



Moving Ahead With SOA

Business services development

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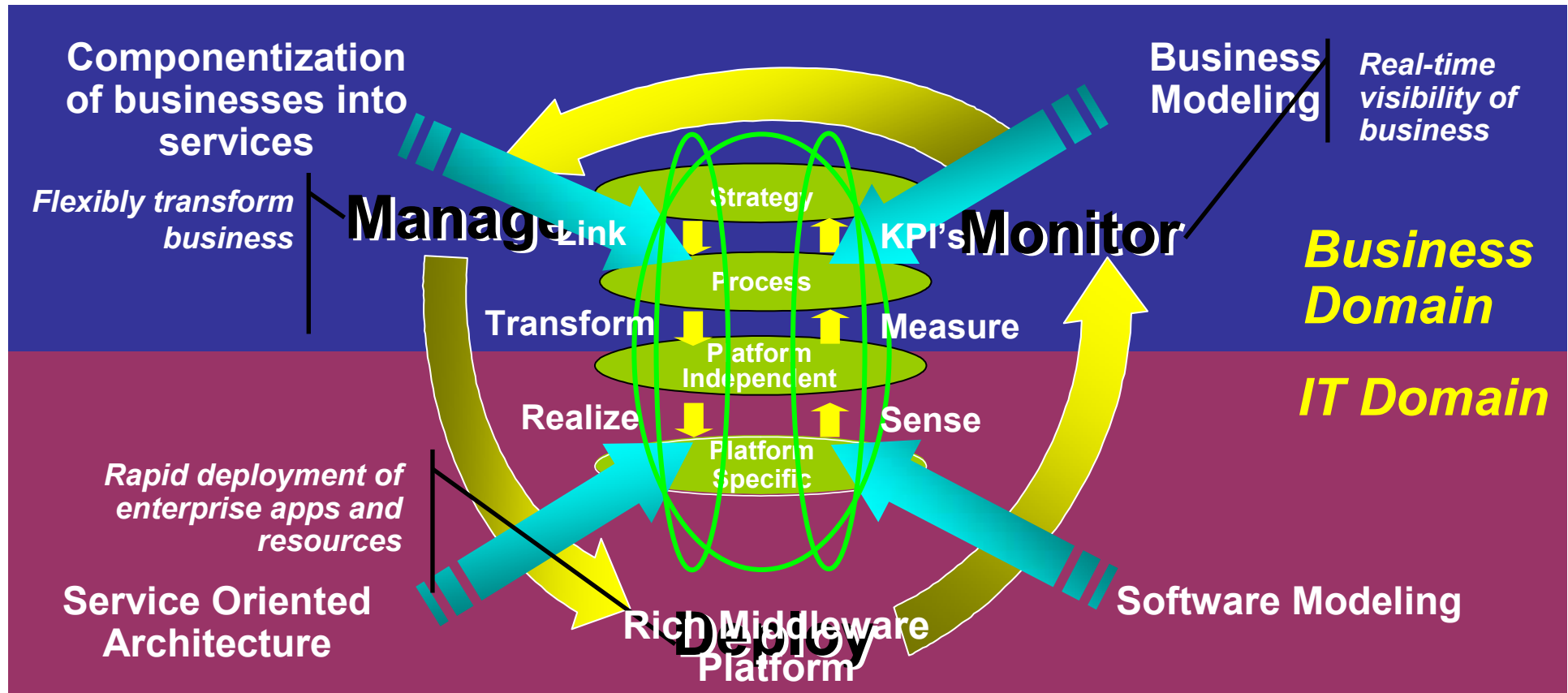
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The IBM Vision for Business Driven Development



Business applications will be deployed, monitored and managed through the manipulation of multi-level models

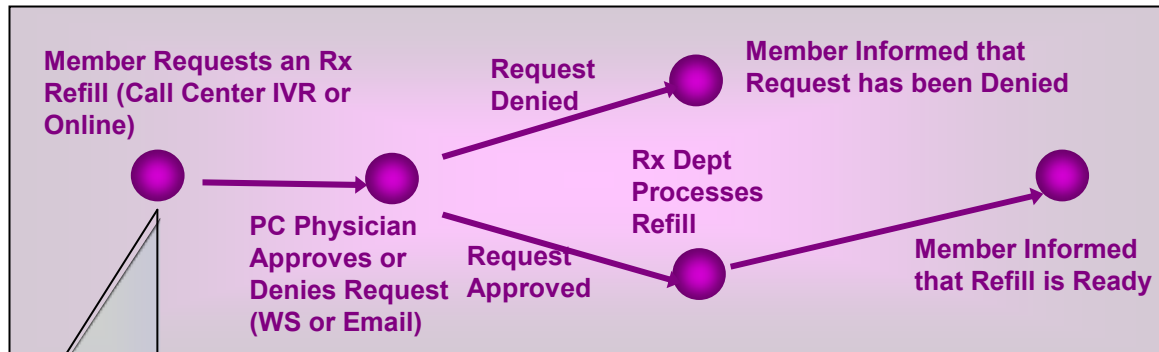


A Simplified Example of Services



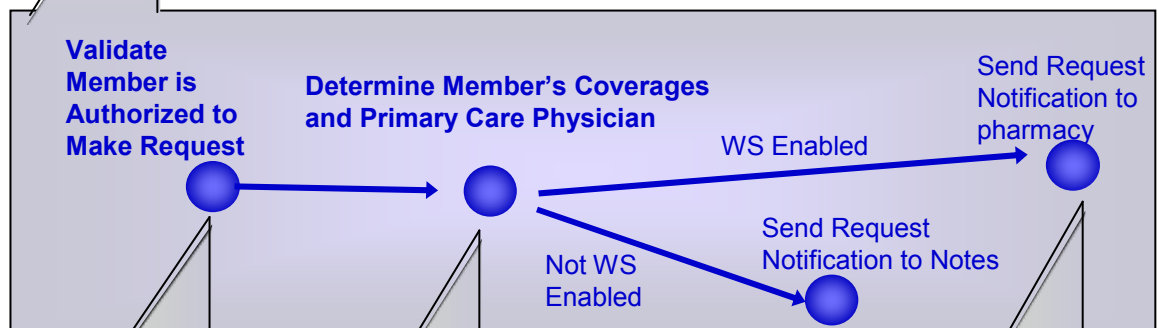
Business Process

- long running
- one or more persons interacting
- multiple valid business process states
- alternative workflows for non-normal conditions



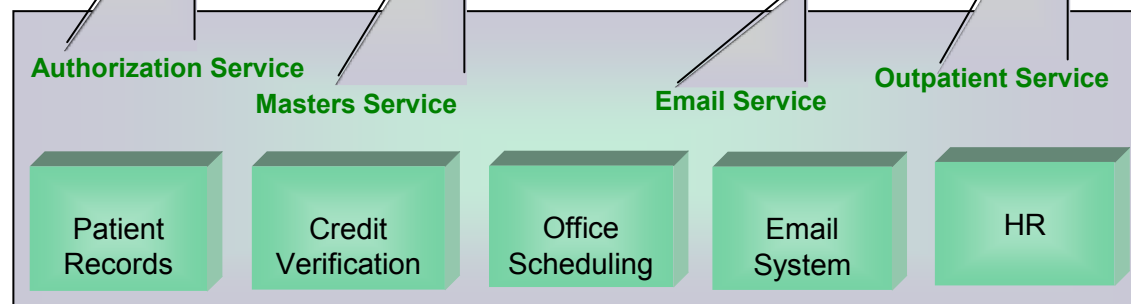
Services

- short term, non-interactive
- one change of business state
- consumes one or more enterprise service
- targeted level of service reuse
- loose coupling important
- may require compensating transactions

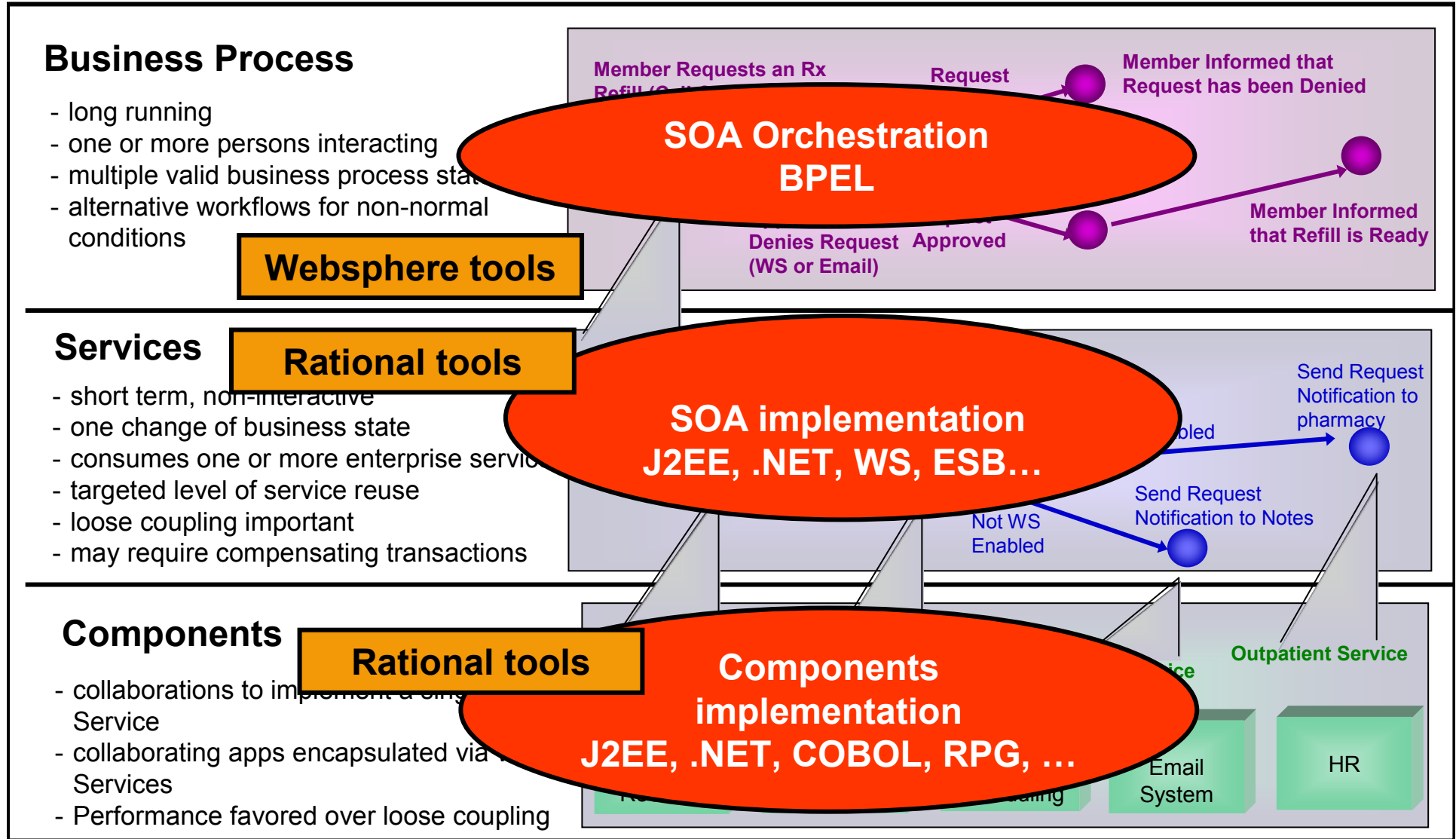


Components

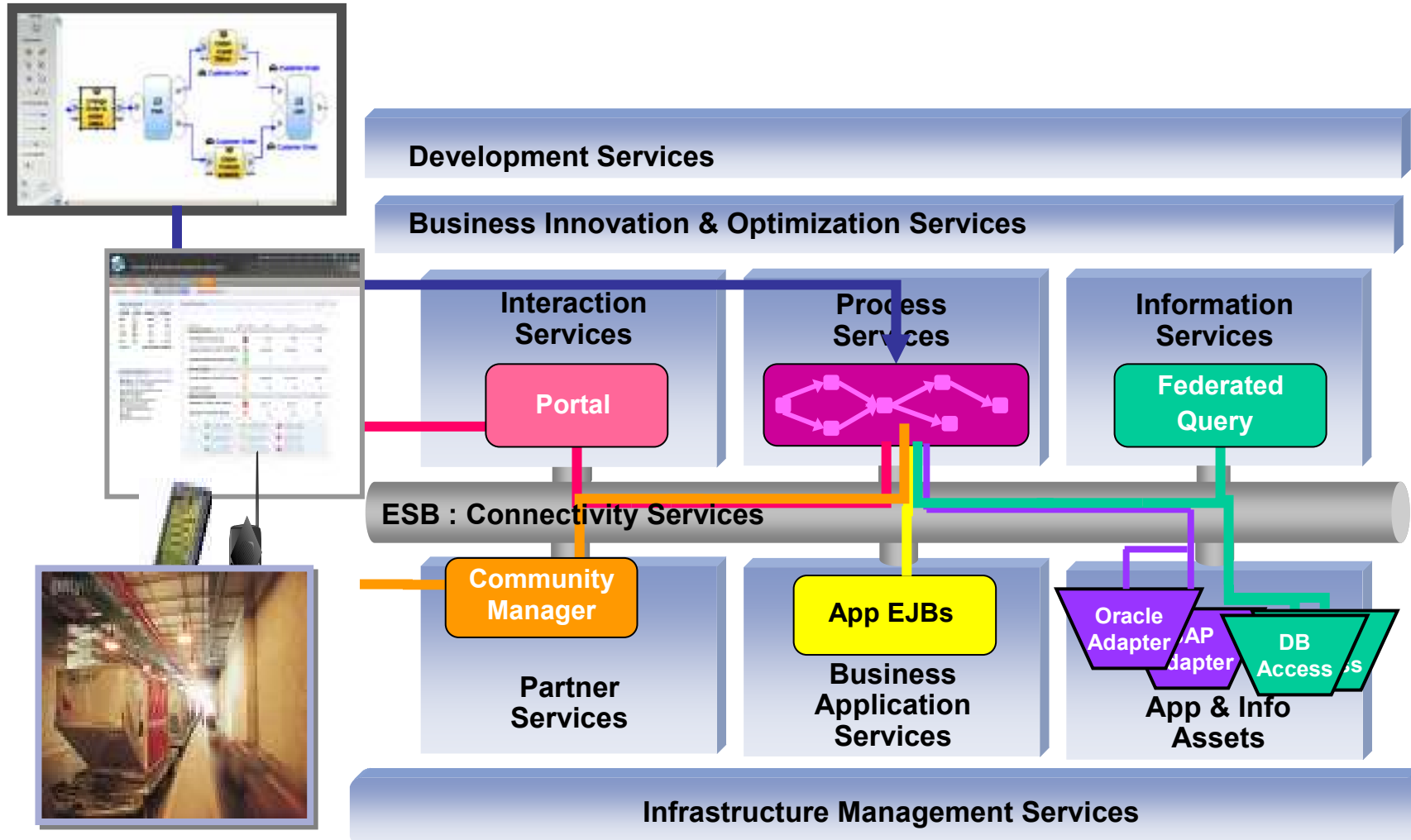
- collaborations to implement a single Web Service
- collaborating apps encapsulated via Web Services
- Performance favored over loose coupling



A Simplified Example of Services



Composite Application Development through SOA



Key roles in service-oriented design and development



Business Analyst

- **Model the business**
 - Understand business requirements
 - Analyze and develop process models
 - Identify optimum process models to drive services design



Software Architect

- **Design the services architecture**
 - Model and refine the services architecture
 - Identify new services needed and existing assets to re-use
 - Generate services specifications



Developer

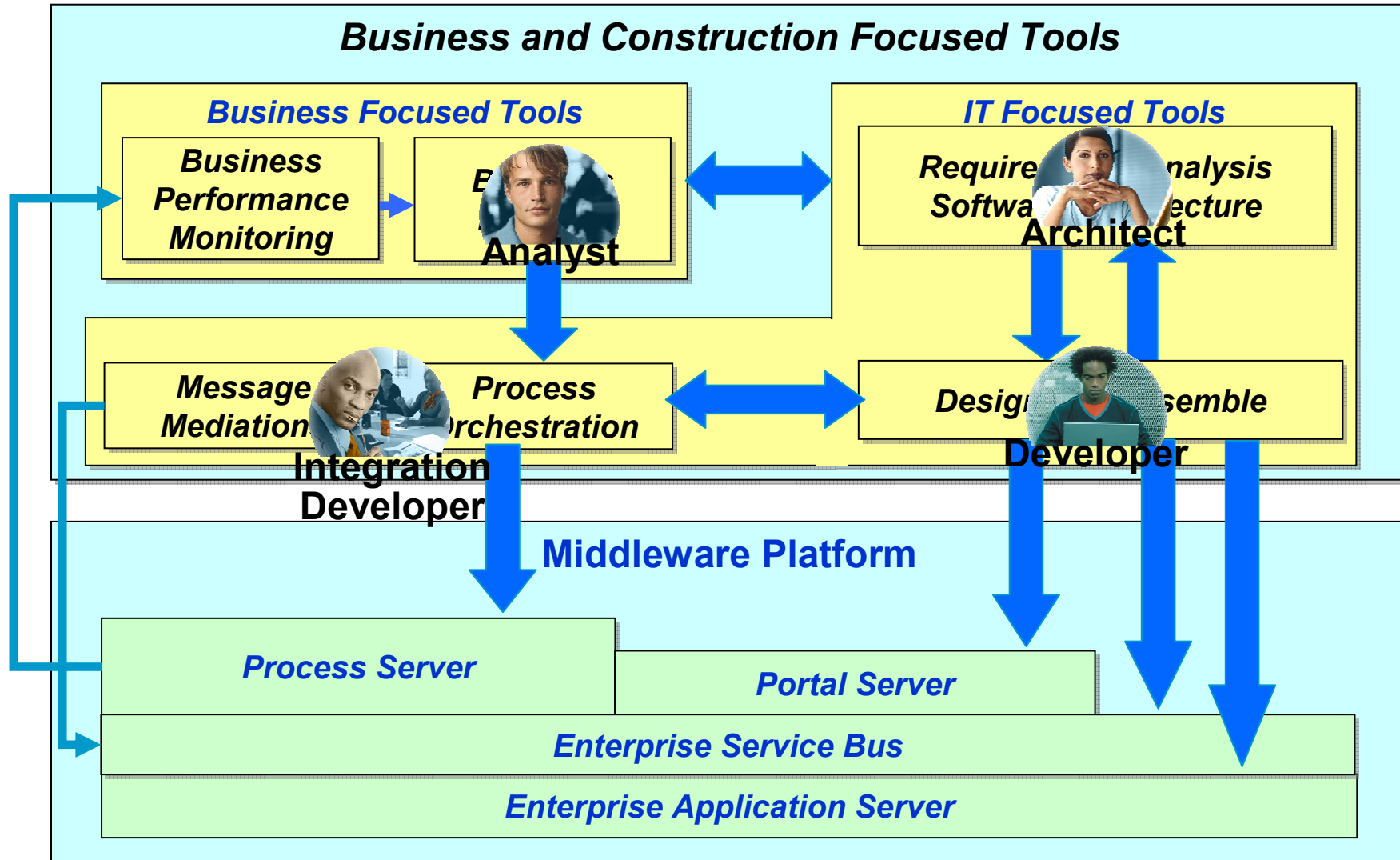
- **Construct the services**
 - Implement new services & repurpose existing assets as services
 - Create UI for access via Web or Portal
 - Validate and test services



Integration Specialist

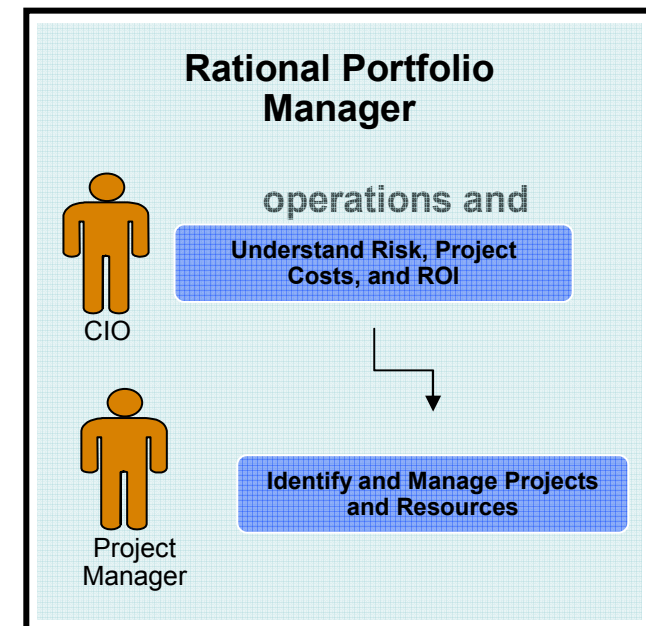
- **Assemble and deploy composite application**
 - View the process model
 - Choreograph the services
 - Assemble and deploy

Business Driven Development Scenario

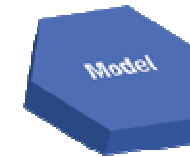




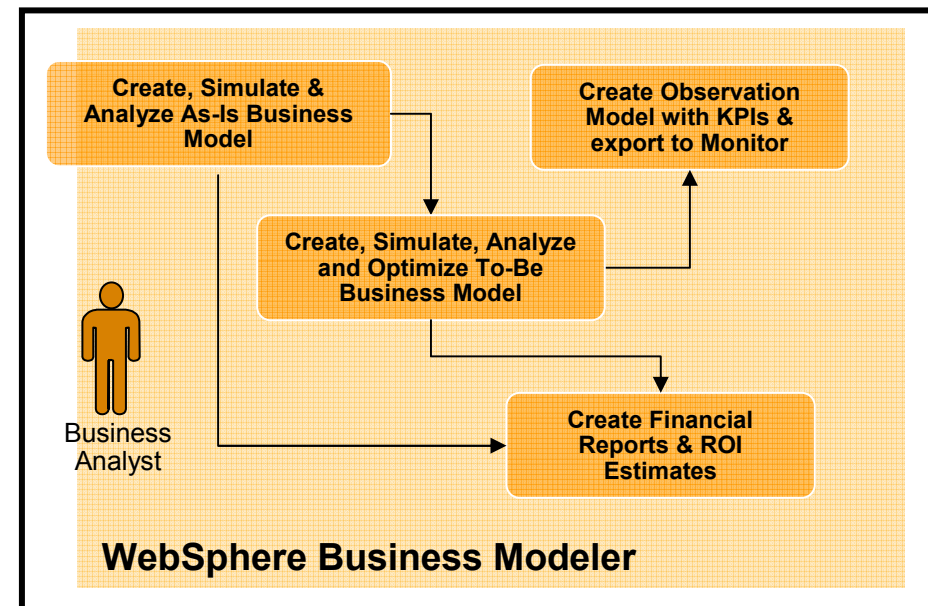
- **Prioritize proposed, existing and under-construction services based on business priority, risk and return**
- **Track service level financials**
- **Provide deep insight into SOA development**
- **Manage SOA project-team dependencies**
- **Forecast demand for service creation and updates**
- **Understand the cost of SOA creation, maintenance**

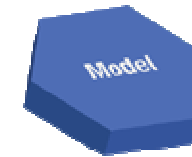


Model the Business

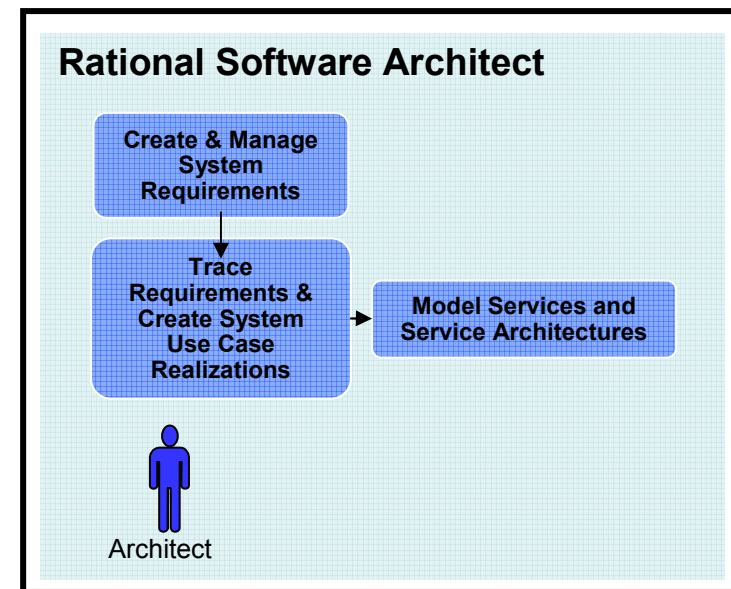


- **Discover and design key business processes**
- **Determine and allocate required resources**
- **Model the business organization & roles organizational units can play**
- **Determination of any other process/tasks (services) that must be provided by others**

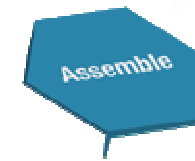




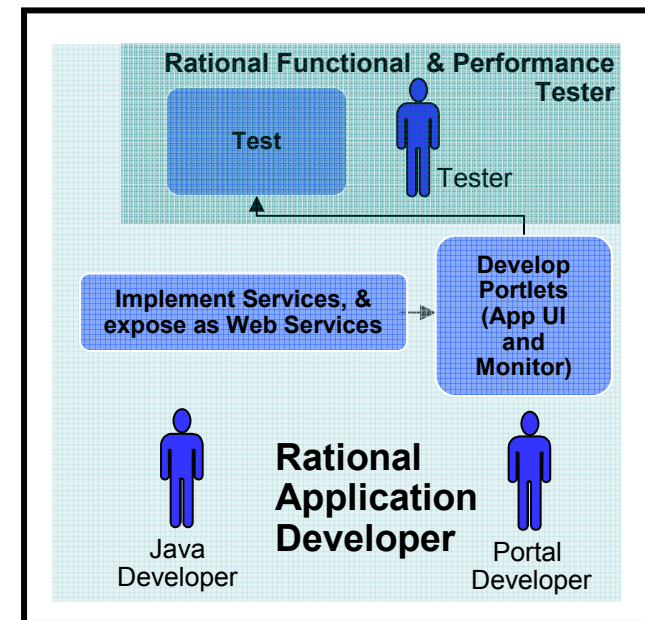
- Trace enterprise requirements to business processes and service implementations
- Define detailed system requirements and service implementations
- Architect and design the service implementations



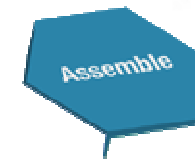
Construct and Test the Services



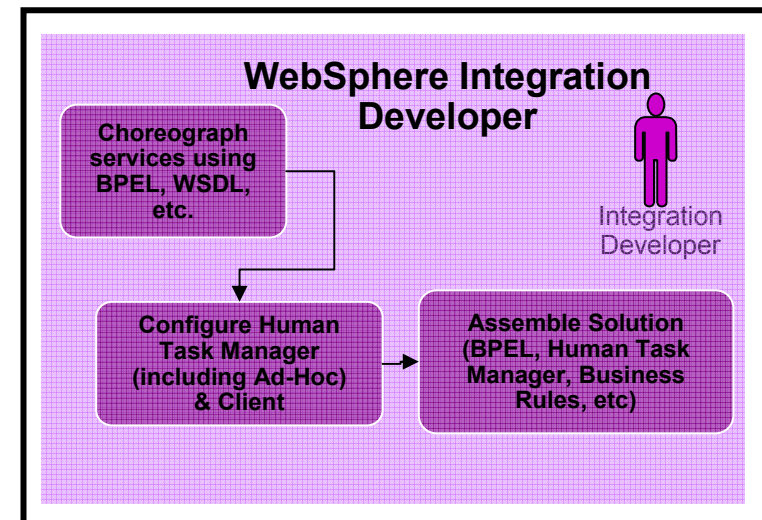
- **Build new services from scratch or enable existing applications for WS-I compliance**
- **Discover and consume existing services**
- **Test functionality**
- **Test performance**



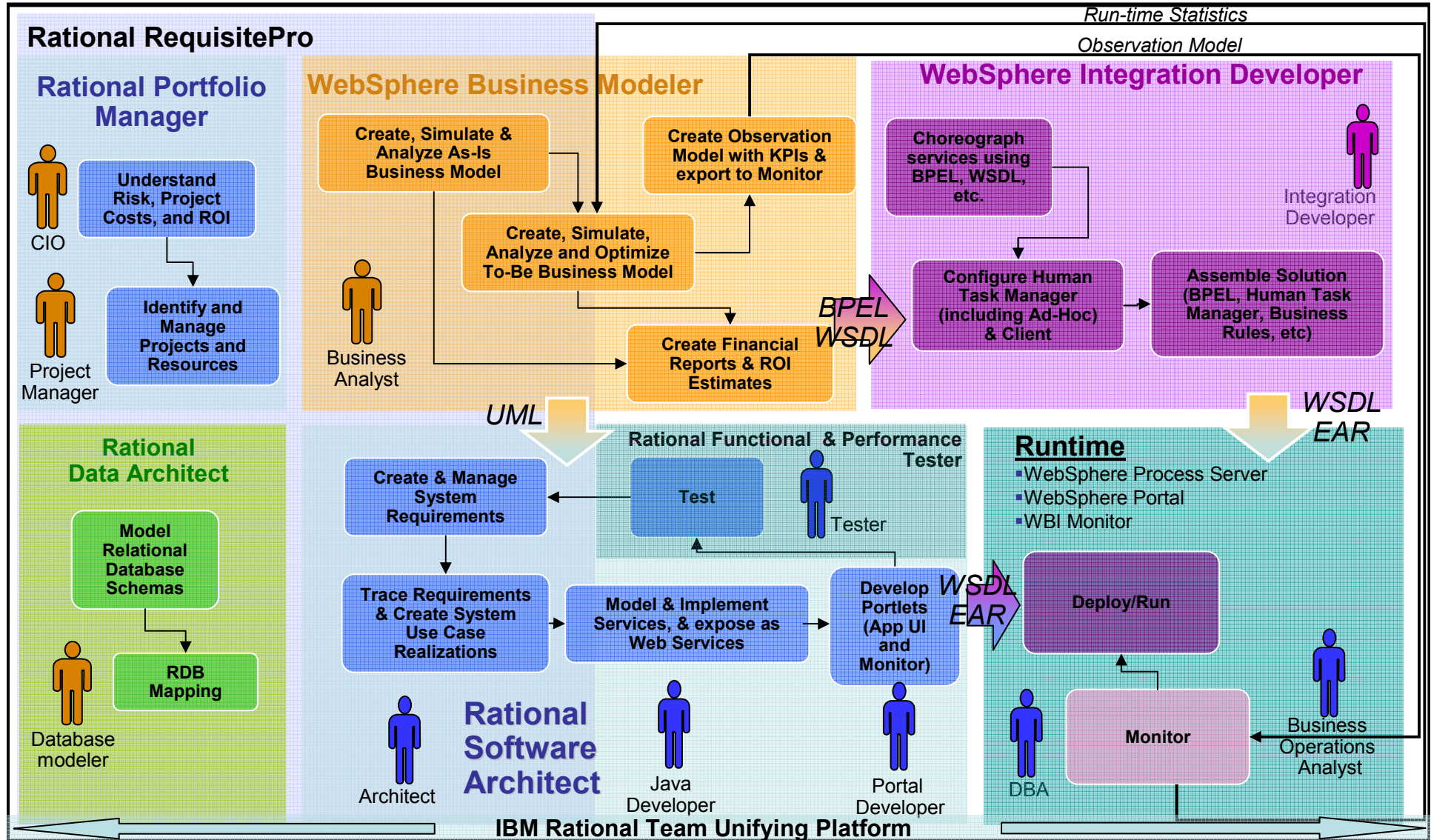
Assemble composite application

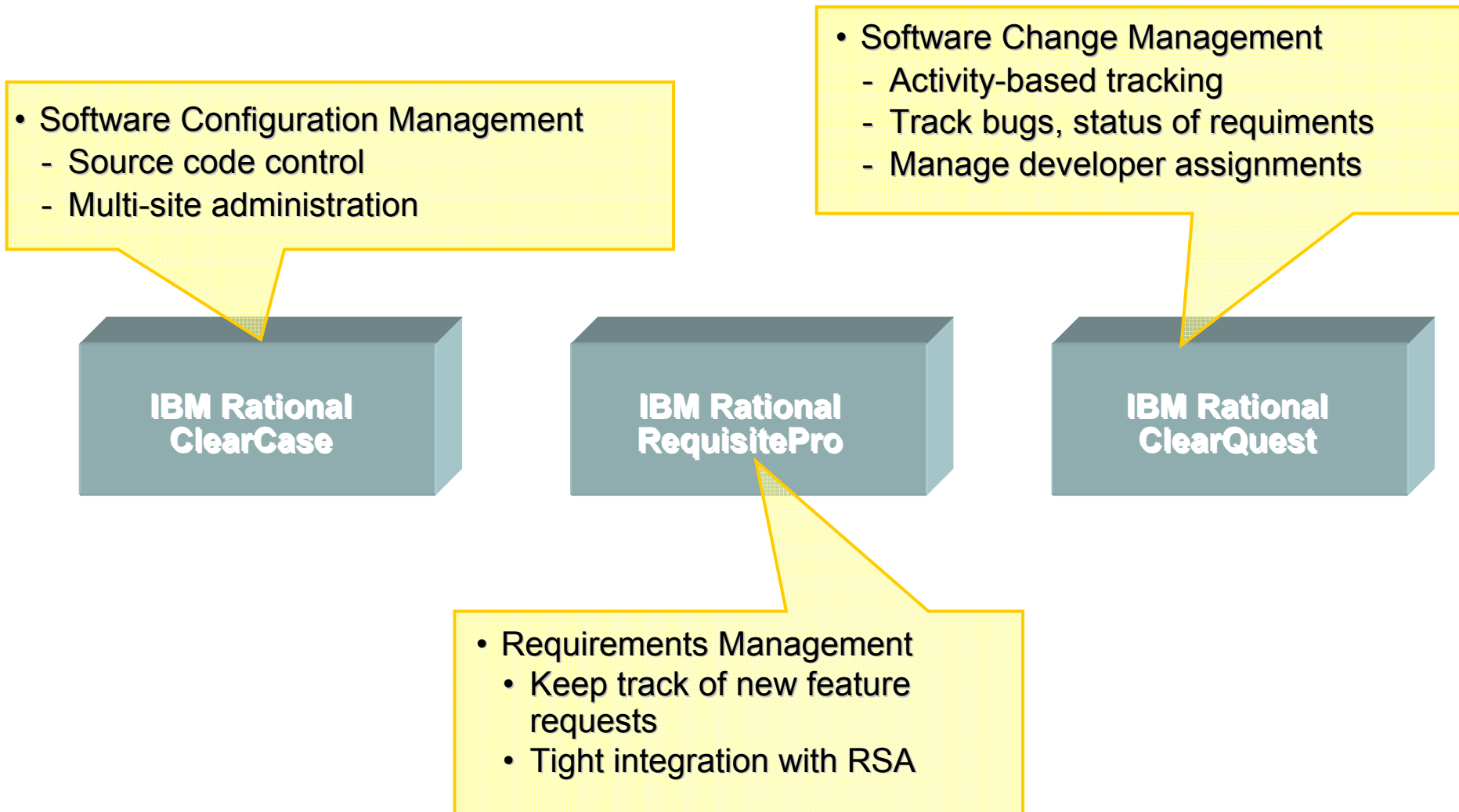


- **Implement business processes designed by Business Analysts**
 - Plug in Services
 - Plug in Human Activities (Staff)
- **Test composite application**

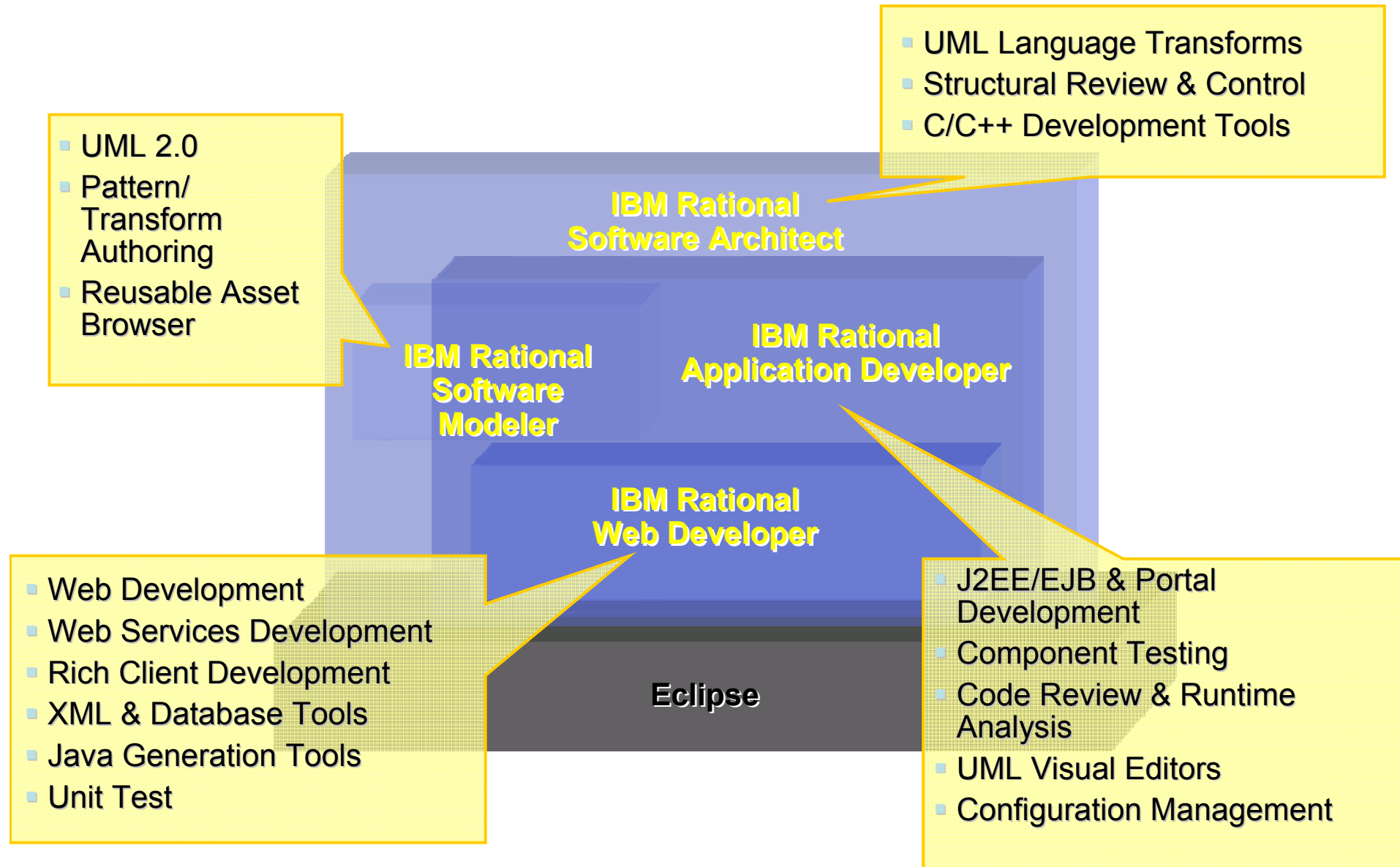


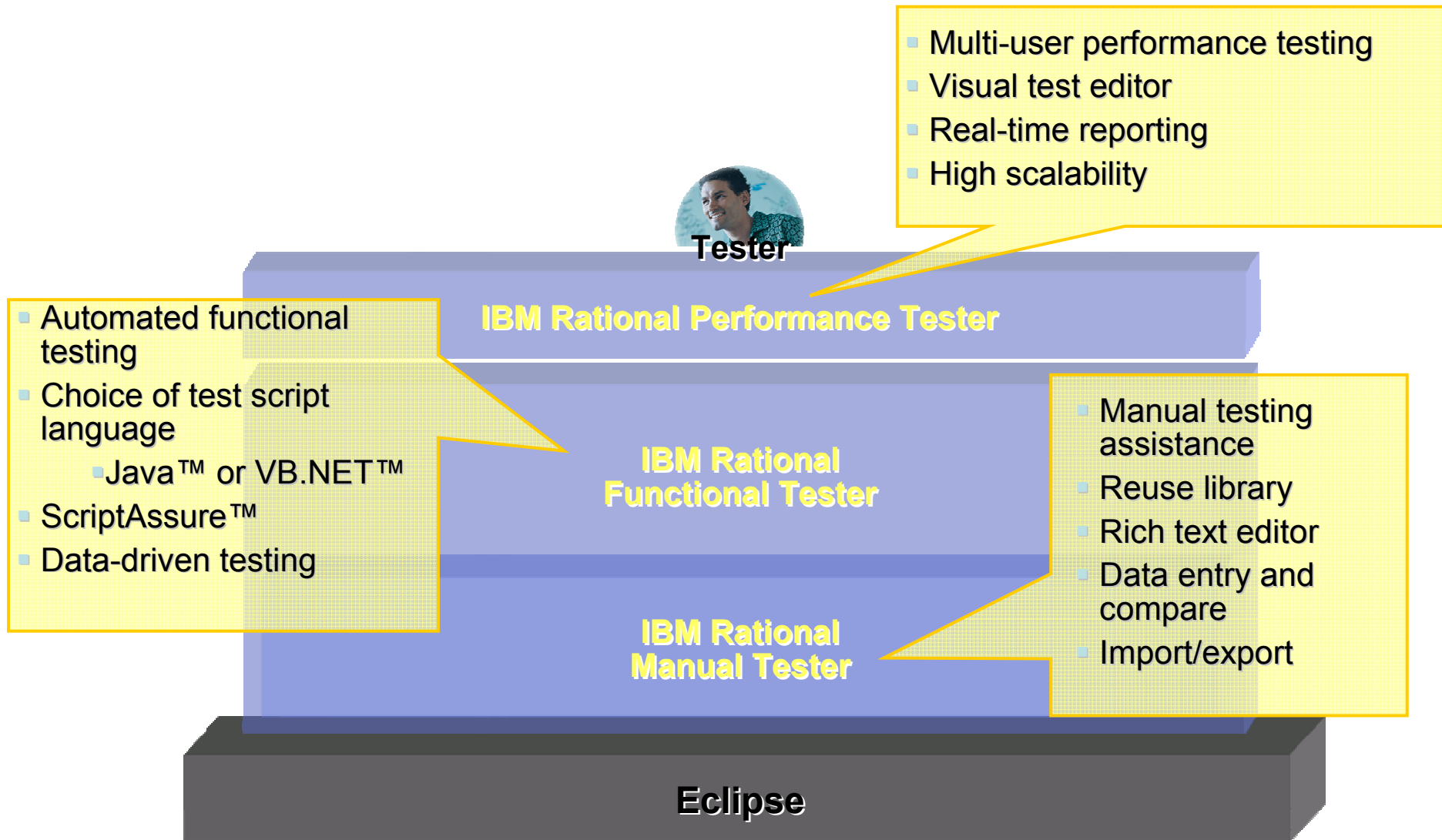
Business-Driven Development: The Big Picture





Design and construction tools





- SOA proposes new challenges in the development process
 - Multiple technologies
 - Shorter delay for implementation
 - Complex dependencies between components
 - Efficient dialog between business analysts, architect and developers
- Rational and WebSphere tools support SOA development cycle today, including :
 - business processes analysis
 - service modeling
 - SOA orchestration and monitoring
 - multiplatform development
 - testing

Demo 1

Gestion des Assets
Gestion des Exigences



Demo 2

Schémas XML
Design et Génération





Demo 3

Services
Design et Génération





IBM developerWorks **Live!**



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<http://www-128.ibm.com/developerworks/webservices>

<http://www-128.ibm.com/developerworks/architecture/kits/>

<http://www.ibm.com/developerworks/downloads/>

Présentation disponible dans le mail de remerciements.
Obtenez gratuitement le livret **SOA for Dummies**
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