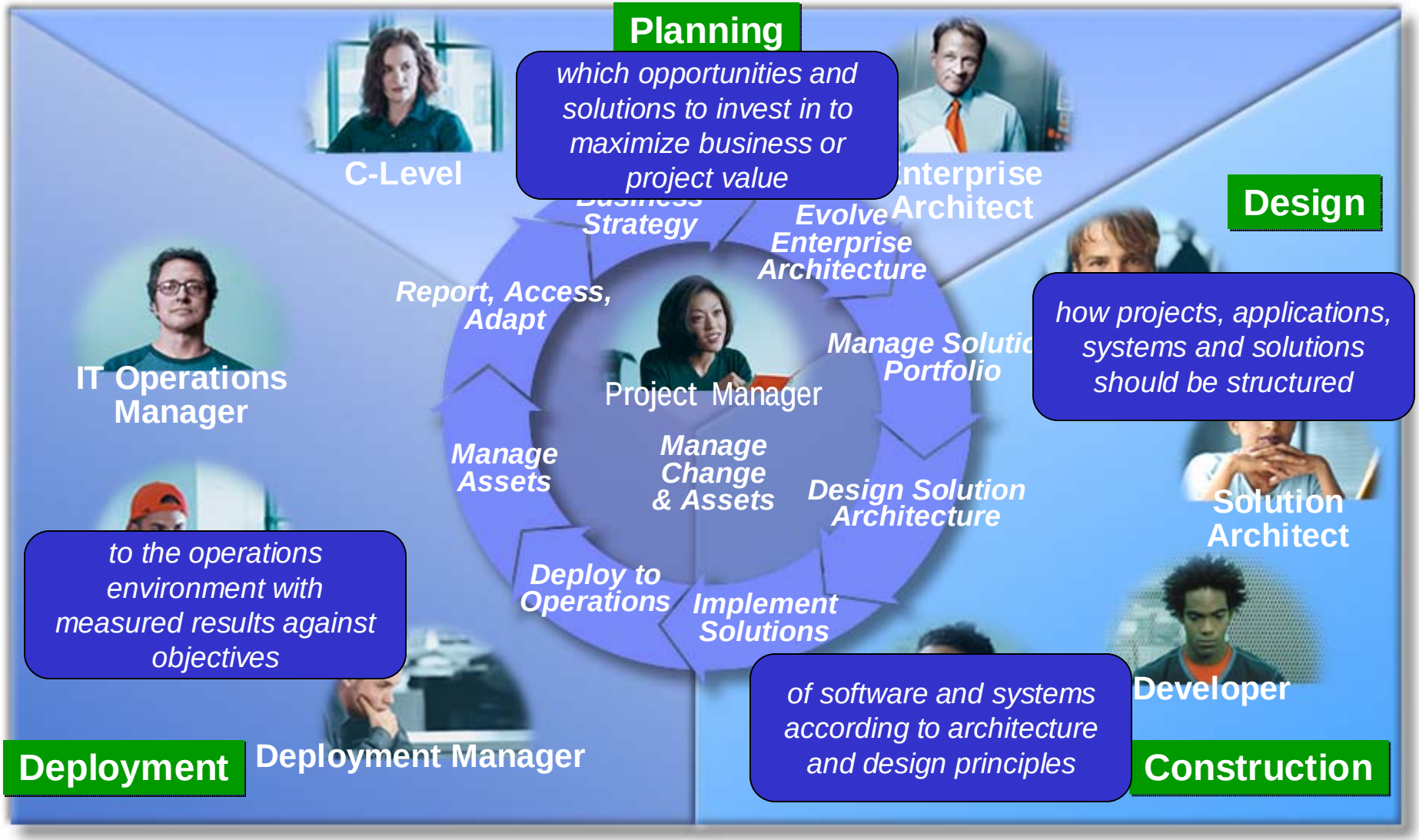
- Problem determination efficiency
- Defect closure rate

Rational's products address these problems today



Where do I start? How can I grow to a larger scope of solution?

Organizing starting points around disciplines



Portfolio evolution guiding principles

Define role of products more clearly

- ✓Distinguish Planning, Design, Construction, Deployment, and Management
- ✓Break down silos to reduce overlap in functionality

Protect & expand customers' past investments

- ✓Transition to new platform and interfaces in an evolutionary manner
- ✓Provide value from day 1

Broaden scope of stakeholder value

- ✓Make architecture products more relevant to non-developers
- ✓Leverage ubiquitous use of Web and Office tools

Use a more effective strategy for product and workflow integration

- ✓Move away from point-to-point integrations
- ✓Use a common platform for web interfaces

Include industry- & domain-specific standards and content

- ✓Basis for "workbench" offerings
- ✓Leverage SIs and other partners for subject matter knowledge

Build a comprehensive architecture management capability

- ✓Incorporate asset management & CLM into workbench scenarios across the portfolio

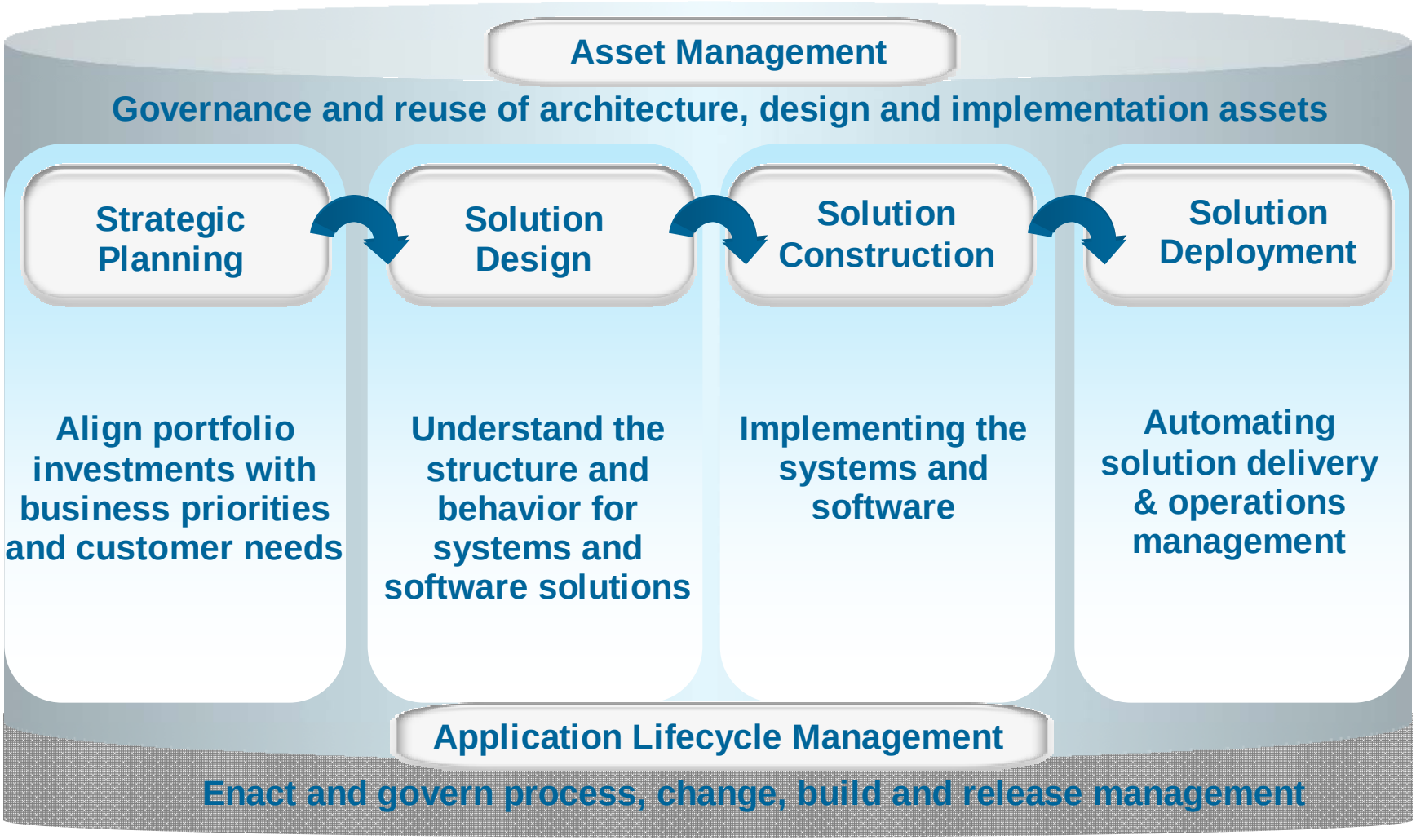
Architecture Management

Rational's Architecture Management strategy takes the core disciplines of enterprise architecture and model-based design & development and integrates them with the management services of asset management & lifecycle management to create a more collaborative approach to creating and managing the architecture for software applications & systems

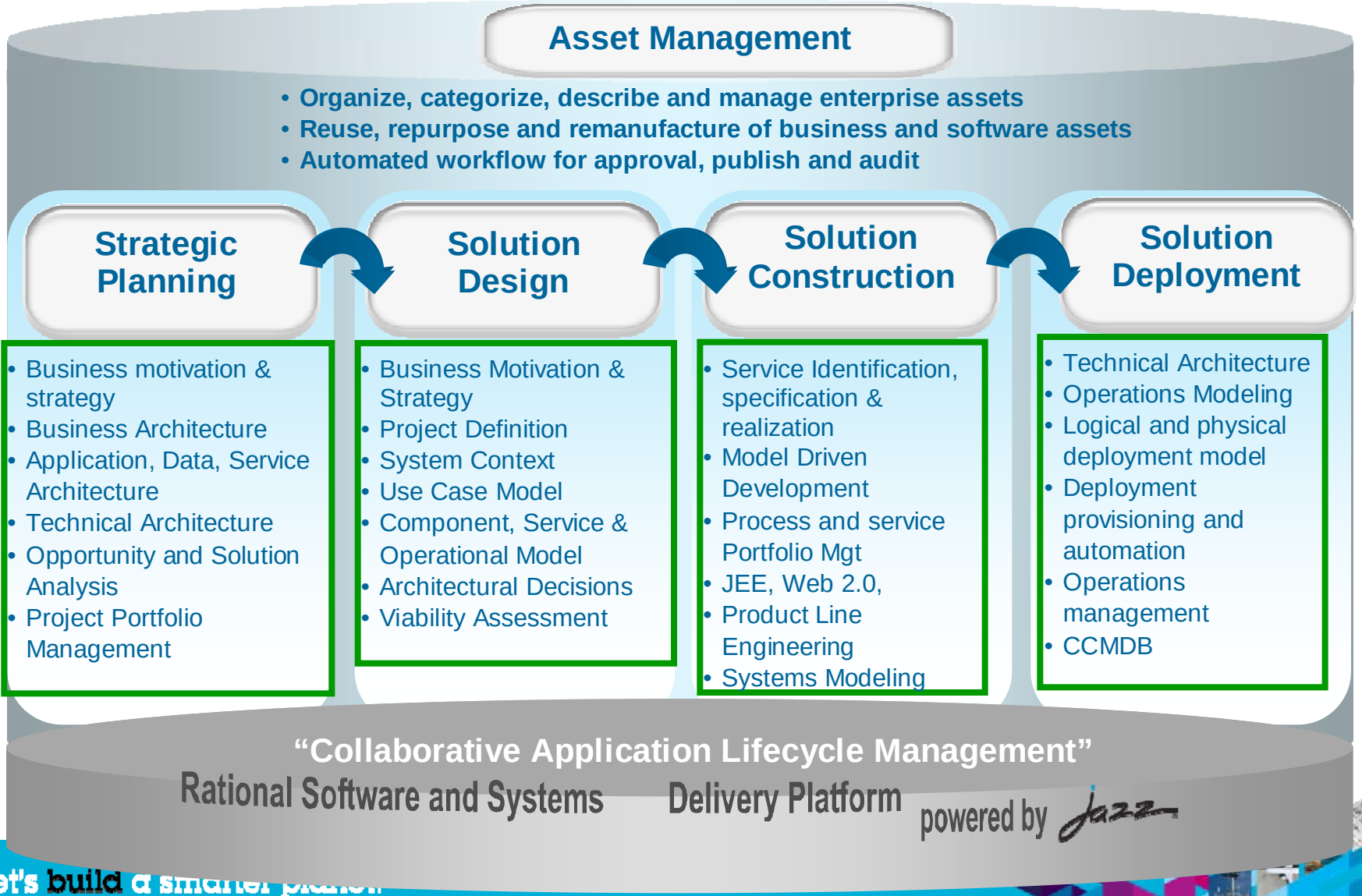
Architecture Management value to customers:

- ✓ Improves communication, integration and governance across the stakeholder community
- ✓ Better aligns business objectives & strategy with workbench implementation & deployment
- ✓ Faster time-to-value and overall cost savings

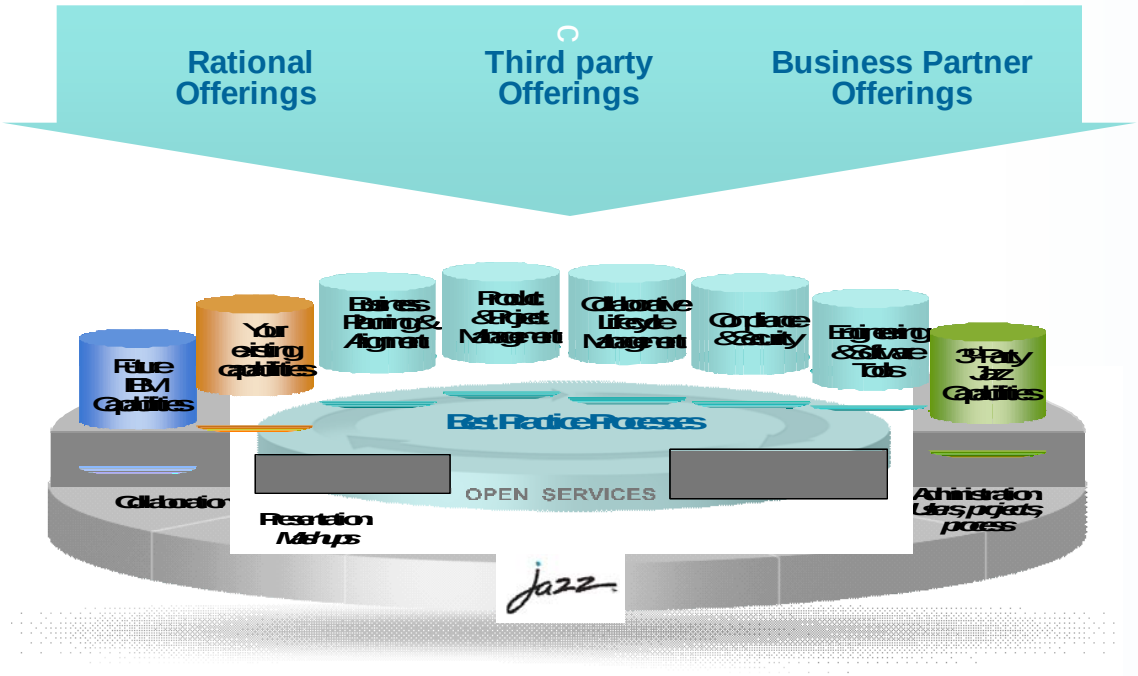
Architecture Management



A vision for supporting Architecture Management in the future



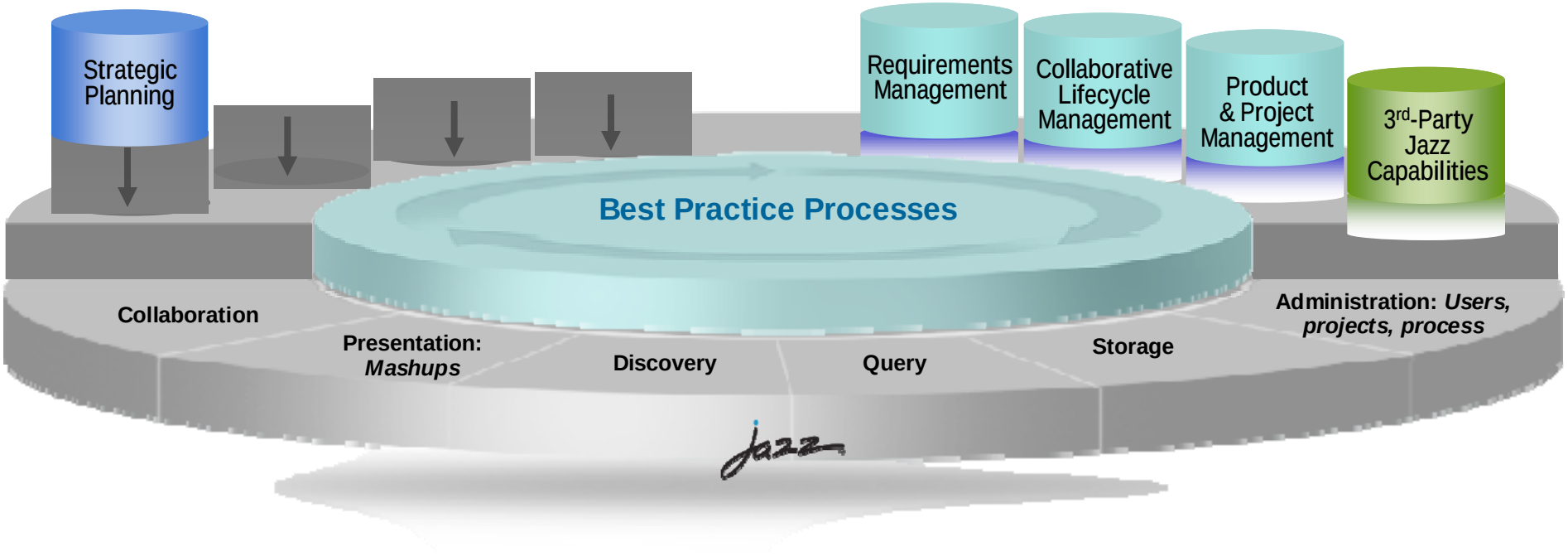
Jazz is a platform for transforming software delivery



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

Jazz is…

- Our vision of the future of systems and software delivery
- A scalable, extensible team collaboration platform
- An integration architecture enabling mashups and non-Jazz products to participate
- A community at Jazz.net where Jazz products are built
- An evolution of our portfolio over time

Building on the Foundation

Extending Jazz for supporting Architecture Management