

Advancing the Business/IT linkage with SOA Governance and Service Lifecycle Management

> Dave Locke, Director Rational GTM Strategy September 2007

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## Governance is critical to overall SOA Success

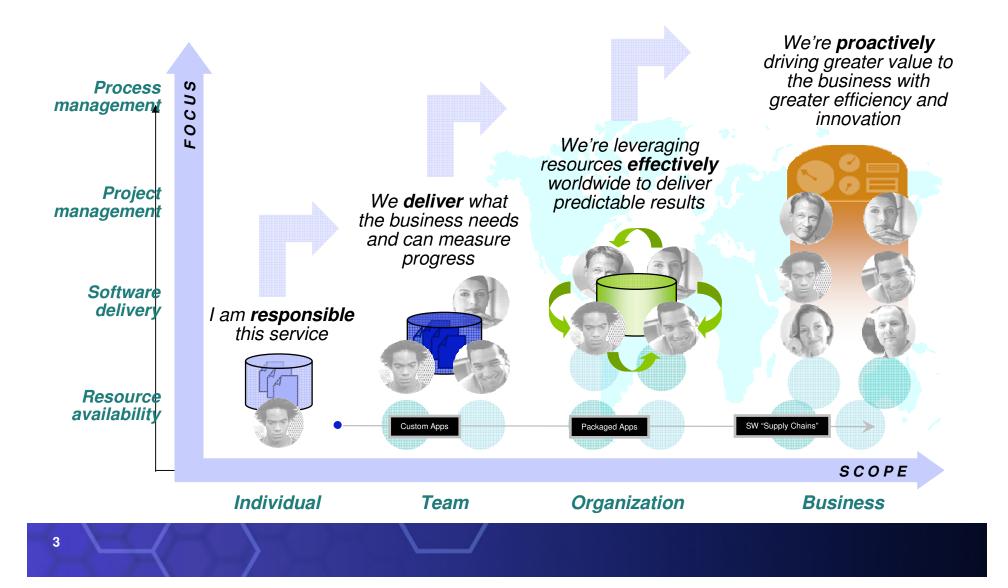


Key Enabling Tools Enhanced WebSphere Registry & Repository New Rational Asset Manager Fostering a culture of reuse SOA Governance and Mgmt Method GBS SOA Services



### Governing an SOA Project Connects LOB to IT Govern software delivery in the context of the business

**IBM SOA** 

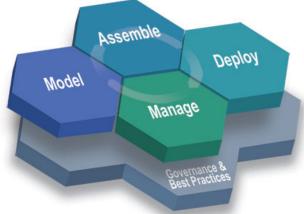


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SOA Governance and Service Lifecycle Management supports Business and IT alignment

### Agenda

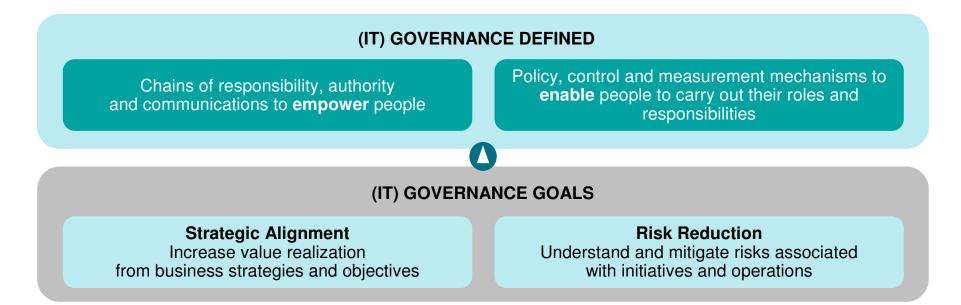
- SOA Governance and Management Method
- SOA Center of Excellence and Services
- SOA Governance Registry and Repository Strategy
- Service and Asset Management





### Defining governance

#### Meaningful governance helps enterprises both preserve and create value



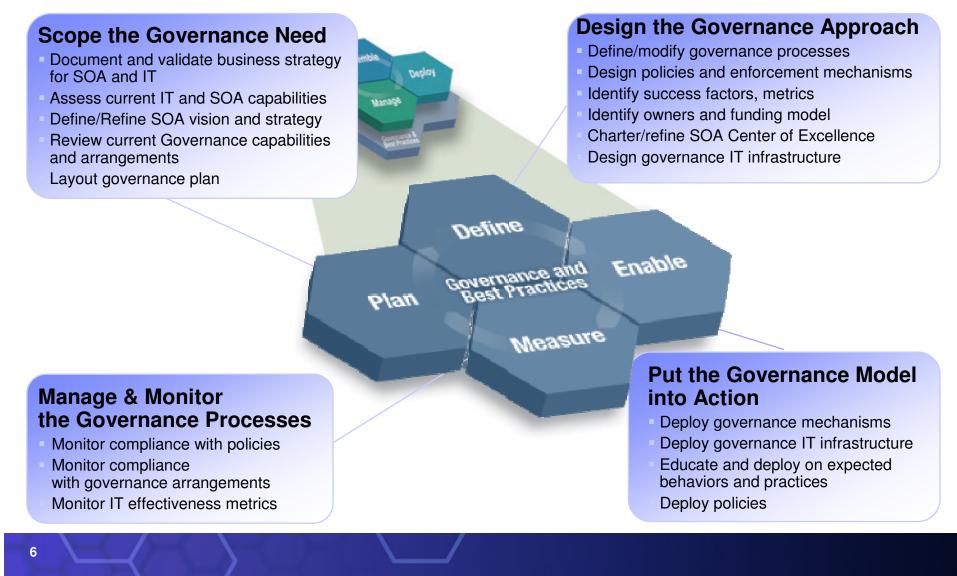
#### Governance is not management

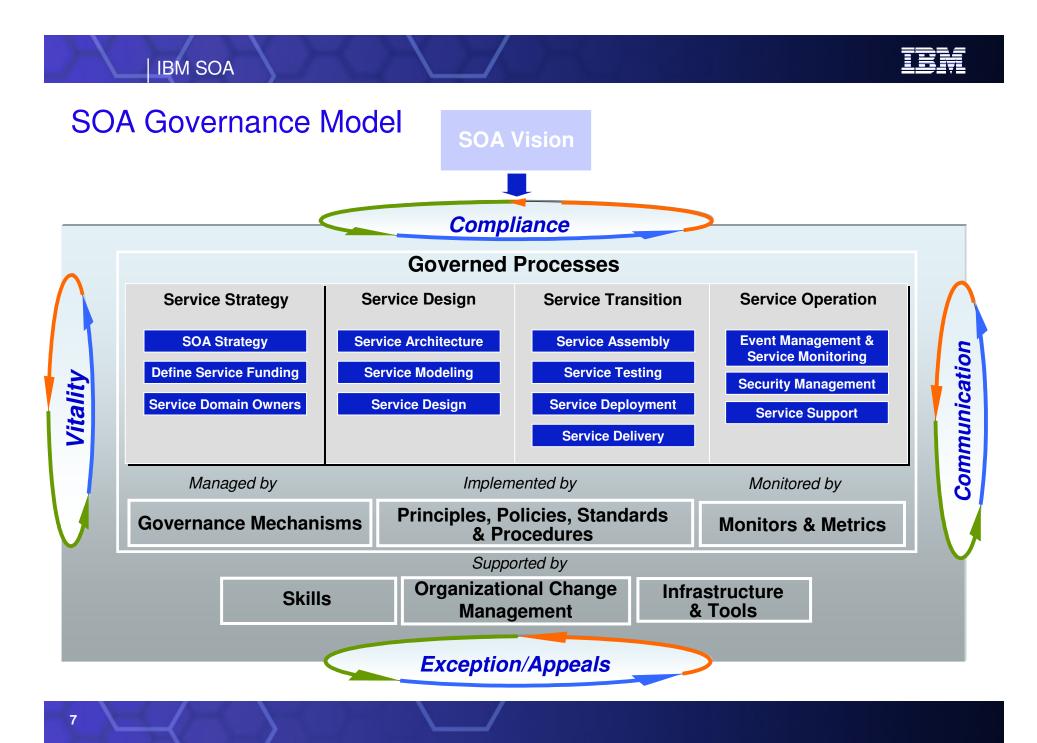
- Management implements within the policy and process created by the governance activity
- Governance must be distinct from management to be meaningful oversight to set direction, enable and measure

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# SOA Governance Lifecycle drives business/IT alignment at the beginning of SOA deployment

**IBM SOA** 







### SOA Governance and Management Method aligns business and IT strategy for successful SOA implementation

- Customer tested SOA Governance Method
- Leverages existing governance model
- Detailed governance process guidance
- Comprehensive framework and processes span lifecycle of SOA governance
- Methodology to help clients establish SOA Centers of Excellence

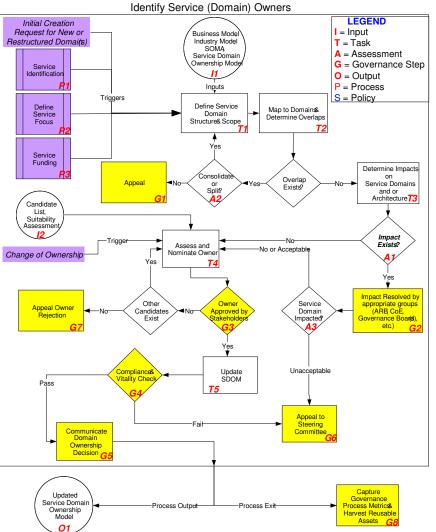
Plan	Define	Enable	Measure
Determine the Governance Focus	Define the SOA Governance Model	Implement the SOA Governance Model	Refine the SOA Governance Model
Tailor method for goals / environment	Define and refine governance processes	Implement the transition plan	Measure effectiveness governance processes Measure effectiveness of organization change Review and refine operational environment
Define scope of governance	Define organizational change	Initiate SOA Org Changes	
Understand current Governance model	Define IT changes in SOA development	Launch the SOA Center of Excellence	
Identify 'Reuse' elements	Define Metrics and Measures for success	Implement infrastructure for SOA	

Continuous SOA Governance Process Measurement & Improvement



# Service Domain Ownership Model helps business and IT cooperation

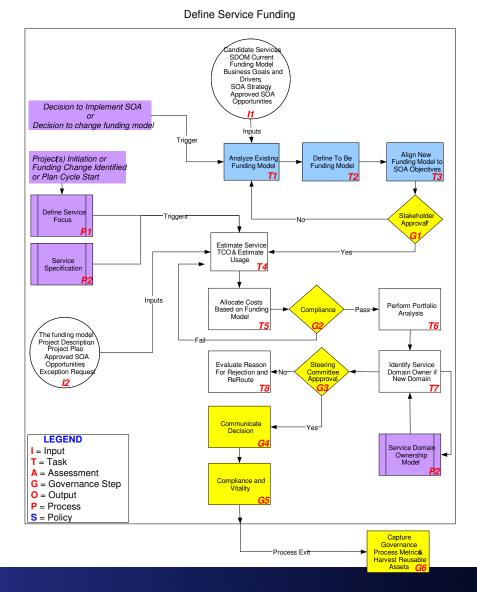
- Service Ownership is one of the most important yet difficult processes to implement for SOA.
- The Domain Ownership Model *should* align with the businesses structure but Political and Cultural issues increases the difficulty to adopt and implement.
- Commitment throughout the organization but especially at higher levels in the organization will make this less difficult.
- This process will make possible a number of SOA benefits and drive the adoption of other processes like the Funding Process which is closely linked to Domain Ownership





### Incentive to align is driven by the Define Service Funding Model

- Important yet difficult processes to implement for SOA.
- Drives a number of SOA benefits and make SOA adoption possible.
- Diagram addresses service funding definition and the governance of a defined model, but not the funding model.
  - Funding Model should address funding of initial projects but more importantly day to day funding of services, their use, maintenance, development and versioning.

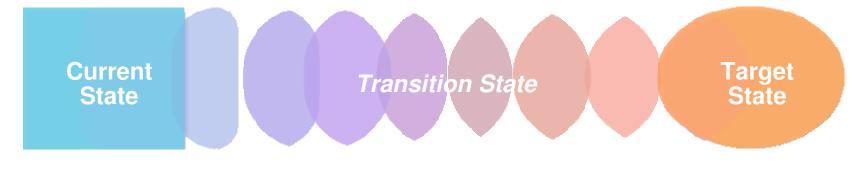


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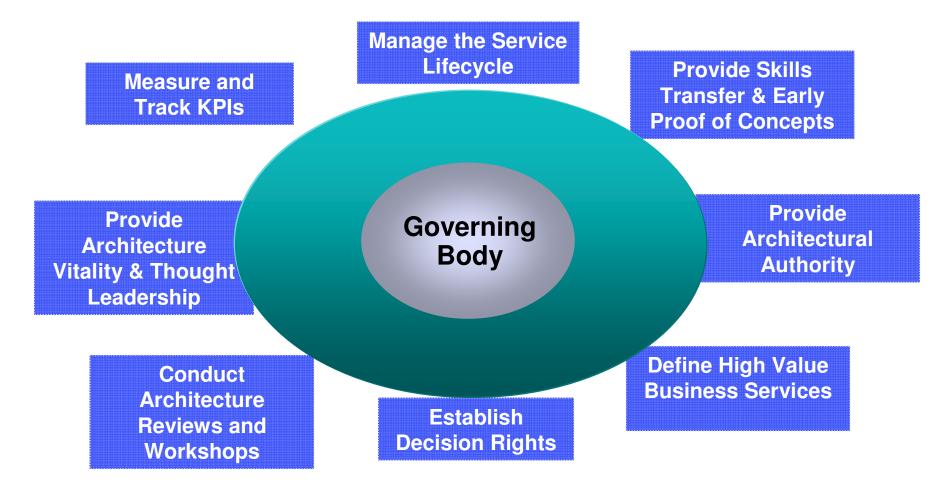


SOA Governance and Management Method vision of success includes the Organizational Change and Change Management

"Help ensure that people impacted by the changes	The Change Management Pattern will: Mitigate risks with appropriate oversight & control
<ul><li>Understand</li><li>Accept</li></ul>	Increase reuse & buy-in promoting the use of Services
<ul> <li>Are Prepared for, and</li> <li>Are Committed to the changes that will affect them."</li> </ul>	<ul> <li>Speed Adoption of the Governance model enabling a successful implementation</li> <li>Facilitate the achievement of program benefits</li> </ul>

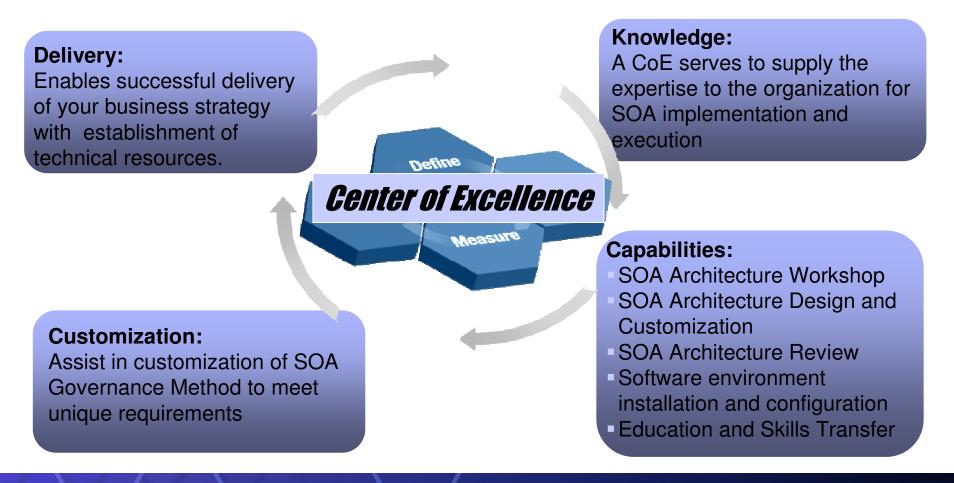


## A Governing Body is needed to manage shared services across the business/IT organization



# Center of Excellence (CoE) can improve the opportunity for SOA implementation success

Governance Method supplies templates to create CoE

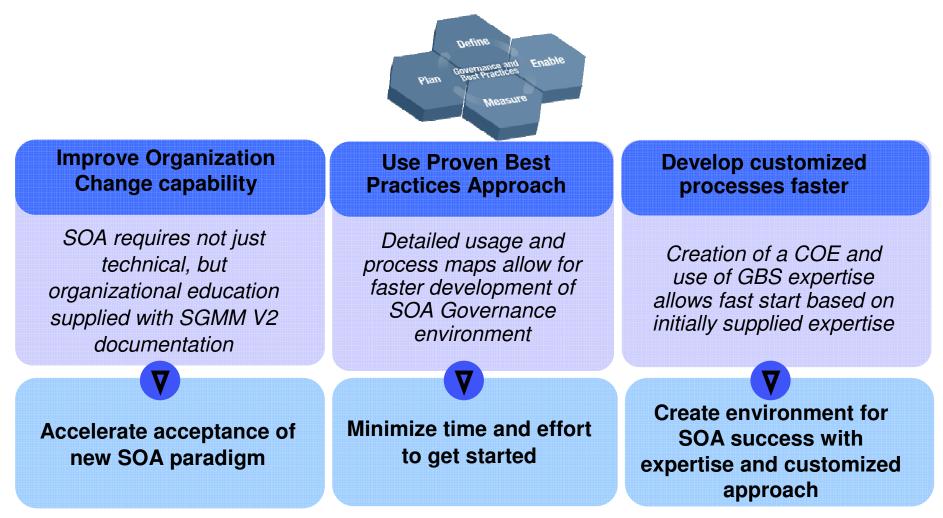




### IBM offers 6 key service offerings to assist in SOA implementations. All supported by SOA Governance

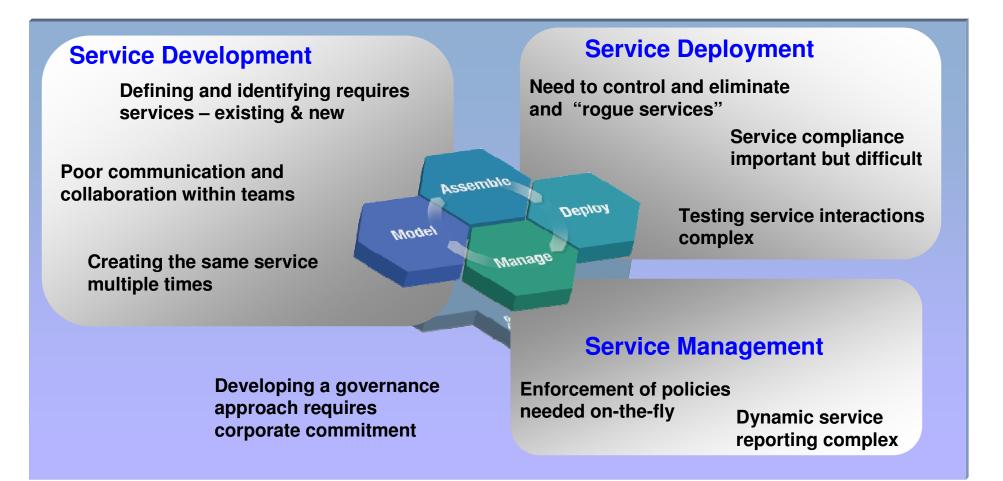
SOA Governance	SOA Strategy	<ul> <li>Helps a C-level exec layout a complete SOA Strategy, Architecture and Roadmap to transformation organization and systems towards a service oriented model.</li> </ul>
	SOA Diagnostic	<ul> <li>For clients that have already started their SOA transformation but want IBM to evaluation how they are doing and make improvement recommendations.</li> </ul>
	Business Process Management Enabled by SOA	<ul> <li>It is a discipline that enables effective management of core business processes across an organization.</li> </ul>
	SOA Implementation Planning	<ul> <li>Helps a Line of Business or Application Group define future business process, the high impact services and the corresponding solution architecture</li> </ul>
	SOA Design, Development, and Integration Services	<ul> <li>The core implementation of an SOA solution. It is designed to be a follow-on from an early BPM or SOA planning phase.</li> </ul>
	SOA Management	<ul> <li>Helps an organization ensure that the required processes, controls, responsibilities and activities are deployed to successfully manage SOA solutions</li> </ul>

Getting started with SOA Governance is faster and easier with SOA Governance Method, a CoE and Services



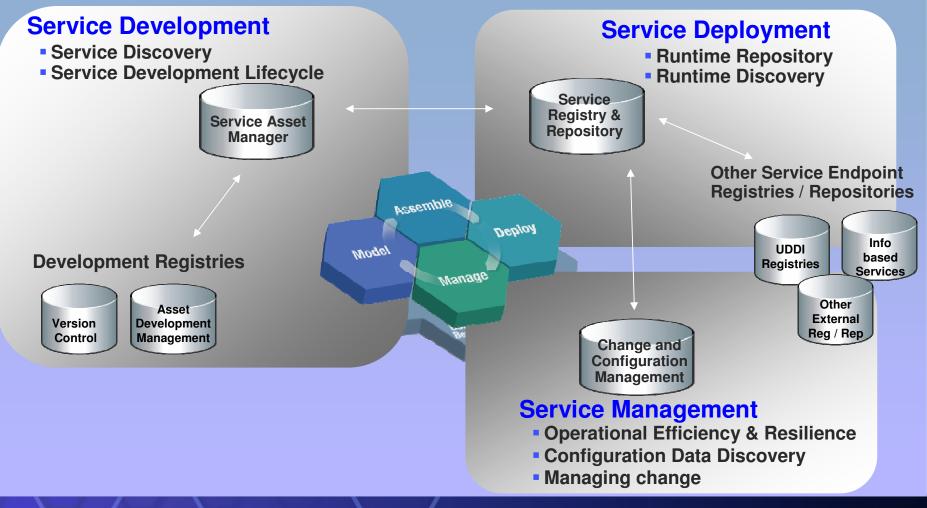


## Each phase of the SOA Lifecycle has different *challenges* requiring different governance capability





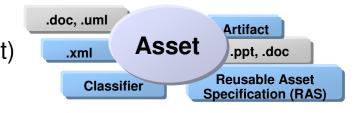
Governance is supported by a federated set of capabilities to meet the challenges of service lifecycle management



### Development and delivery asset management tracks IT assets

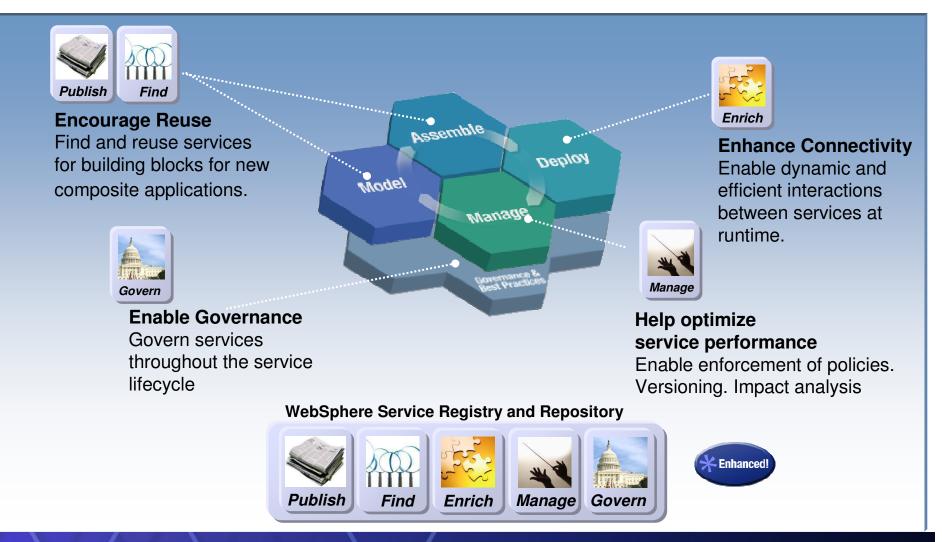


- Discovers existing assets to leverage
- Assists in identifying assets to harvest and package as a Service
- Manages assets under development
- Handles multiple types of assets
  - Services, source code, documentation, presentations,
    - patterns, process flows
      - (Collections of artifacts associated with a particular business requirement)



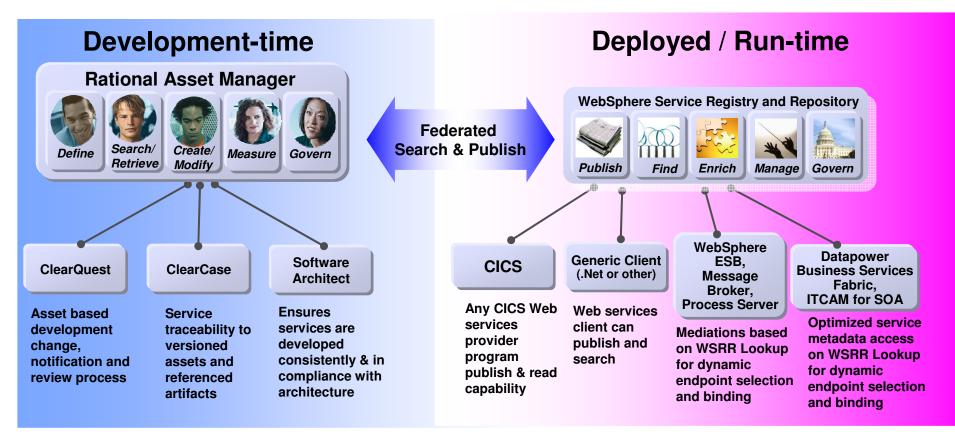


### An SOA requires management and control of services at runtime





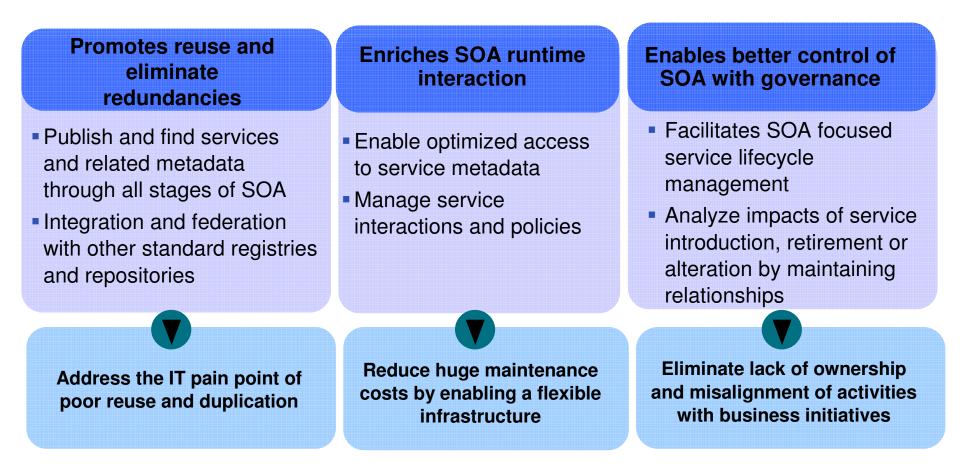
## Development and deployment of services in SOA will have different requirements within the Lifecycle



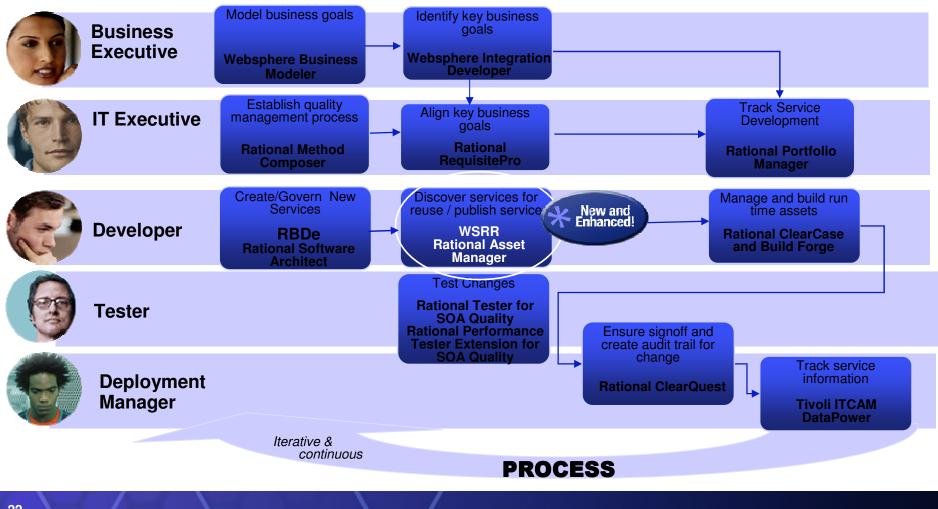
- Not every deployed service is a reusable asset and not every reusable asset is a deployed service
- > A service will be one of many types of assets managed by Rational Asset Manager



## Service management and control will require the functionality in a federated registry/repository strategy



## Streamline Service Lifecycle Management by automation and metrics gathering increases success



Debloy



## Governance should not an "afterthought"; it matters because without it success is not achievable

Lack of working governance mechanisms in midsize-to-large (greater than 50 services) post-pilot projects will be the most common reason for project failure (0.8 probability). *(Gartner)* 

#### Focus on business benefits

- Add flexibility to business process
- Improve time to market

Governance isn't optional- it's imperative. Without it, ROI will be low and every project out of pilot phase will be at risk. *(Gartner)* 

#### Mitigate risk and regain control

- Maintain quality of service
- Ensure consistency of service

Professional investors are willing to pay <u>premiums of 18-26% for stock</u> in firms with high governance. (McKinsey Quarterly)

#### Improve team effectiveness

- Measure the right things
- Communicate clearly between business and IT



## Key Takeaways



- 1. Adopt an end-to-end framework to support a long-term approach toward service orientation
- Implement a Stakeholders Management & Communication Strategy to gain adoption of ESB and service orientation
- 3. Communicate clear roles and responsibilities, including job impacts, at various levels of the organization
- 4. Establish Governance Scenarios to promote an "enterprise view" on shared services
- 5. Integrate the Services Lifecycle into the current SDLC or systems delivery process
- 6. Apply lessons learned from previous enterprise effort to build momentum and gain support from management
- 7. Don't start with an empty whiteboard IBM can help.





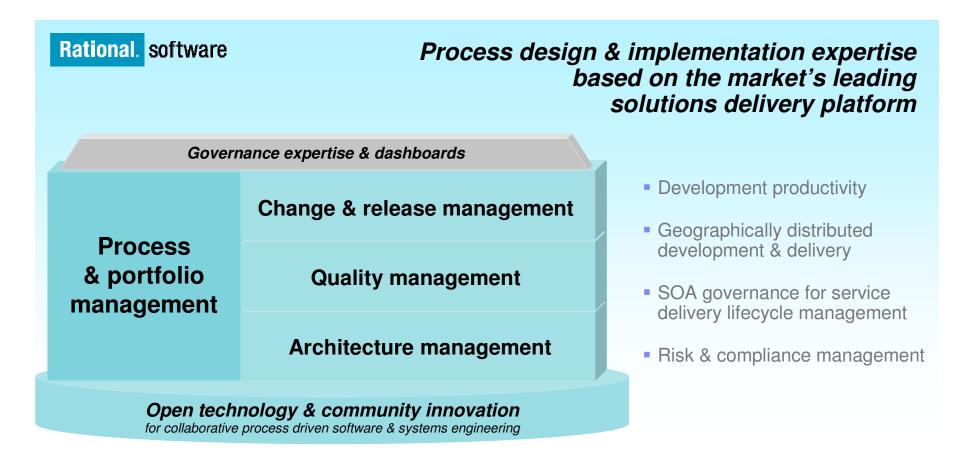


## Additional information to follow

IBM SOA



## IBM Rational Software Delivery Platform What we offer







## Process and portfolio management



#### Aligning business goals, best practices, and projects for improved productivity and predictability

Process & portfolio management

- Manage enterprise value
  - Align business and IT
  - Balance risk and return
  - Provide visibility, clarity and accountability
- Monitor progress and streamline decision making
  - Leverage resources anywhere
  - Standardized, proven processes
  - Increase project success
- Control risk and change
  - Continuously measure to reduce risk
  - Enable lifecycle change management
  - Meet compliance needs





Change & release management

## Change and release management

Governance Dashboard

#### Rational ClearCase

Sophisticated version control system for source code, files, directories and other development assets across the lifecycle

#### **Rational ClearQuest**

Highly flexible workflow based defect and change tracking system for managing issues throughout the project lifecycle

#### **Rational Build Forge**

Automates build management by maintaining billof-materials list changes and content of builds for accurate testing, problem resolution and compliance management

#### Tivoli Provisioning Manager

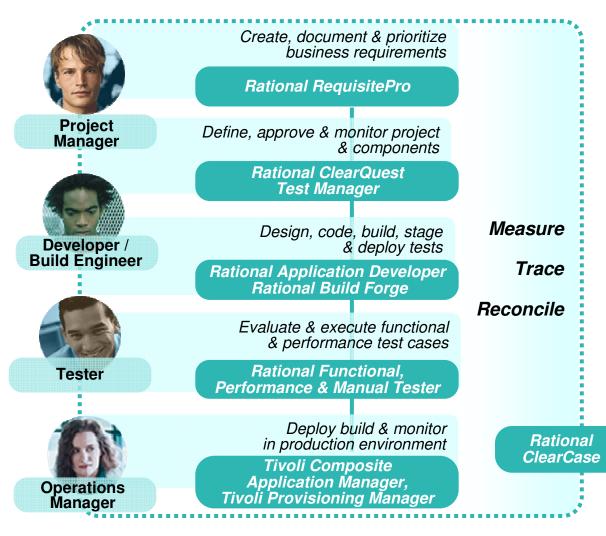
Automation for provisioning of the development environment

#### Improving effectiveness with process automation, build management, reporting, and traceability

- Accelerate software delivery for business agility
  - Projects delivered on schedule
  - Teams are connected and more efficient / productive
  - Faster response to business and customer needs
- Reduce cost with efficient teams and better quality
  - Scalability, standards and automation create significant efficiencies
  - Seamless communication and coordination of global teams
  - Better controls and rapid feedback improve quality throughout the process
- Effectively govern development and reduce risk
  - Compliance management "baked in" to everyday work
  - Consistently, enforced processes
  - Audit trails throughout the lifecycle
  - Make better decisions. faster



## Quality management



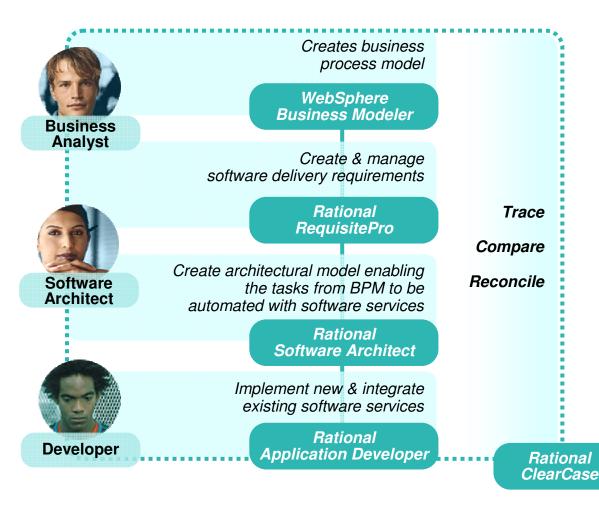


## *Govern quality across the delivery lifecycle*

- Align teams to work efficiently across the quality management lifecycle process
- Proactive response to quality issues earlier in the lifecycle
- Collaborative process automation & enforcement (e.g., outsourced testing)
- Extensible framework ensures performance, function, and scale of software including testing software for packaged applications



## Architecture management





#### Models, designs, and rapidly builds resilient architectures for SOA, systems, and applications

- Linkage of BPM & service implementation
- ✓ Processes, patterns & profiles
- Architecture to code transform
- Architectural evolution & reconciliation
- SOA governance framework automation and tracking





## Teams and functions are organizationally distributed The new norm

- Realities
  - Rapid pace of change new business models, competitive pressures
  - Costs to "keep lights on" constrains new investment opportunities
  - Constant organizational flux (acquisitions, sourcing, etc)
  - Emergence of extended communities of expertise and open source



- Goal: Drive value & reduce cost
  - Work aligned to markets & customers
  - Cost-effective sourcing
  - Leverage talent & communities
  - Increase flexibility & responsiveness