



Overview of new Rational enterprise modernization solutions and product updates for System z

Enhancing IT value by leveraging the past, exploiting the present, and transforming the future



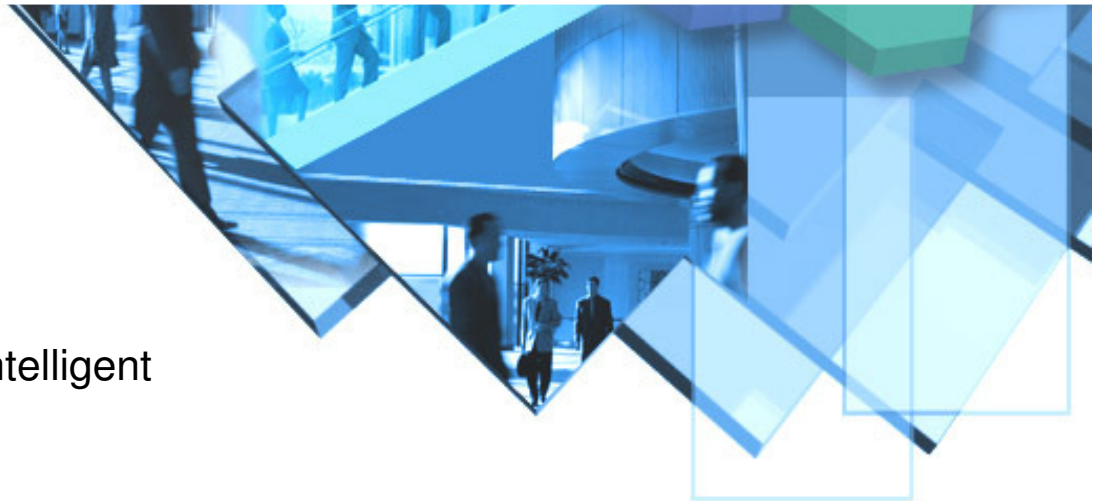
Agenda



- **Accelerating Software Innovation**
- **The Rational Software Delivery Platform:
An Enterprise Modernization View**
- **Q&A**

Innovation will require a significant investment in software

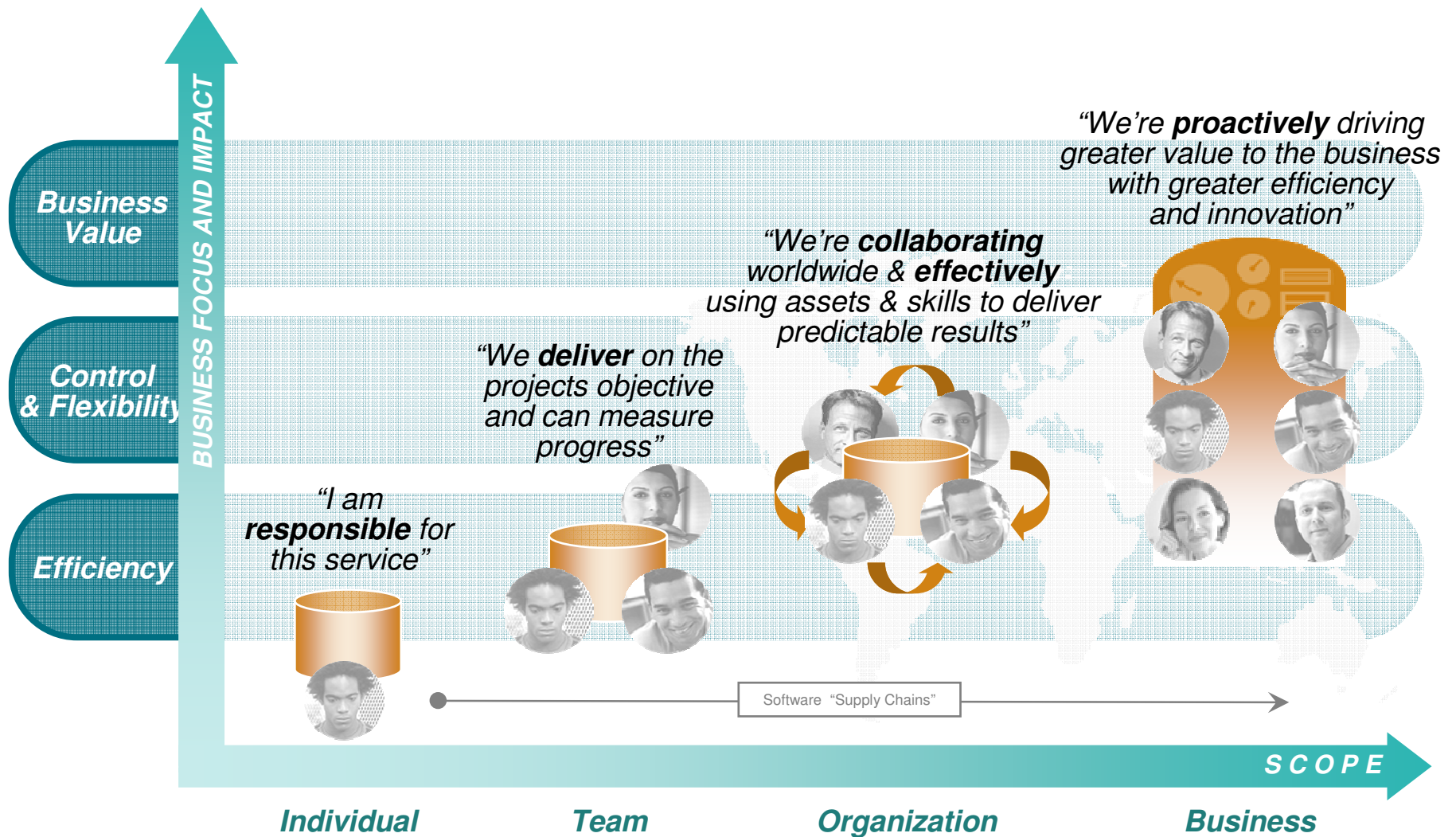
- For businesses and institutions everywhere, there have never been so many ***new possibilities*** at our disposal
- Imagine the amount of software necessary to:
 - Deliver a green world
 - Take advantage of information base explosion
 - Communicate with a trillion devices
- We are moving to a new generation of intelligent software and systems
- To accelerate innovation and take advantage of these new possibilities, clients must get better at ***managing effective software delivery***



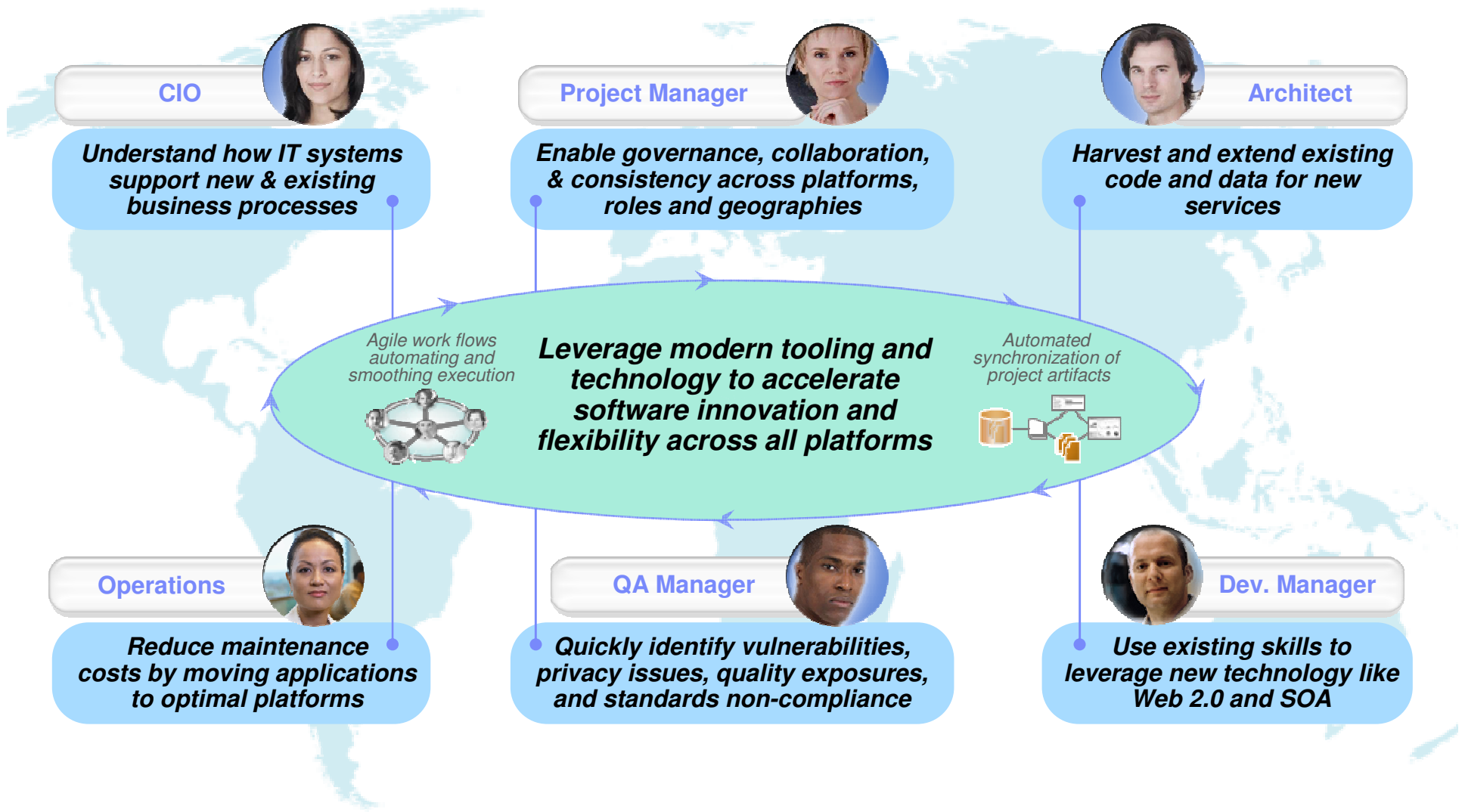
Customers are asking...How can we ?...

- Speed software delivery?
 - Meet organizational commitments?
 - Make time-critical market windows?
 - Deliver software projects to operations on time and on budget, with greater reliability?
- Improve software quality?
 - Ensure that business-critical applications meet end-user requirements and performance criteria?
 - Comply with regulatory standards?
 - Pinpoint critical application security vulnerabilities?
- Integrate solutions across platforms and reduce complexity?
 - Drive organizational alignment?
 - Improve efficiency, reduce errors and reduce friction?
 - Harness globally distributed resources for development, delivery and operations?

Needed: A mature approach to software delivery



Needed: Solutions that eliminate barriers to innovation

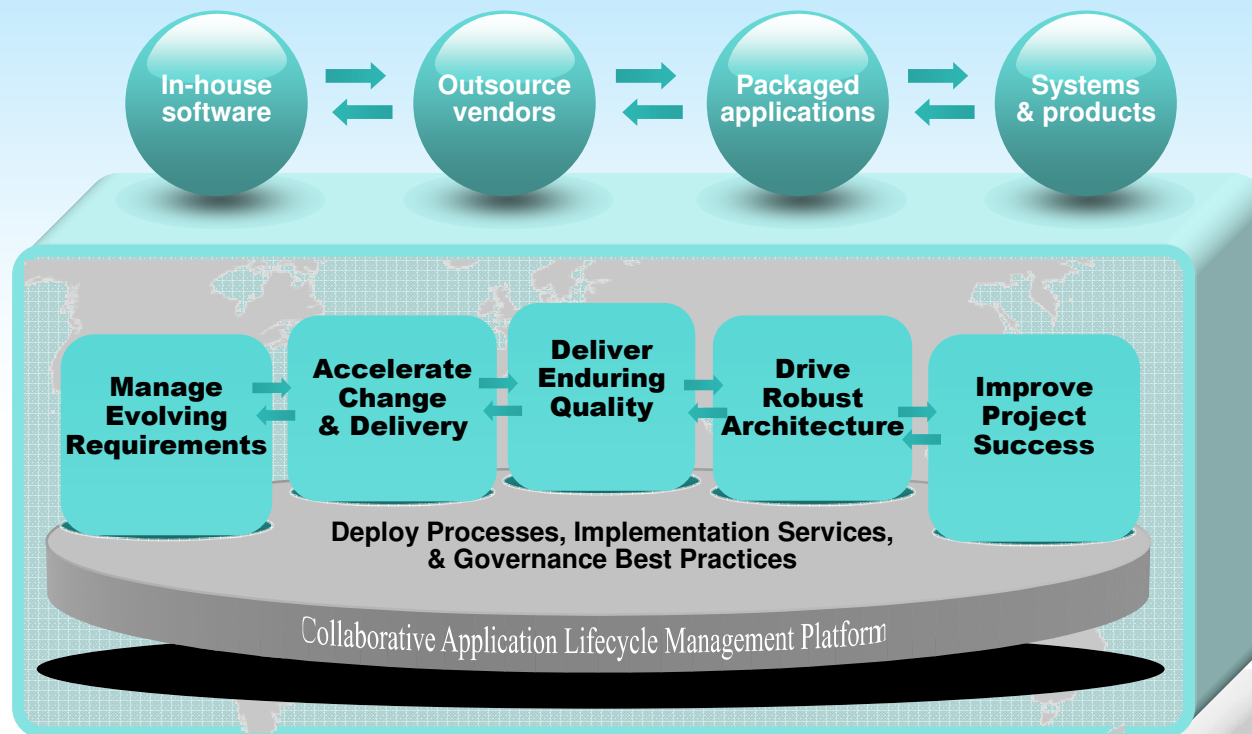


IBM Rational Software Delivery Platform

*Accelerating software innovation for the **entire** enterprise*

Rational. software

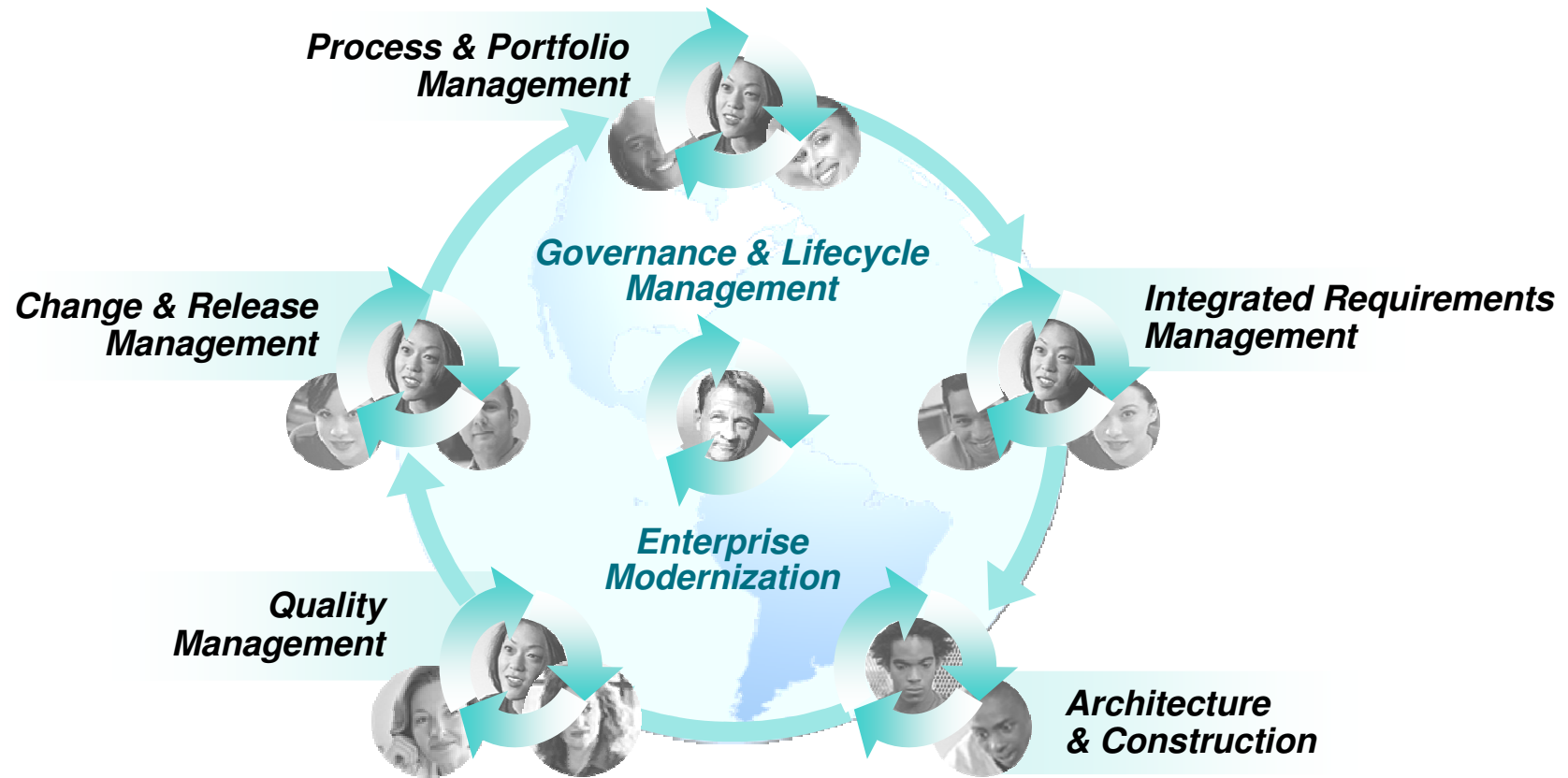
Solutions to help customers achieve greater value and performance from their investments in delivering software



- **Enterprise Modernization and Transformation**
- **Organizational Governance**
- **Skill Development and Community**
- **Implementation Services**

Rational's business

Governing the business process of software and systems delivery

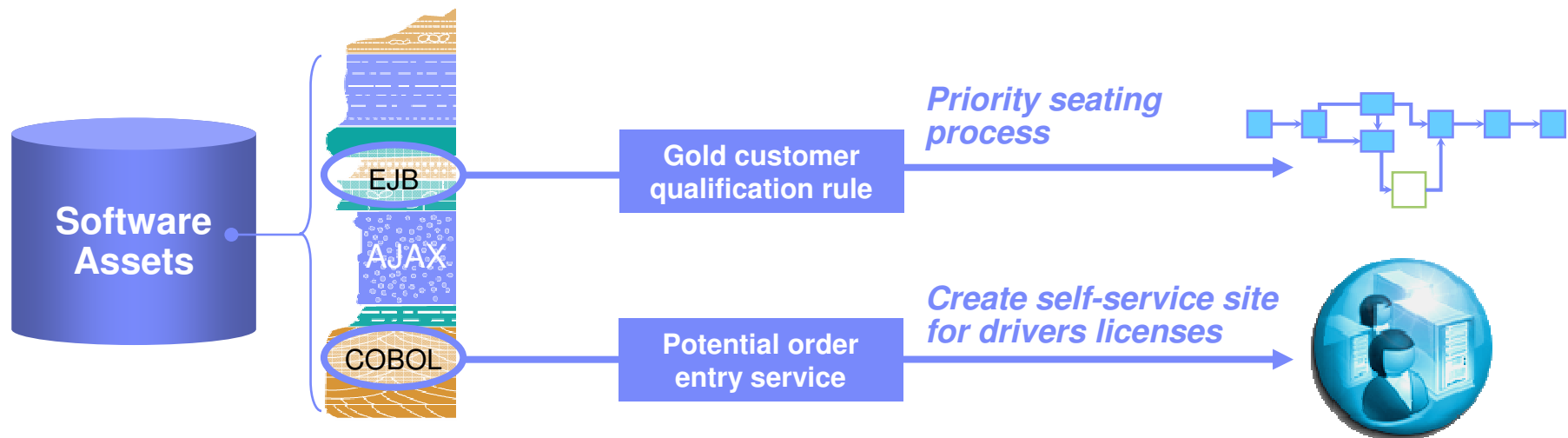


Managing Software Delivery - for System z ... and distributed

- ▶ Multi-platform development is the norm; System z is key in most enterprises
- ▶ However, many think of z development as “different and unique”, constraining efficiency & flexibility
- ▶ Rational’s Enterprise Modernization solutions provide:
 - a consolidated platform for multi-platform application development
 - a collaborative, integrated environment that supports innovation
 - the same power and flexibility for all types of applications, including z
- ▶ With totally modern tools for System z, customers can choose their deployment platform for new applications based upon runtime requirements (e.g. QoS, proximity to data)
... and NOT based on out-dated perceptions of z development
- ▶ It is time to re-think how z development is done!

Companies want to

Understand how their IT systems support their business processes, and then enhance them in a predictable manner

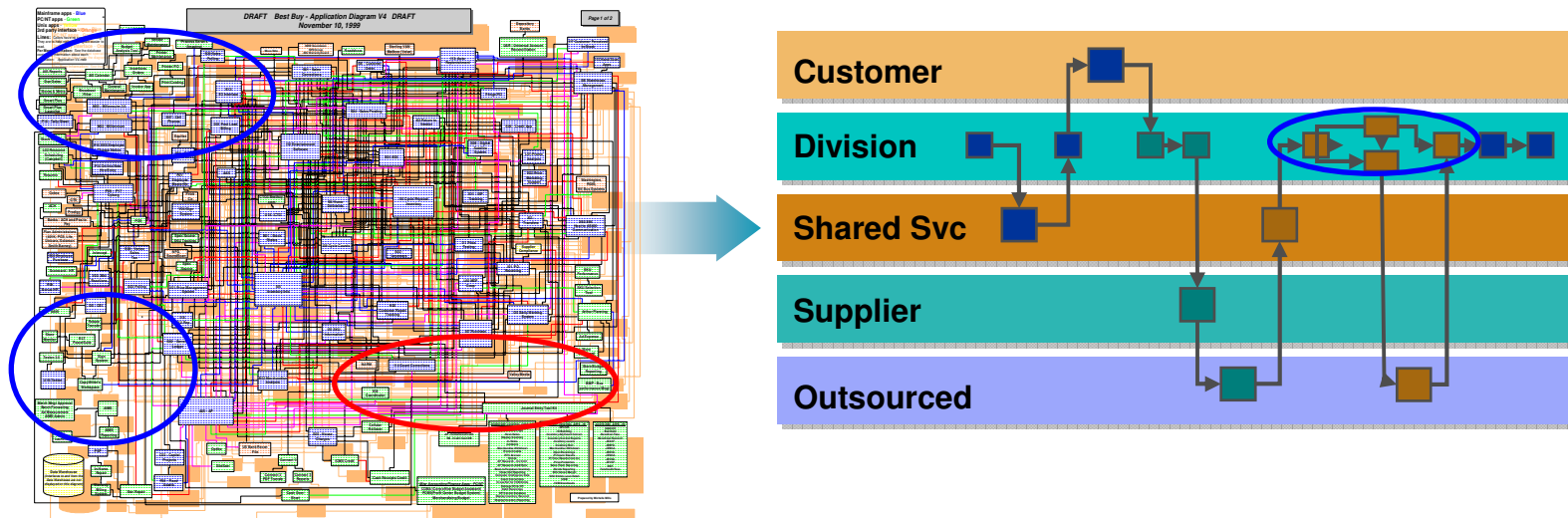


But...

They have no business intelligence inventory of their application assets, relying instead on manual processes & incomplete knowledge

Companies want to

Have an IT architecture that quickly adapts to support current business needs

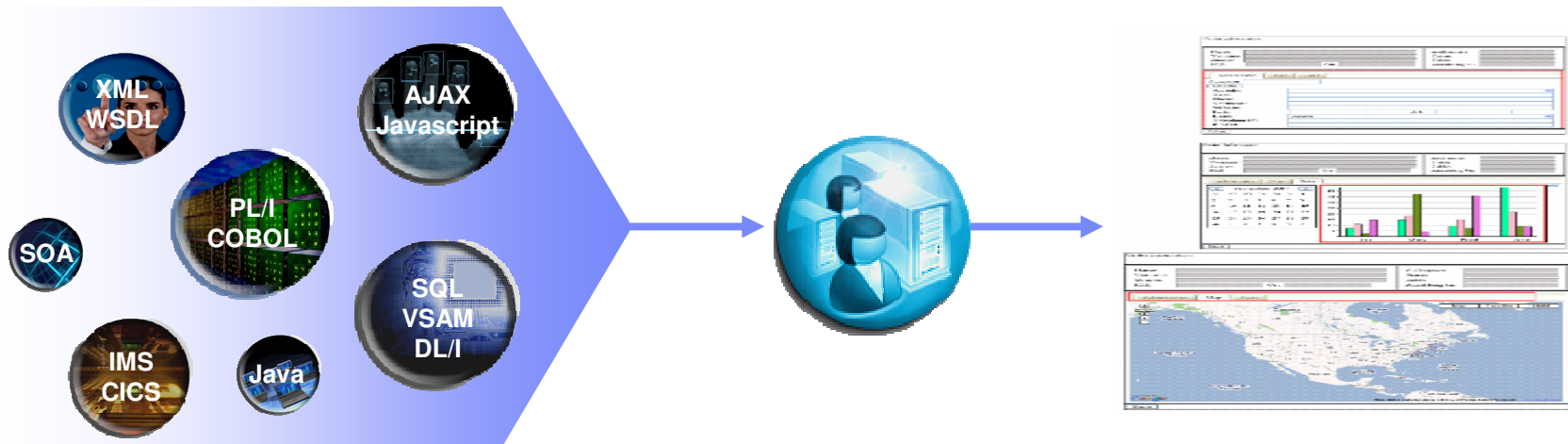


But...

They have application architectures that were incrementally built over the last 20-30 years that are no longer flexible or agile

Companies want to

Use existing developers to build modern cross-platform apps that leverage new technologies like Web 2.0

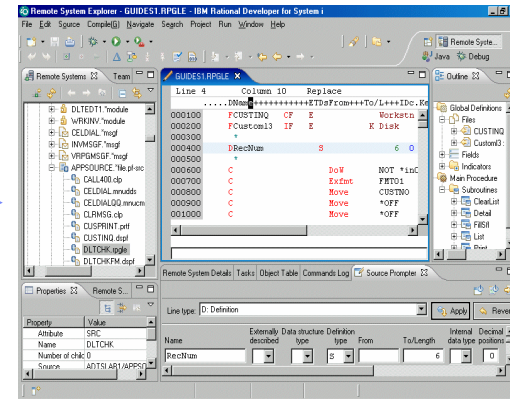
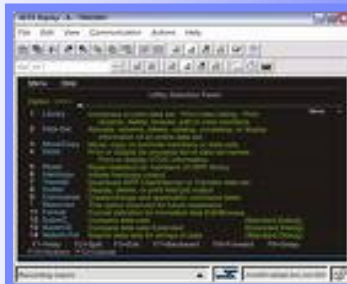


But...

They have developers that do not know all of these new technologies, and hiring all new people or doing massive retraining is unrealistic

Companies want to

Increase productivity of their “backend” development staff, as well as attract new employees to this work

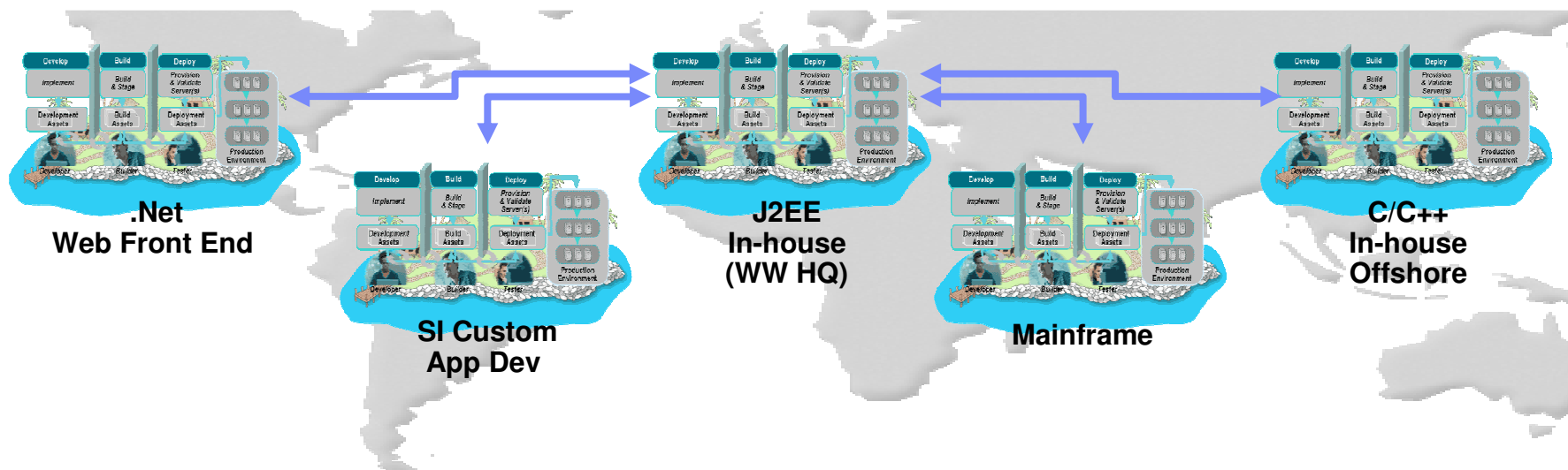


But...

They have antiquated development tools which deliver low productivity and are repulsive to younger staff

Companies want to

Enable multi-platform and cross-geo collaboration and governance

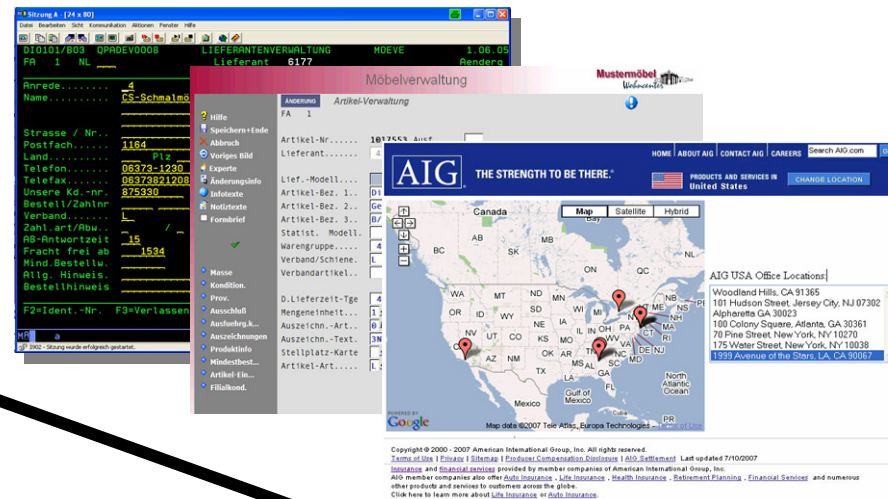


But...

They have different tools, processes and team infrastructure for each deployment platform, greatly complicating development of composite apps

Companies want to

Present a sophisticated, modern user interface to their customers and employees

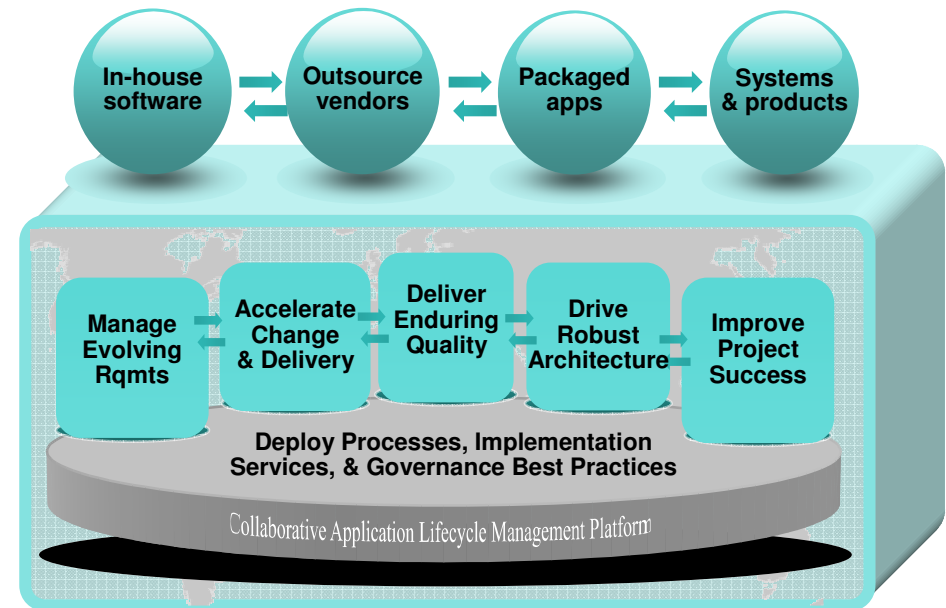
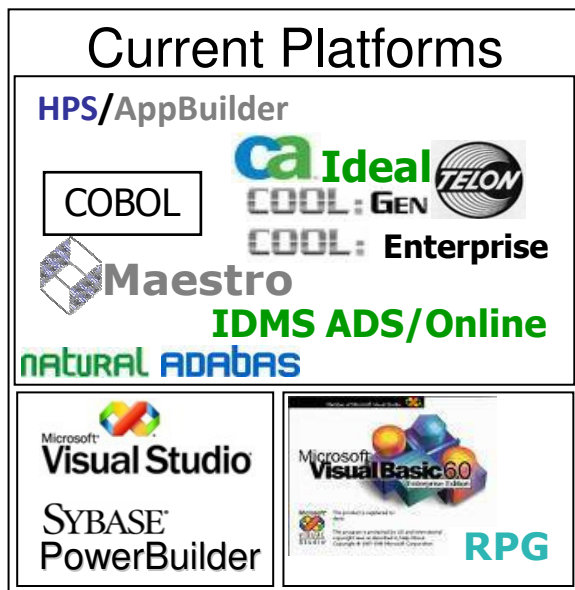


But...

They don't know how to upgrade their archaic green screen applications without rewriting their applications

Companies want to

Reduce costs and move to modern platforms, languages, and tools for all development



But...

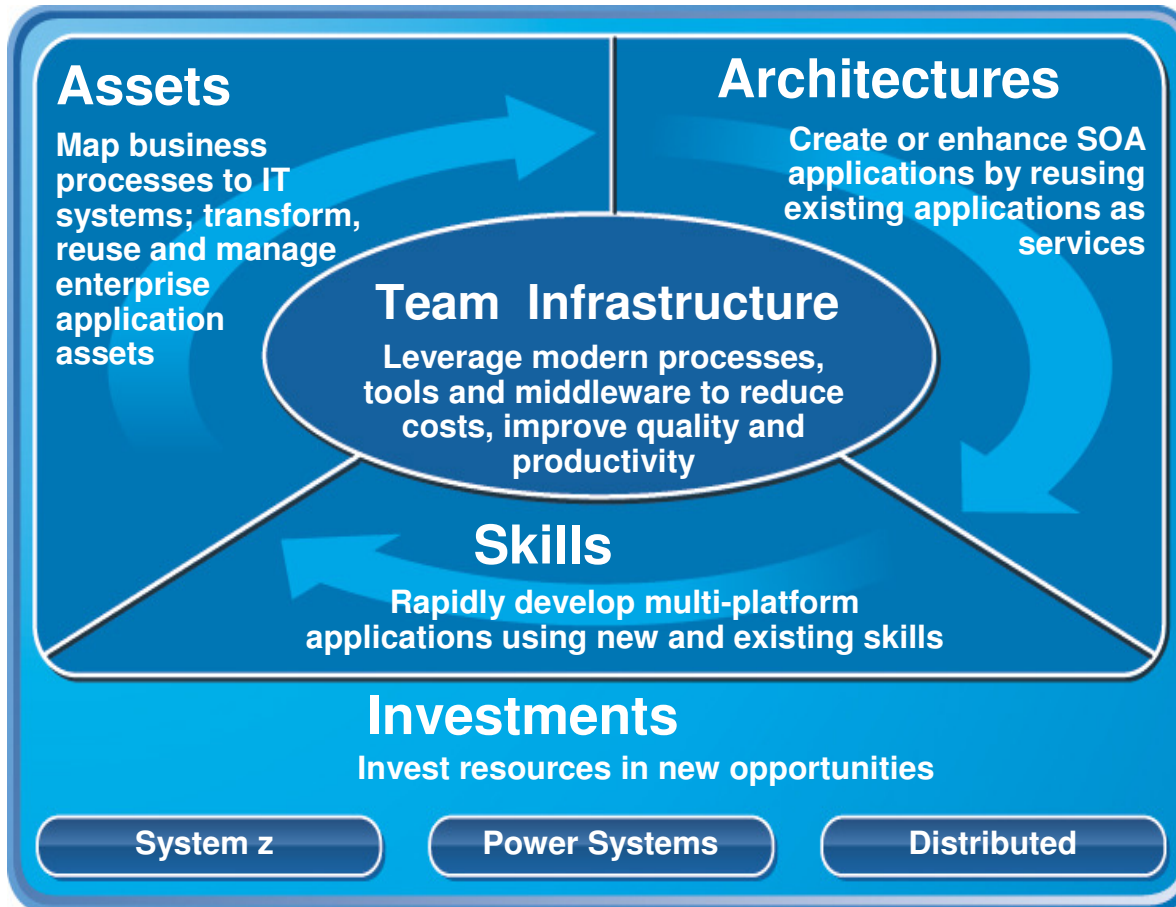
They are stuck on unsupported, expensive, legacy development platforms

The Road to Enterprise Modernization



- **Companies need a unique modernization strategy based on:**
 - business requirements
 - budget
 - staffing constraints
- **With our Enterprise Modernization expertise, we can help formulate a customized roadmap for each of our customers**
- **Here are some of our solutions...**

Dimensions of Enterprise Modernization



1. **Leverage value in existing assets to support and enhance business processes**
2. **Drive innovation with SOA and web technology advancements**
3. **Leverage existing and new staff on multi-platform projects**
4. **Improve quality and flexibility with a consolidated team infrastructure**
5. **Reduce maintenance costs**

<http://www-306.ibm.com/software/info/developer/solutions/em/>

Modernize your Asset Management

I want to improve my business processes, but where do I start?



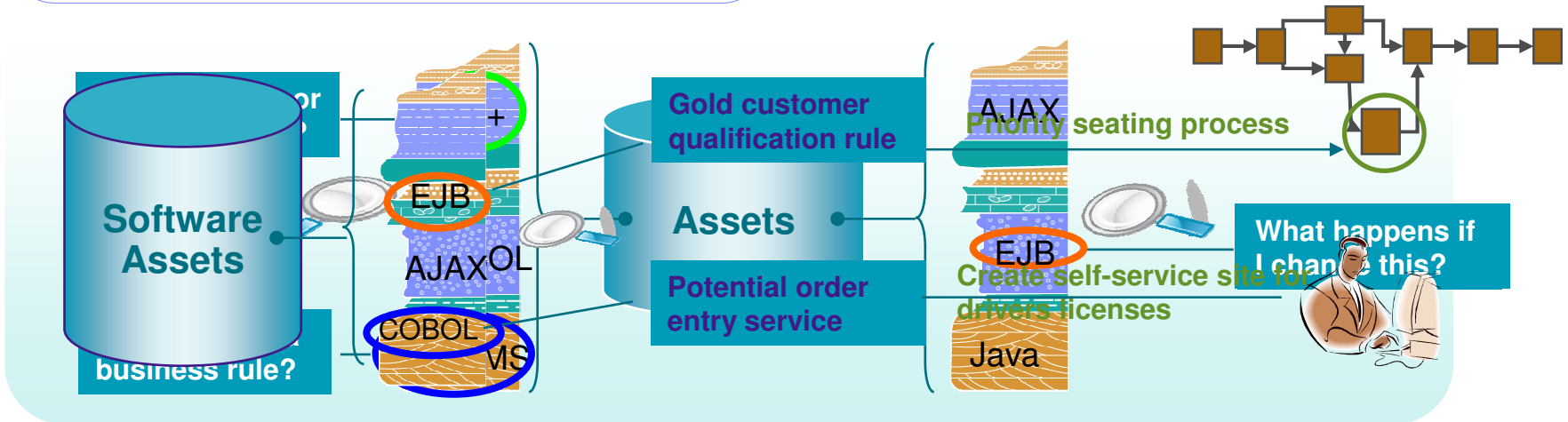
Business Challenge
 Difficulty understanding and leveraging existing IT systems to support business processes

How can we...

- ▶ Understand how our IT systems support our business processes so we can predictably enhance them
- ▶ Avoid application downtime due to unforeseen code dependencies?
- ▶ Maintain control over code provided by outsourcers, business partners, or acquired through a merger?
- ▶ Accelerate SOA efforts?

Solutions
 Comprehensive inventory of assets for impact analysis & reuse

- ✓ Map business processes to IT systems
 - *WebSphere Studio Asset Analyzer* New!
 - *Rational Asset Analyzer*
 - *Rational Transformation Workbench*
- ✓ Manage assets during development
 - *Rational Asset Manager*
- ✓ Manage deployed services
 - *WebSphere Service Registry & Repository*



Modernize your Architectures

That would make a great web service!



Business Challenge

Inflexibility in adapting applications in support of business needs

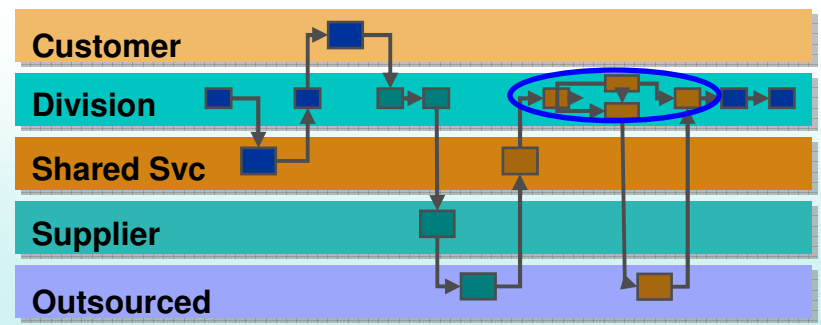
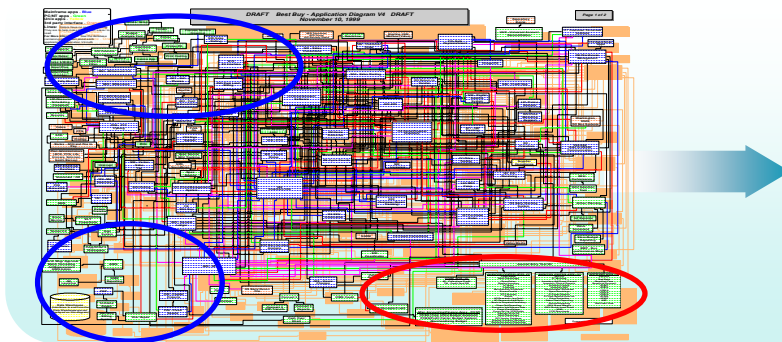
How can we...

- ▶ Progress our SOA maturity given all our existing code assets, including CICS, IMS, IBM i and green screen applications?
- ▶ Build services once and deploy them across my heterogeneous production environment?
- ▶ Ensure our new SOA system will be more easy to extend and maintain than my current ones?

Solutions

Flexible architectures to enable business agility

- ✓ Expose 3270 and 5250 applications as web services
 - *Host Access Transformation Services*
- ✓ Quickly create web services from existing COBOL, RPG, PL/I, Java, or EGL applications
 - *Rational Developer for System z (SFM)*
 - *Rational Business Developer*
- ✓ Create new platform-independent services
 - *Rational Business Developer (EGL Service keyword)*
- ✓ Leverage MDD - xform UML to EGL, COBOL, WSDL, etc
 - *Rational Software Architect*



Modernize your Skills - Languages

I built that cool web 2.0 app with EGL



Business Challenge

Staff inflexibility due to “skills silos”

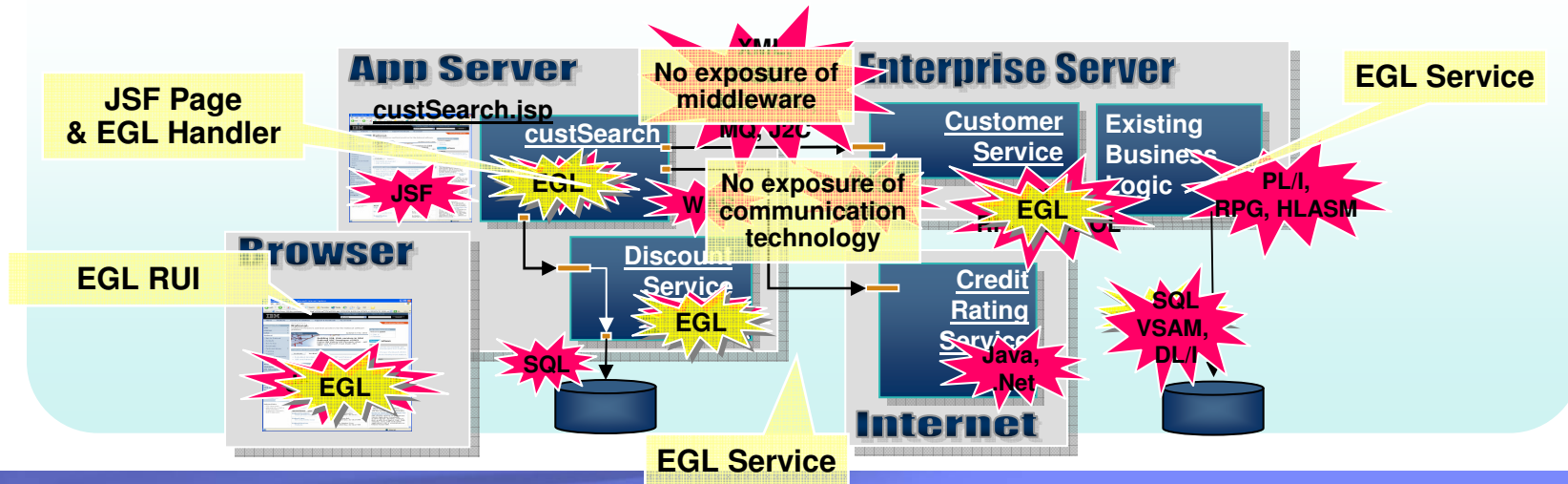
How can we...

- ▶ Exploit new technologies and innovation without retraining existing staff that knows the business?
- ▶ Use new employees on any project, independent of the target platform?
- ▶ Provide modern web UIs leveraging existing skills and systems?

Solutions

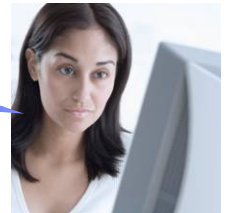
Powerful tools & abstractions for cross-platform development using today’s skills & tomorrow’s new employees

- ✓ Apply existing business-knowledgeable staff to build all elements of multi-platform applications ... end-to-end from Web 2.0 to services to business transactions
- ✓ Attract new staff with “IBM’s newest business language”
 - Rational Business Developer (EGL)



Modernize your Skills - IDEs

I am NOT going to miss my green screen IDE



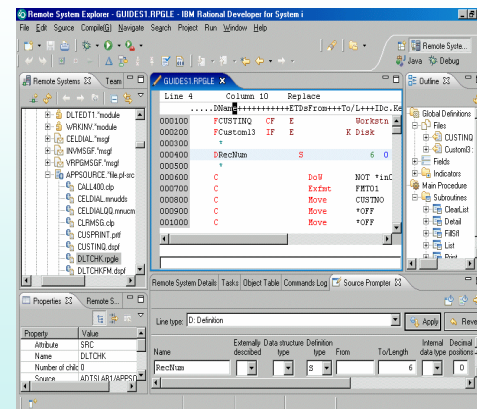
Business Challenge
Low productivity, non-competitive tools for new developers

How can we...

- ▶ Achieve higher productivity for our enterprise developers?
- ▶ Attract new and younger developers to backfill retiring System z and IBM i developers?
- ▶ Simplify license management by standardizing on a single, multi-platform development IDE?
- ▶ Free up System z MIPS for production use?

Solutions
Modern IDEs to achieve high productivity and attract new talent

- ✓ Use modern IDEs to develop and maintain code
- ✓ Debug and test from workstation
 - Rational Developer for System z
 - Rational Developer for System i
 - Rational Business Developer
 - Rational Developer for System i for SOA Construction
 - Rational Application Developer



Modernize Your Team Infrastructure

The only island I want to see has palm trees



Business Challenge

Inefficiencies and quality problems in multi-platform development

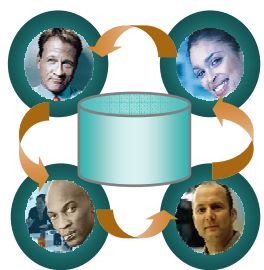
How can we...

- ▶ Increase quality and improve responsiveness for multi-platform development teams?
- ▶ Simplify management of team infrastructure for multiple development teams?
- ▶ Reduce team infrastructure costs across the enterprise?

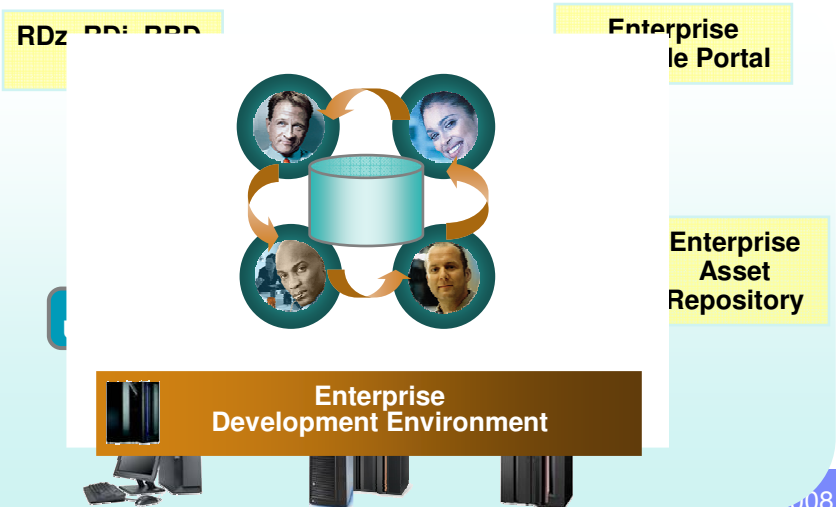
Solutions

Coordination, traceability, consistency across platforms

- ✓ Consolidate enterprise and distributed source code management
 - *Rational ClearCase*
- ✓ Automate and orchestrate defect tracking and configuration management across the enterprise
 - *Rational ClearQuest*
- ✓ Produce coordinated, traceable, automated, and cross-platform builds
 - *Rational BuildForge*



Distributed Development Environment



Delivering the first wave of New Rational **Jazz** Offerings

Collaborative Application Lifecycle Management

New!

Requirements Composer

Business Expert Collaboration

Elicit, capture, elaborate, discuss and review requirements using a variety of techniques & notations

New!

Quality Manager

Business Driven Quality

Coordinate and manage quality assurance plans, processes and resources across the lifecycle

Coming soon...

- Real-time enterprise reporting
- Collaborative project management
- Process design & enactment
- Application Development**



Web



clipse



Visual Studio
(future)

Jazz TEAM SERVER

In-context collaboration, real-time project health, event notification, process enactment & enforcement, global search & query, security, role-based access, automated traceability

New!

Team Concert

Software Innovation Through Real-time Project Team Collaboration

Work Item Management

Automated and flexible software change management improving project control and visibility

ClearQuest Connector

Configuration Management

Source code control, traceability and versioning leveraging dynamic workspaces & parallel development

Clearcase Connector

Build Management

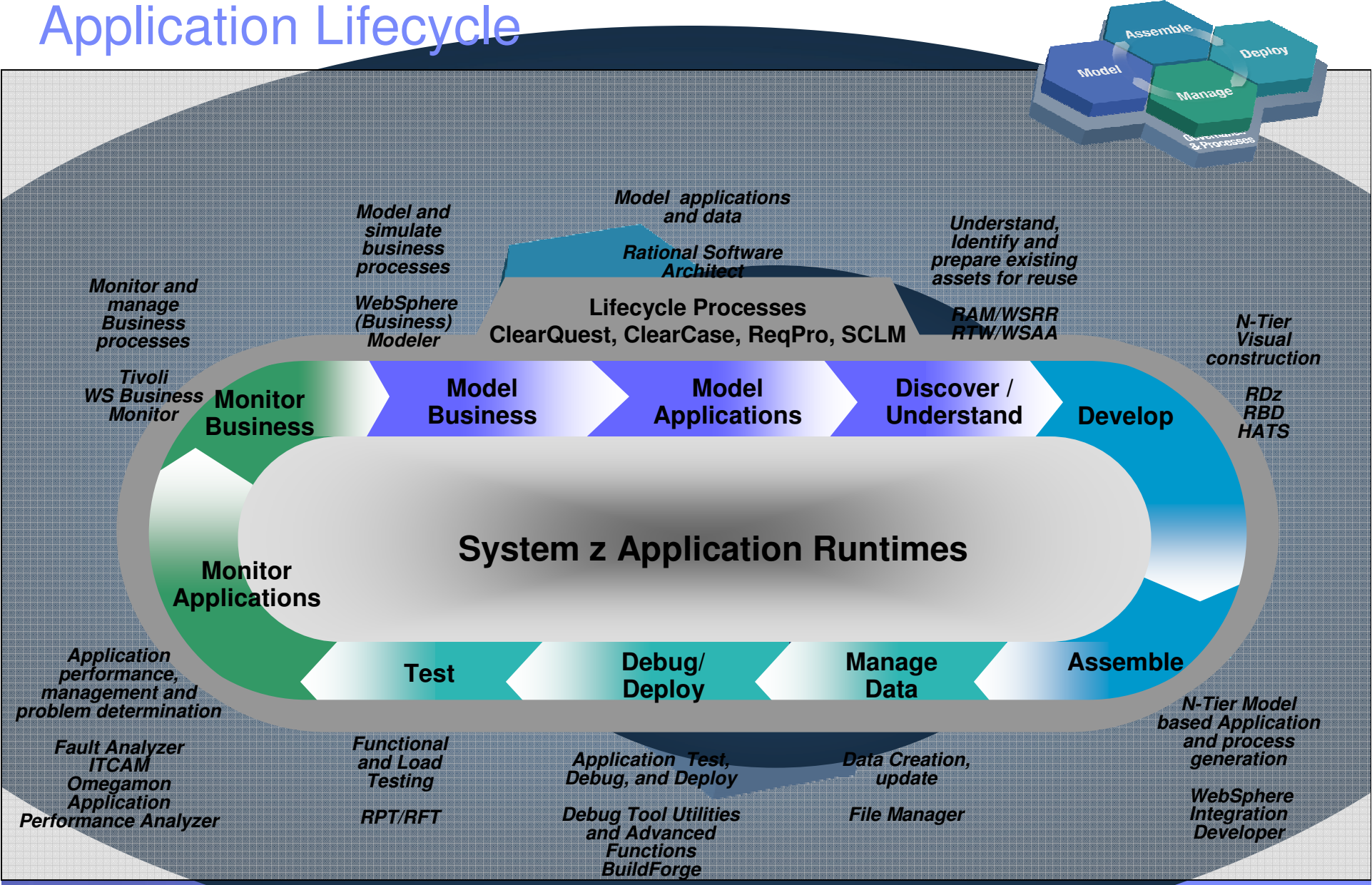
Automates build planning, project construction, build of materials and release processes

Build Forge Integration

New and Enhanced!

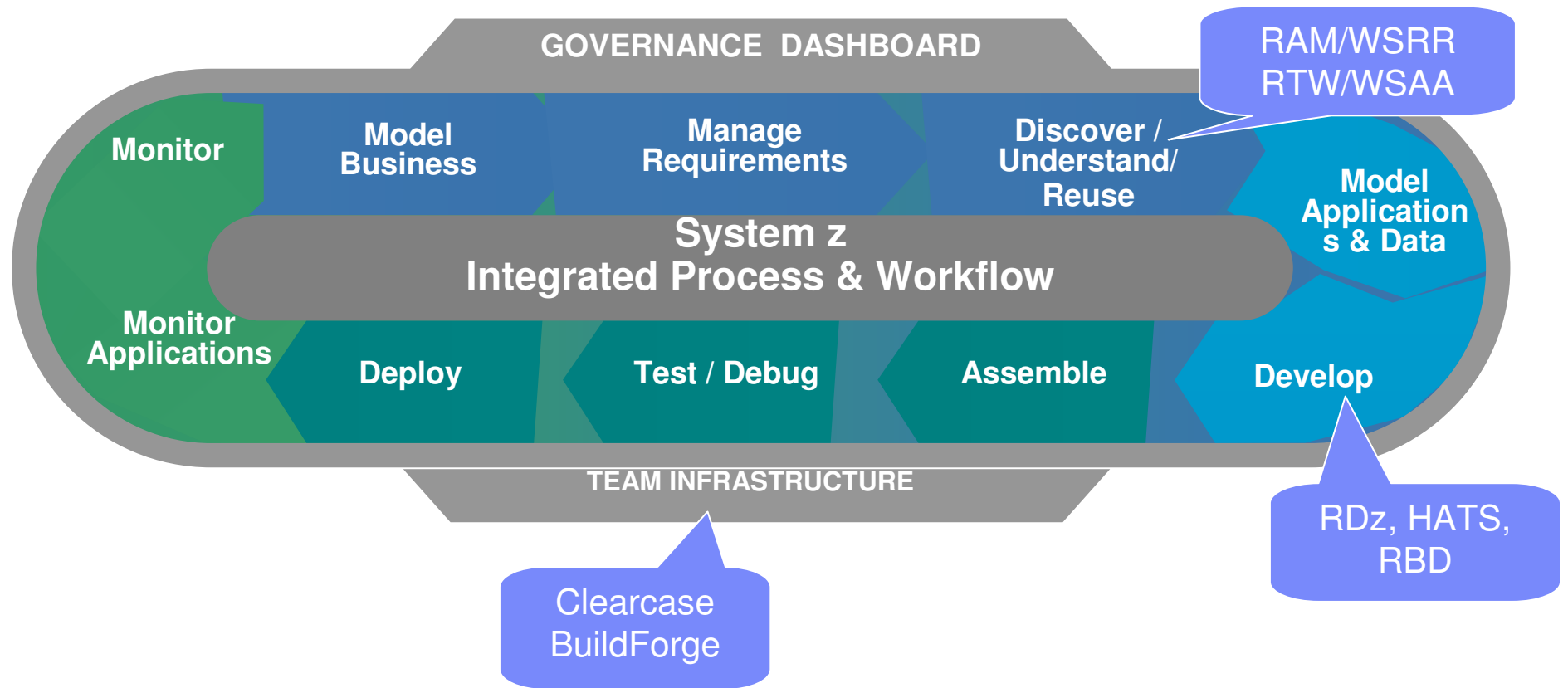
Jazz Enhancements to ClearQuest, Build Forge and ClearCase

Application Lifecycle



The IBM Software Delivery Platform

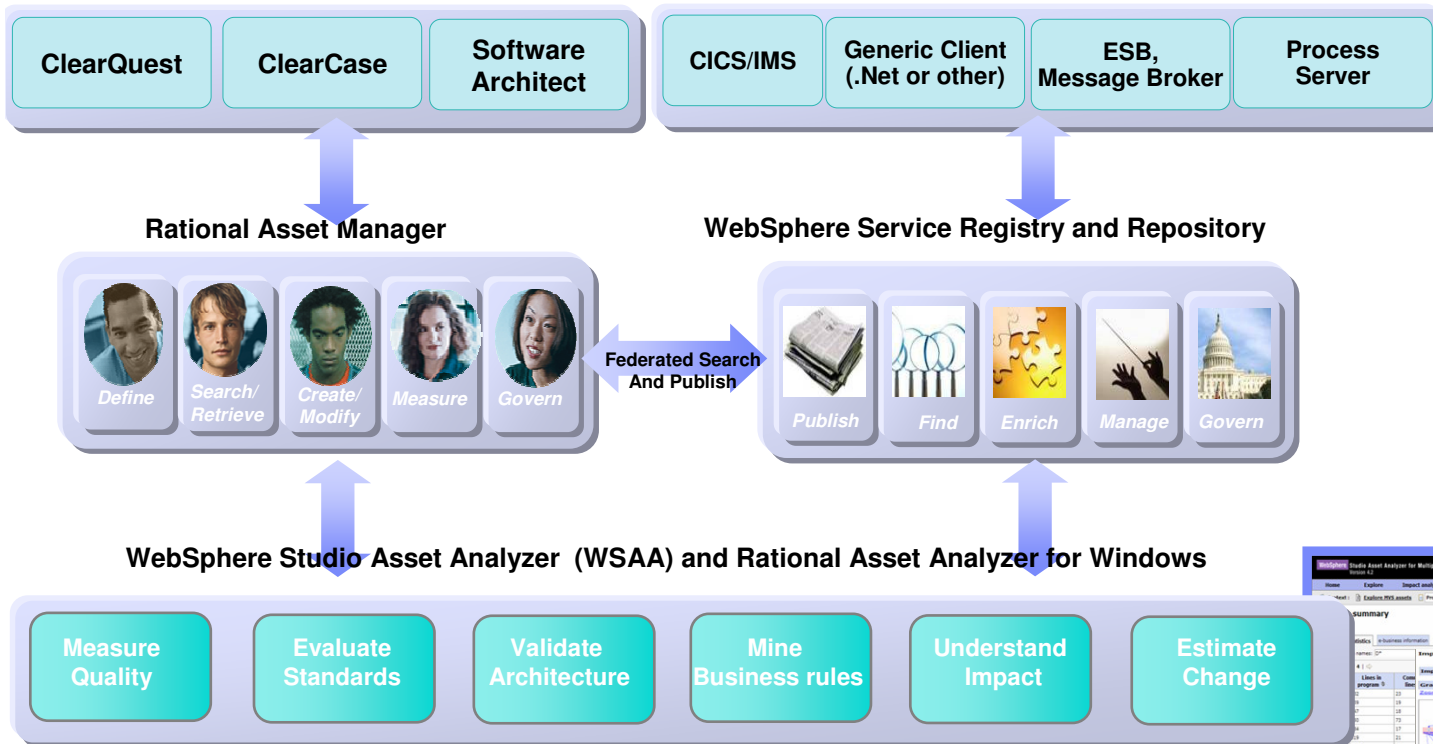
A complete, coherent and integrated set of AD solutions



Bridge the gap between services and application processing

Manages information that is useful for developing, re-using and managing all types of reusable assets

Manages information that is useful for the runtime operation, management and development use of services



- Gain asset clarity with respect to assets, services and relationships
- Combine logical and physical views of service(WSDL) assets and processes
- Discern application impacts of services and underlying processing
- Publish and manage assets across organizations

IBM WebSphere Studio Asset Analyzer v5.1 (WSAA) assists in enterprise wide application understanding helping organizations to understand application architecture, perform impact analysis, evaluate application quality an speed a developers overall throughput and lower maintenance costs. It also is part of a broad solution addressing SOA governance providing insight into the processing contained in services. It is a complement to products including RSA, WSRR, and RTW.

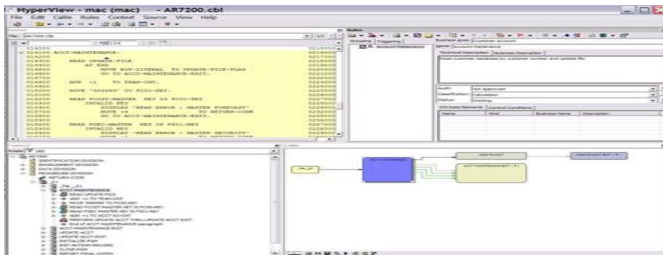
Extend value of existing enterprise assets

Accelerate your path to reuse and SOA with Rational Transformation Workbench

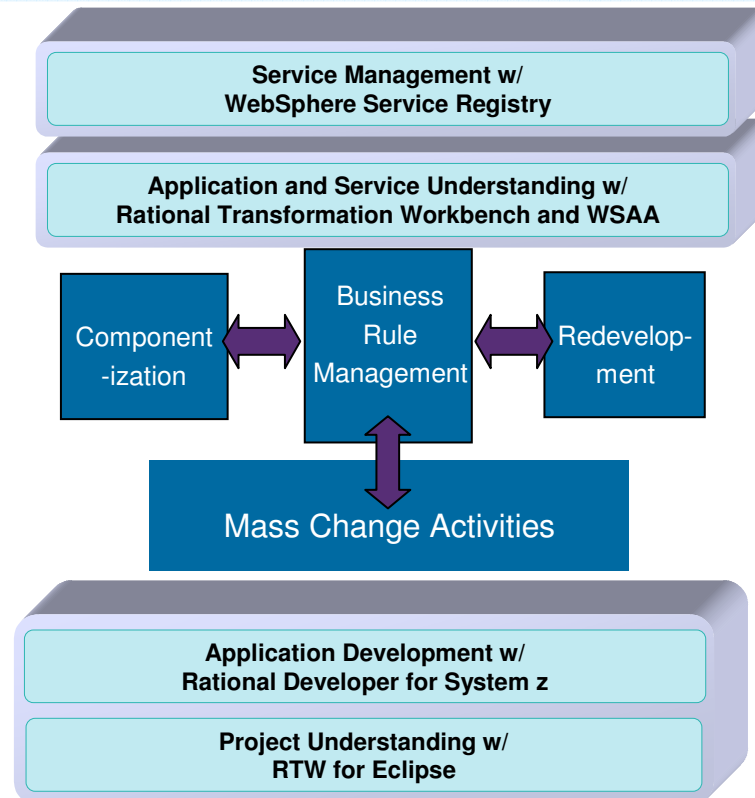
IBM Rational Transformation Workbench v3.1 (RTW) assists in restructuring monolithic applications to help reduce complexity and maintenance costs and speed development of SOA services. It provides deep project-level application analysis to complement the enterprise-wide application insight of IBM WebSphere Studio Asset Analyzer software.

New in RTW 3.1

- ▶ Demystify enterprise applications and their inter-and intra-relationships
- ▶ Gain intellectual control; make fact-based decisions; develop transformation roadmap
- ▶ Identify key assets, mine business rules and restructure for reuse in SOA; Reduce cost and time of modernization projects



IBM Rational Transformation Workbench



Drive innovation with technology advancements

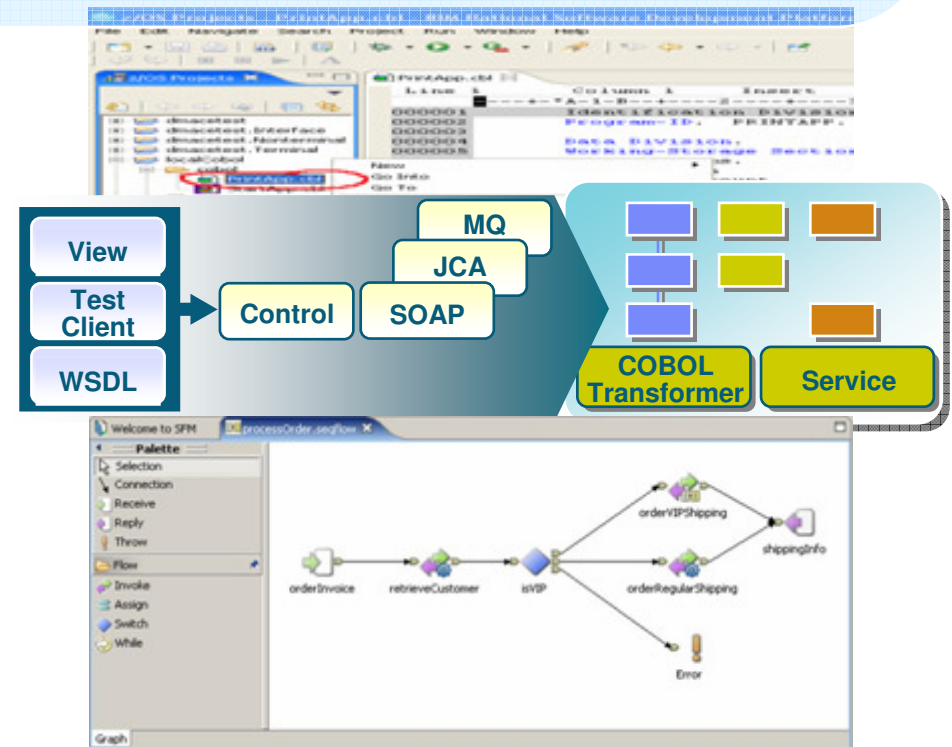
Build traditional and composite applications with Rational Developer for System z

IBM Rational Developer for System (RDz) provides powerful eclipse-based tools for building COBOL, PL/I, C/C++, Java, HLASM CICS, IMS and batch applications. RDz is designed to optimize and simplify application development for traditional processes, and for the SOA you're building to address your needs today and in the future—through best practices, visual tools, templates, code generation and a comprehensive development environment.

RDz 7.5

- ▶ Leverages service flow modeler to automate development of CICS services
- ▶ Develop z/OS applications and CICS and IMS Web services more productively than ever
- ▶ Manage core and composite artifacts from z/OS
- ▶ Speed software delivery with integrated, automated end-to-end processes

- Enables traditional; and modern UI's (via RBD)
- Supports local and remote development
- Creates connectivity via web services, CICS SFM, CTG, IMS Connect
- UML to COBOL speeds Model driven development
- Delivers distributed debugging support for SOA applications via Debug Tool
- Integrates to File Manager, Fault Analyzer



[IBM Rational Developer for System z](#)

Extend value of existing enterprise assets

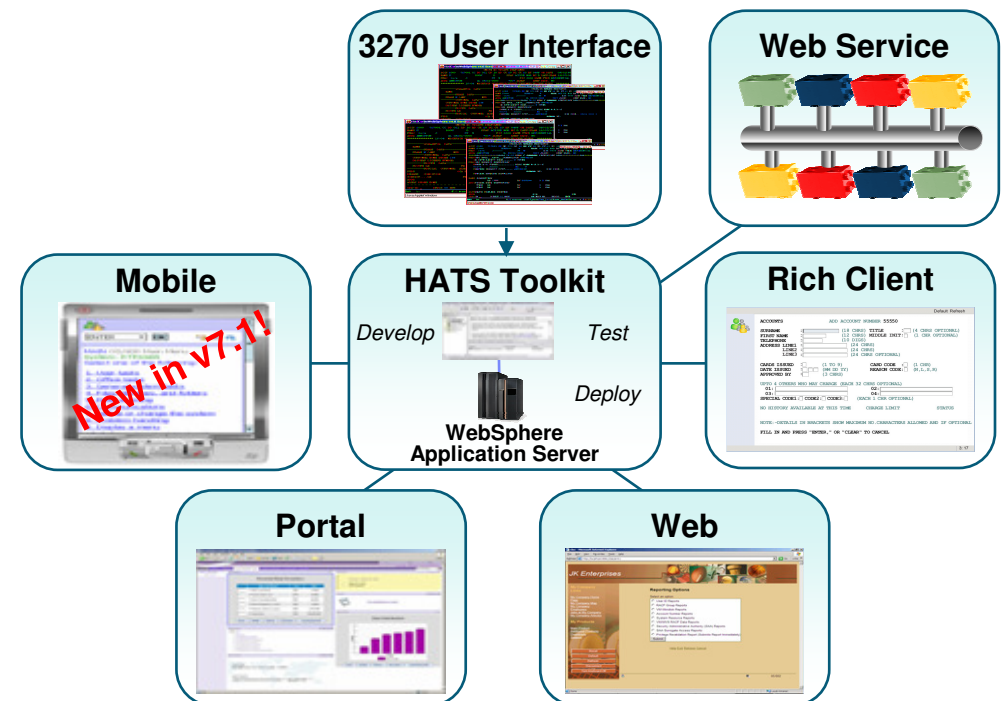
*Transform user experience with Host Access Transformation Services for Multiplatforms**

With **IBM Rational Host Access Transformation Services for Multiplatforms (HATS)** customers can quickly improve the user interface of their existing System z applications and achieve integration with other business information with minimal development cost. The result is an easy-to-use Web interface to the application, which reduces training cost, simplifies the application, and makes it easy to understand for new users.

HATS 7.5

- ▶ Rename/Rebrand/Reprice/Repackage
- ▶ WAS 7.0, Portal 6.1, Mobile App Support
- ▶ Visual Macro Editor (Full support)
- ▶ JSR 168 support
- ▶ Web services usability improvements

- Enhance 3270 and 5250 green screen applications with a GUI interface
 - Combine data from multiple screens, applications and databases and deploy to Web, Portal, and rich client
- Use HATS as on ramp to your SOA environment
 - Extends terminal app. tasks as Web Services and insert them in business processes



[IBM Rational Host Access Transformation Services for Multiplatforms](#)

Drive innovation with technology advancements

Accelerate adoption of Web 2.0 and SOA with Rational Business Developer

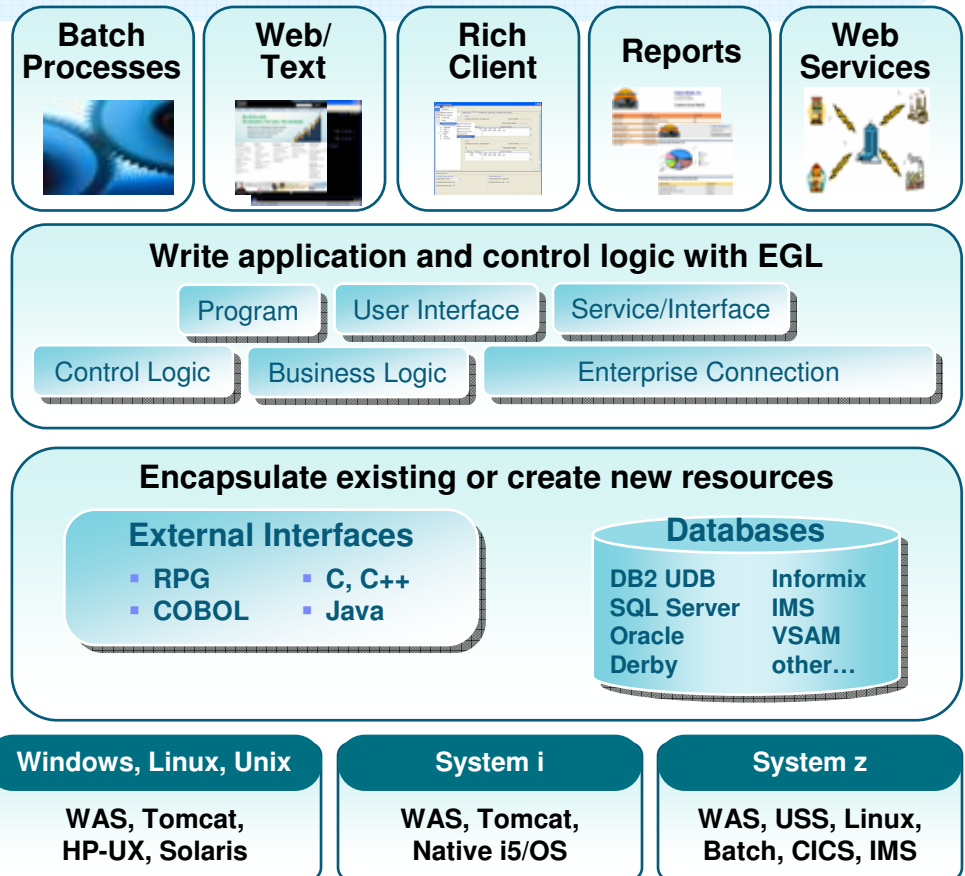
New!

IBM Rational Business Developer (RBD) helps business developers build cross-platform Web and service-oriented applications through “EGL”. COBOL and PL/I developers can leverage their domain using “**EGL, IBM’s newest and most powerful business language**”, to design, develop, test, and deploy new solutions in record time.

New in RBD 7.5

- ▶ Create Web 2.0 and AJAX applications using EGL’s support for Javascript (RBD V7.5.1)
- ▶ Support for MQ, CSV, DL/1, TUI (3270, 5250), BIRT reporting
- ▶ Deploy generated program to IMS
- ▶ Improved support for System i, Portal development
- ▶ Target for migration from VAGen

- Simplify delivery of modern User Interfaces
- Modern syntax appeals to today’s developers
- UML to EGL speeds Model Driven Development
- Leverage business developer skills
- Enhance integration to existing processing and services and improve application QOS
 - Deploying to WAS, CICS, IMS



[IBM Rational Business Developer](#)

Consolidate your Team Infrastructure

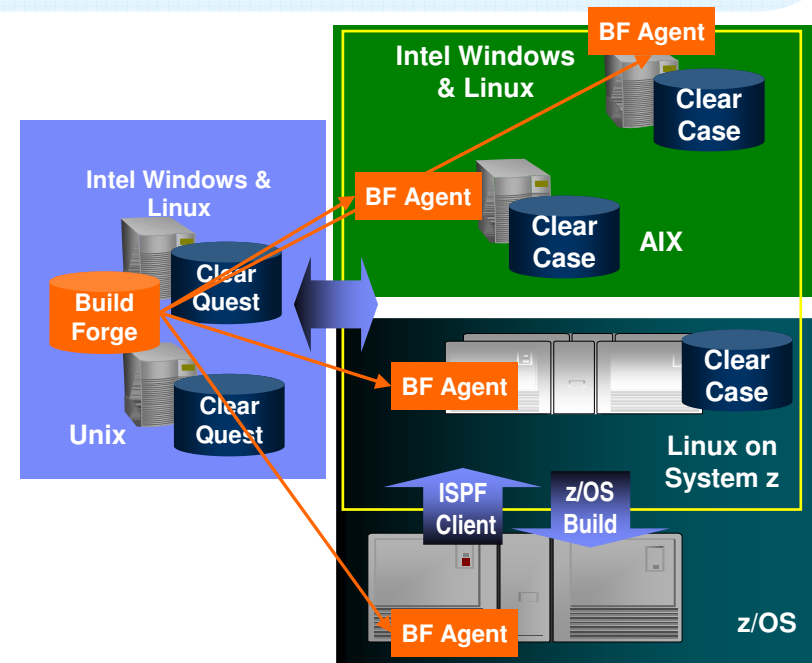
Provide Coordination, traceability, consistency across platforms

With **IBM Rational ClearCase v7.0.1, ClearQuest 7.0.1, and Build Forge v7.0.2** customers can reduce development costs with a single infrastructure for software development environments and processes across platforms and technologies; improve quality through improved traceability, automation of processes, and improved reporting; and benefits from lower costs due to elimination of duplicate processes and processes.

New CRM Solutions

- ▶ **ClearCase 7.0.1**
 - Improved Build Processing
- ▶ **ClearQuest 7.0.1**
 - Enhanced lifecycle integration
- ▶ **BuildForge 7.0.2**
 - Driving distributed builds across platforms

- Provides:
 - single point of control, single artifact repository and set of user interfaces
 - Provides consistent process paradigm across platforms
- Extends power of SDP, Unified change management, and cross platform deployment to z/OS



IBM Rational Change and Release Management Solutions

Questions





Learn more at:

- [IBM Rational software](#)
- [IBM Rational Software Delivery Platform](#)
- [Process and portfolio management](#)
- [Change and release management](#)
- [Quality management](#)
- [Architecture management](#)
- [Rational trial downloads](#)
- [Leading Innovation Web site](#)
- [developerWorks Rational](#)
- [IBM Rational TV](#)
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