IBM Software Group

IBM Application Lifecycle Solutions

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Vice President of Solutions and Software

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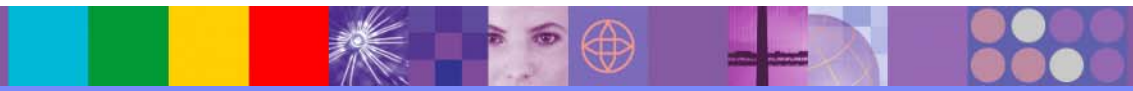

ON DEMAND BUSINESS

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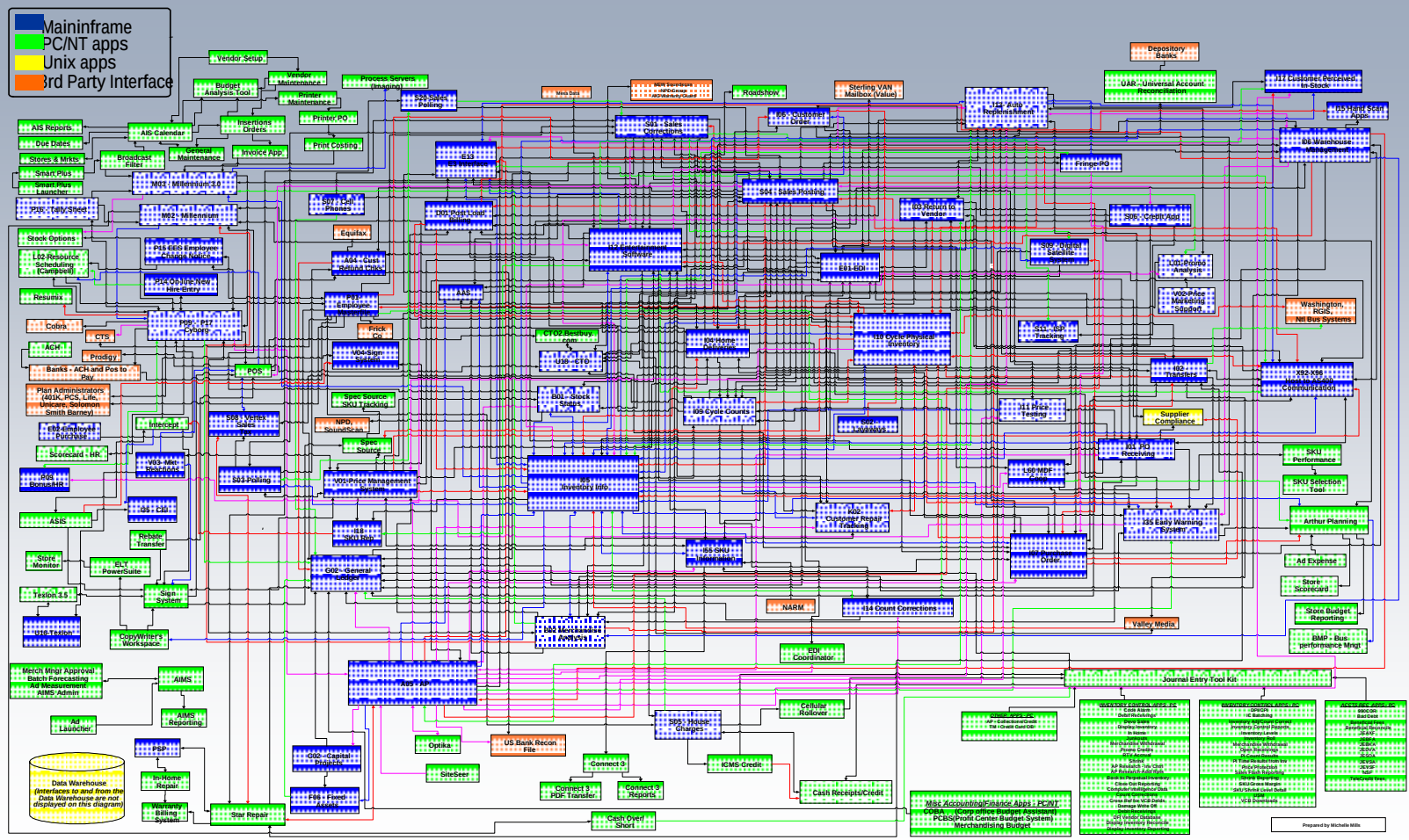
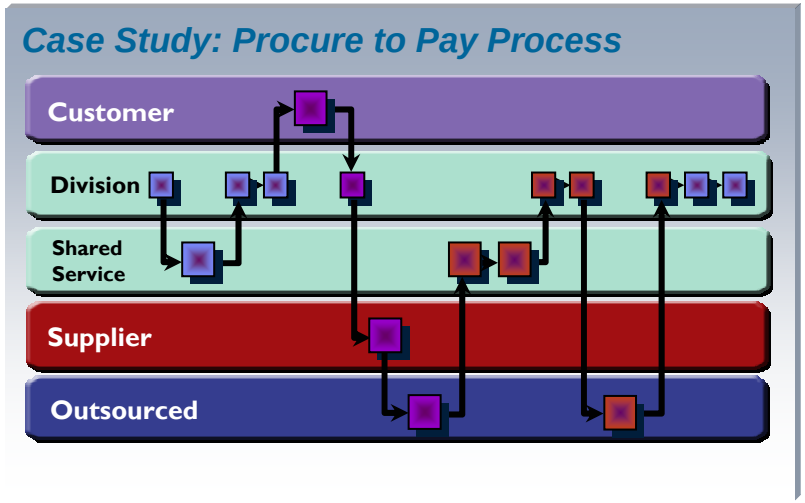
Quality Challenges



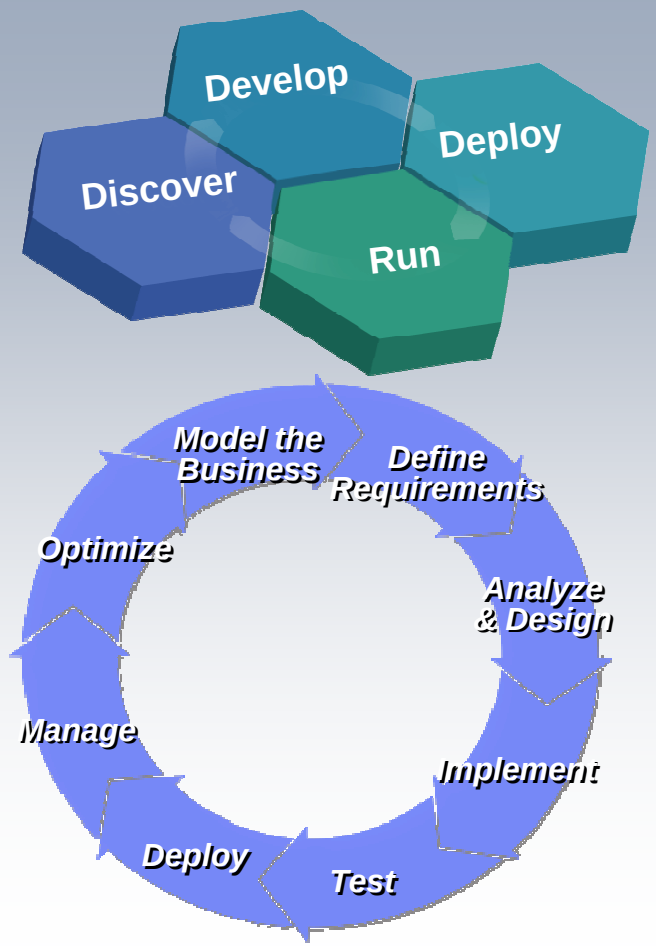
Actual Application Architecture for Consumer Electronics Company

But … Tools & Technology Applied Correctly
Can Pave the Way for Successful Business Innovation

- Standards (including open source) for interoperability
- Self-defined, loosely coupled interfaces
- Tools to visualize and integrate existing assets
- Model Driven Architecture (MDA)
- **Architecture is the key to successful business innovation**



Enterprise Platform



- **Discover business & technology assets**
  - Business priorities
  - Requirements
  - Middleware and software assets
- **Develop at the speed of business**
  - Rapid application development
  - Model-driven architecture
  - Asset-based development
  - Direct-to-middleware productivity
- **Deploy to closed-loop environments**
  - Automated applications deployment
  - Streamlined composite application management
  - Direct-to-operations productivity
- **Run**
  - Highest Qualities of service
  - Broadest ROI's
  - Utilization of standards/process

The IBM Software Development Platform

A complete, open, modular, and proven solution

Analyst

Model, simulate, assemble, and monitor processes

Architect

Visually model applications and data

Developer

Rapidly construct, transform, integrate and generate code

Tester

Design, create, and execute tests

Deployment Manager

Provision, configure, tune and troubleshoot applications

Project Manager

- Follow a common process
- Manage and measure projects and portfolios
- Manage requirements
- Manage change and assets
- Manage quality

Executive

- Align investments with business objectives
- Analyze and monitor project portfolios

The IBM Software Development Platform

A complete, open, modular, and proven solution

Analyst

WebSphere Business Integration Modeler & Monitor

Rational Software Modeler

Architect

Rational Software Architect

WebSphere Studio Asset Analyzer

ATW

Developer

RAD

WDz

RWD

WID

HATS

Tester

Rational Functional, Manual, Performance Tester

ITCAM for WebSphere

Deployment Manager

Tivoli Configuration Manager

Tivoli Monitoring

Customer Extensions

ECLIPSE

3rd Party ISV Tools

Project Manager

Executive

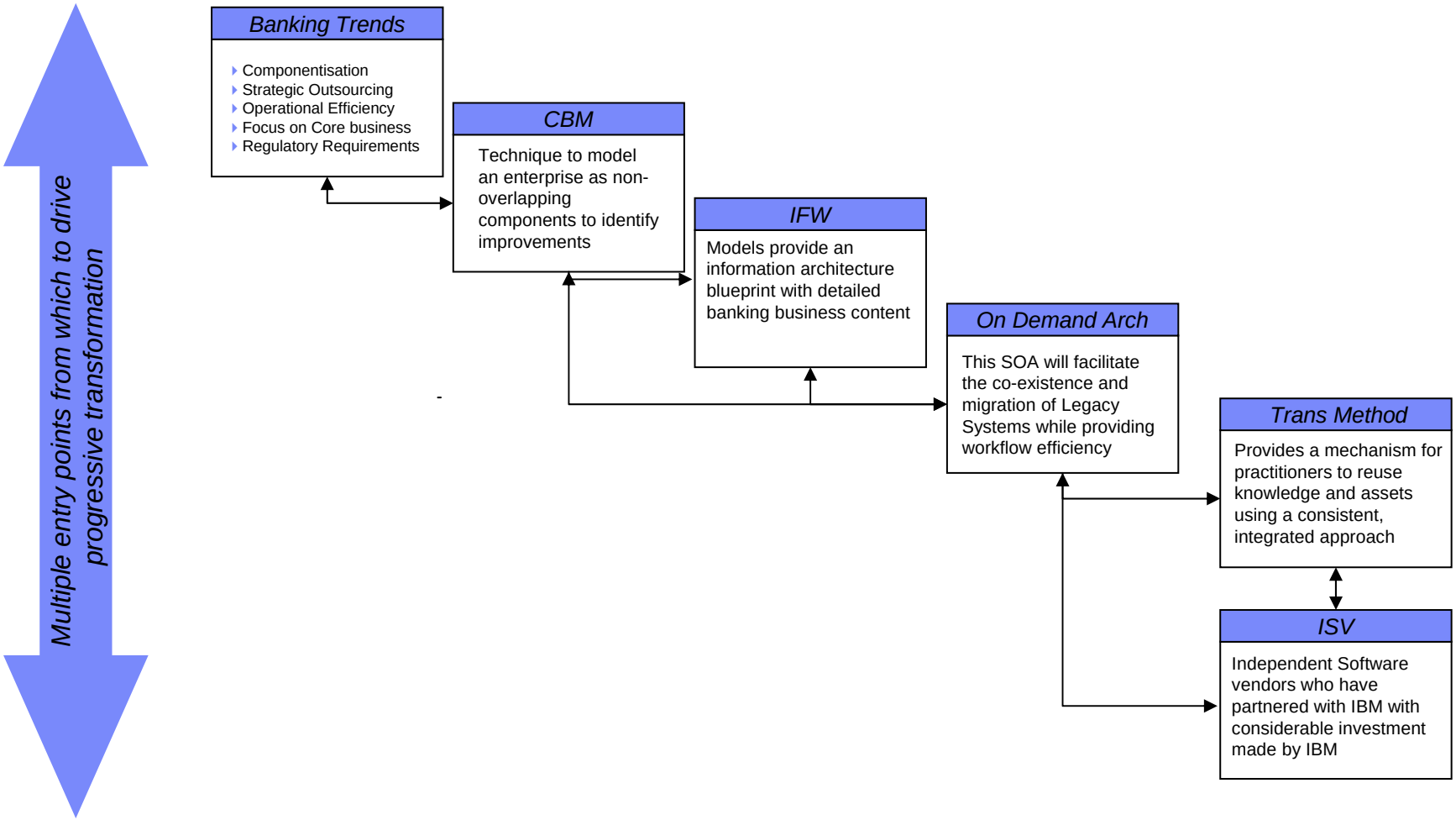
Rational Team Unifying Platform

Rational Project Console	Rational Requisite Pro	Rational ClearCase	Rational ClearQuest	SCLM	Rational Test Manager

Rational Unified Process

Rational Portfolio Manager

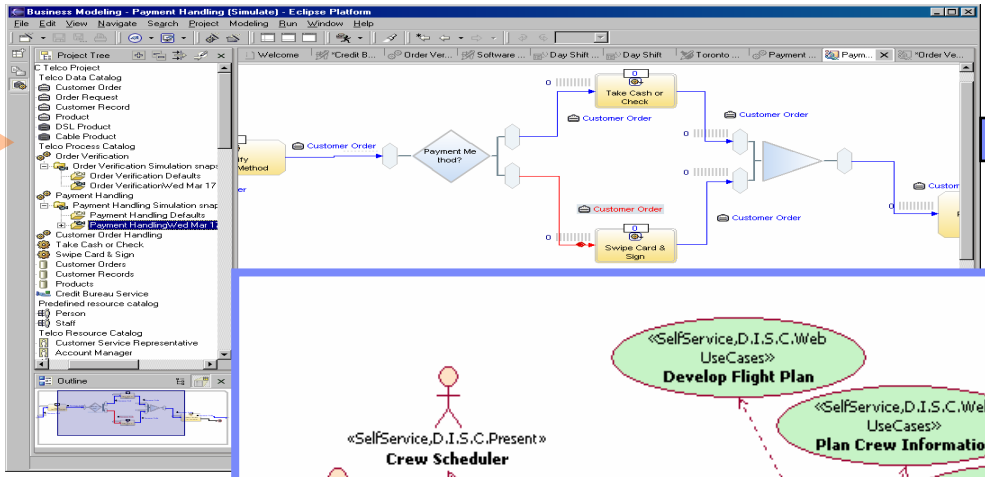
IBM transformation tools and resources span enterprise functions



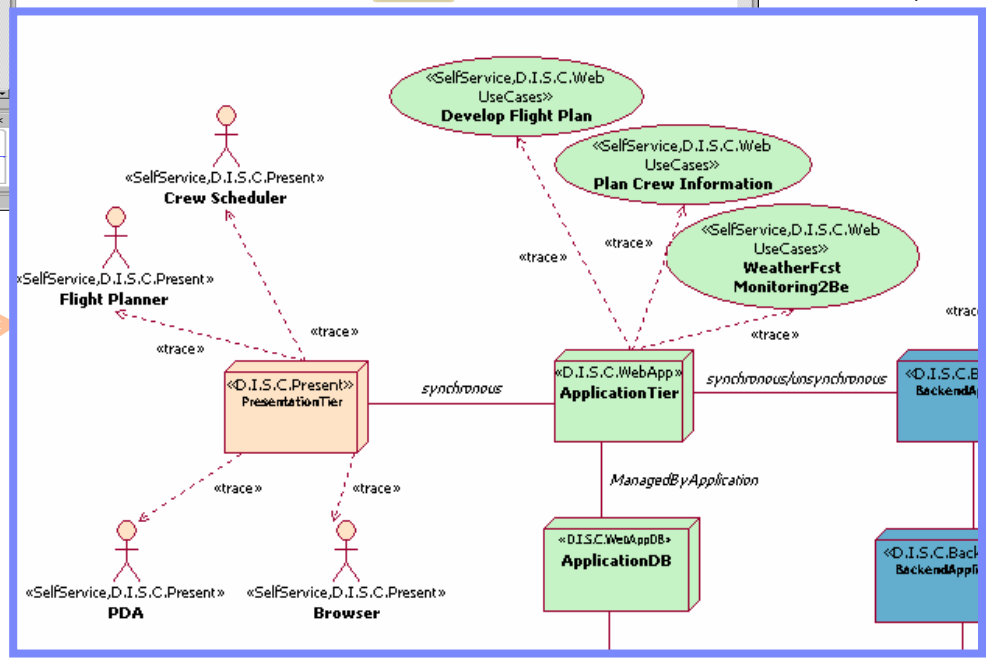
Step one: Model the business

Document business processes and user interactions

Analyst models “as is” business process and explores alternative “to be” business processes



Analyst models “as is” and “to be” user interactions through use cases

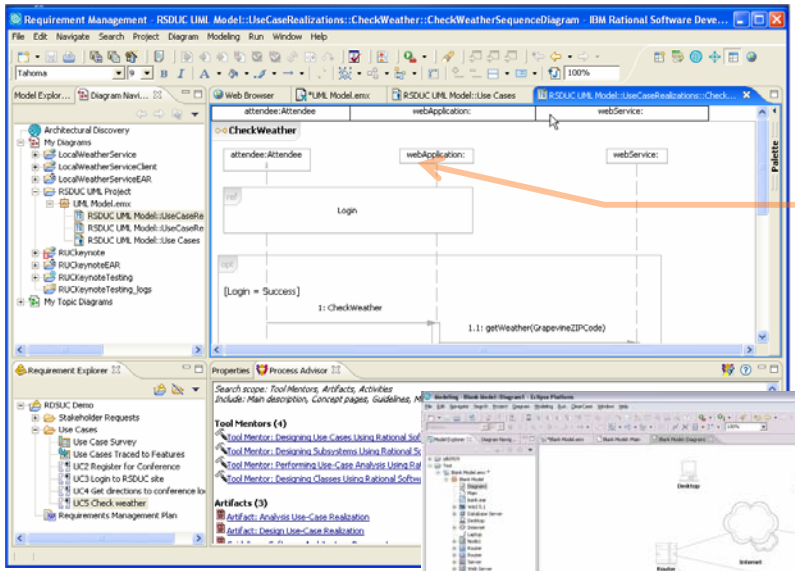


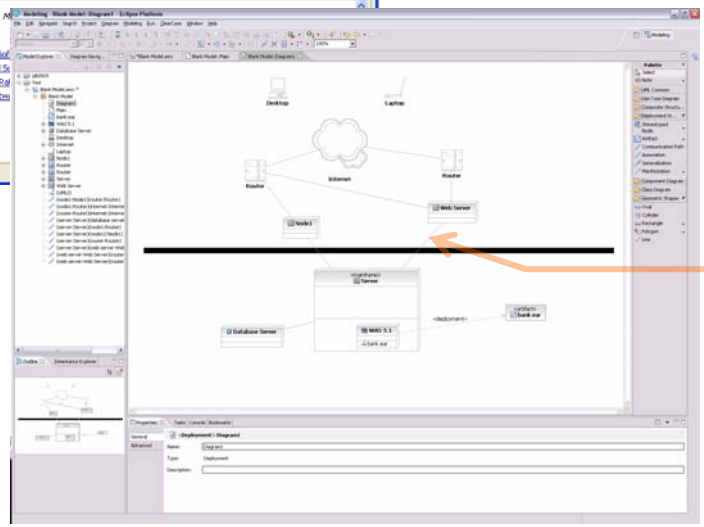
IBM WebSphere Business Integration Modeler
IBM Rational Software Architect

IBM WebSphere Developer for zSeries: Service Flow Modeler

Step three: Discover existing assets, analyze and design application

Minimize risks by understanding architectural dependencies





Architect imports business processes and refines application design, based on best practices, and existing assets

Architect models operational model

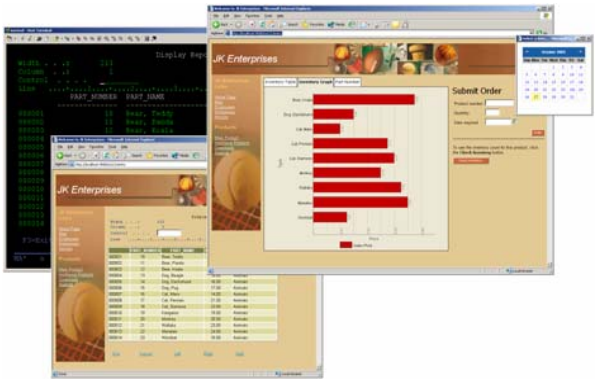
IBM WebSphere Business Modeler

IBM Rational Software Architect
IBM WebSphere Asset Analyzer
IBM Asset Transformation Workbench

Step three: Styles of transformation for zSeries environments

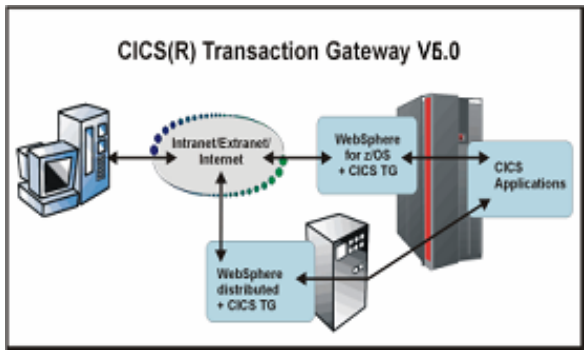
Transform User Experience

Enhance user interface and workflow for quick return on investment



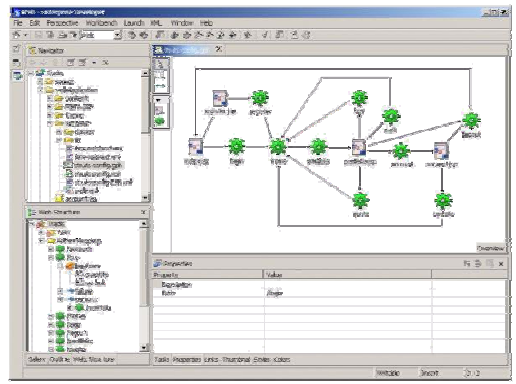
Transform Application Connectivity

Improve business processes and develop customer, partner and supplier relationships using Web services and Java connectors



Transform Application Architecture

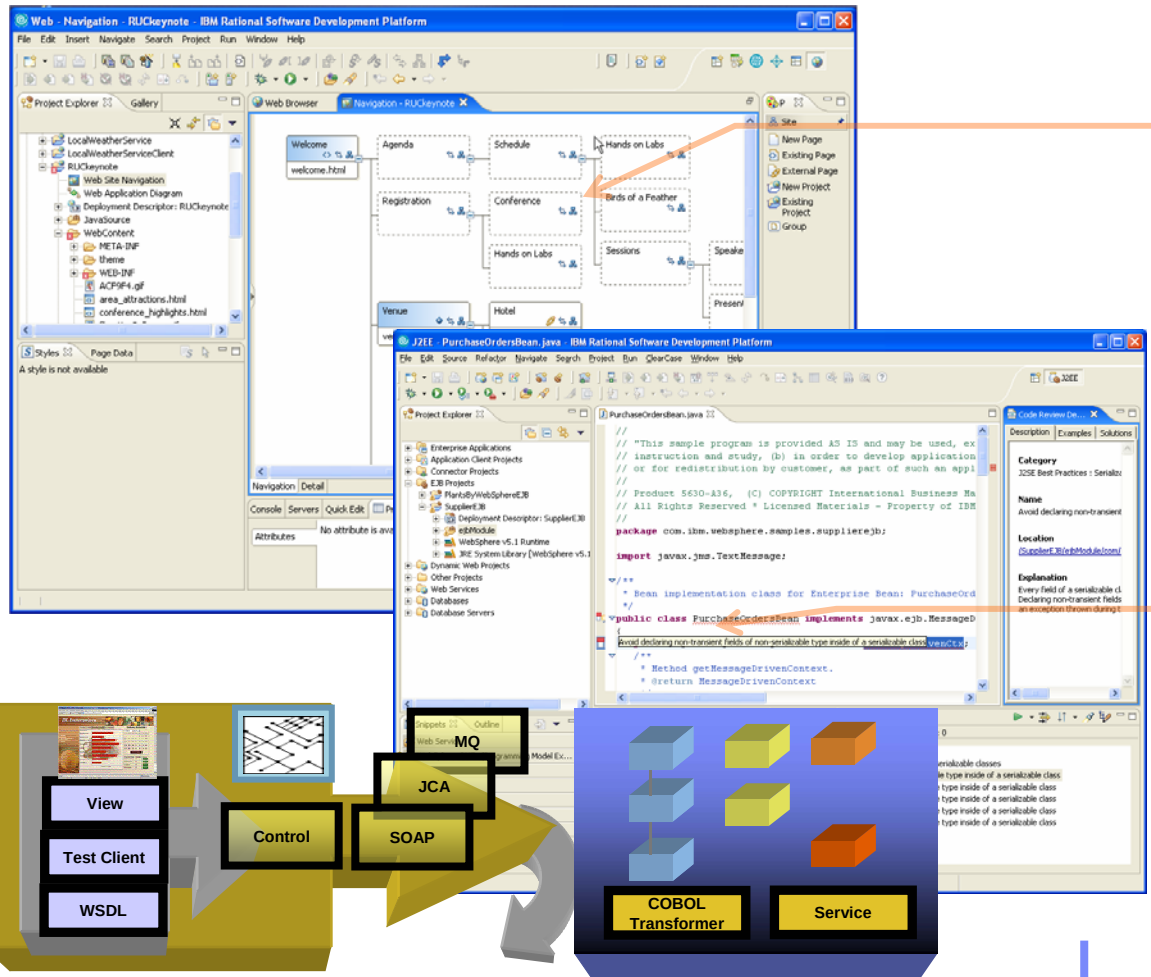
Update and extend mission-critical applications as services, leveraging their core value in new ways



Single integrated delivery vehicle across application transformation styles

Step four: Implement application

Build higher quality applications in less time



Developer implements application leveraging highly productive J2EE, Java, CICS, IMS, COBOL, PL/I capabilities (JSF, SDO, patterns)

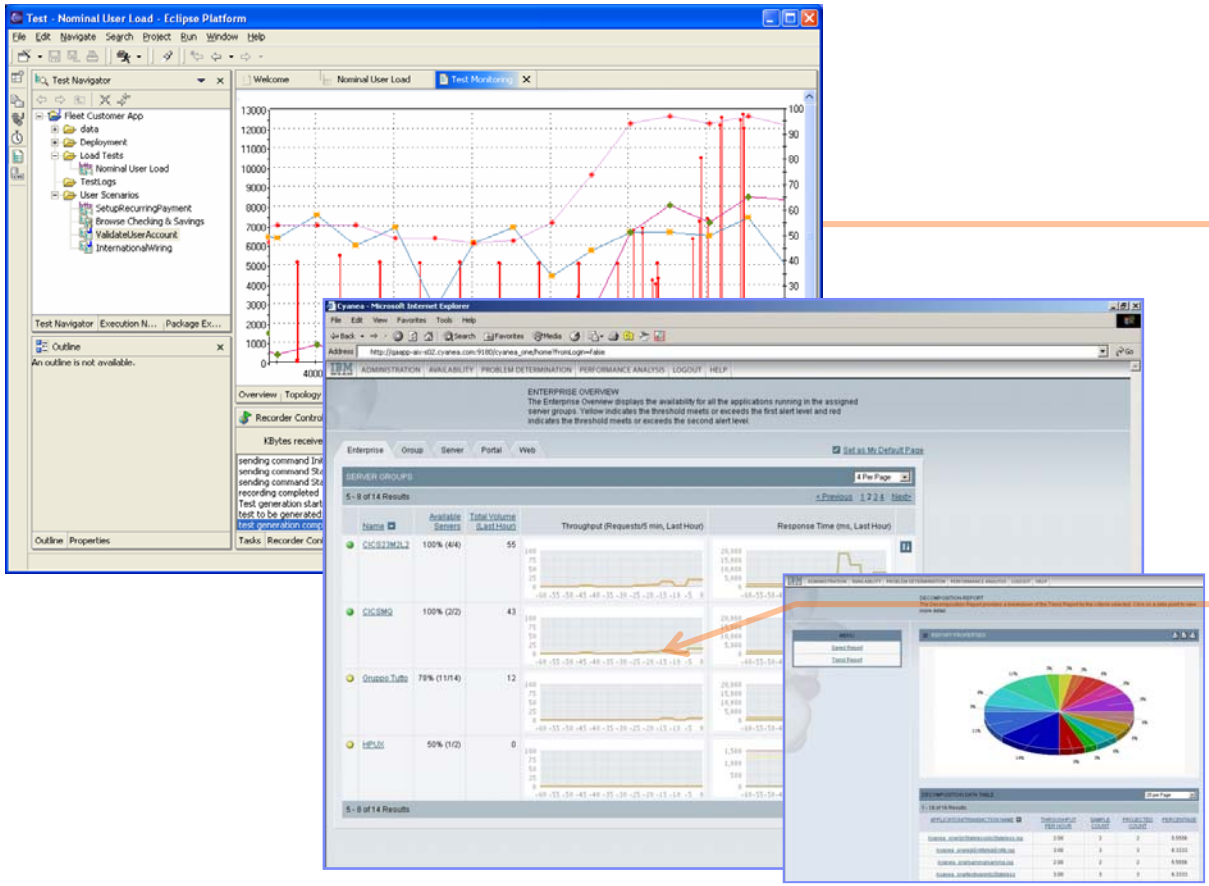
Developer leverages code analysis & unit testing to fix functional, performance, and security problems at the component level

IBM Rational Software Architect
IBM Debug Tool

IBM Rational Application Developer
IBM WebSphere Developer for z/Series

Step ten: Deploy

Plan capacity and ensure compliance with Service Level Agreements



Tester evaluates the scalability of the new application based on Service Level Agreements captured in business model

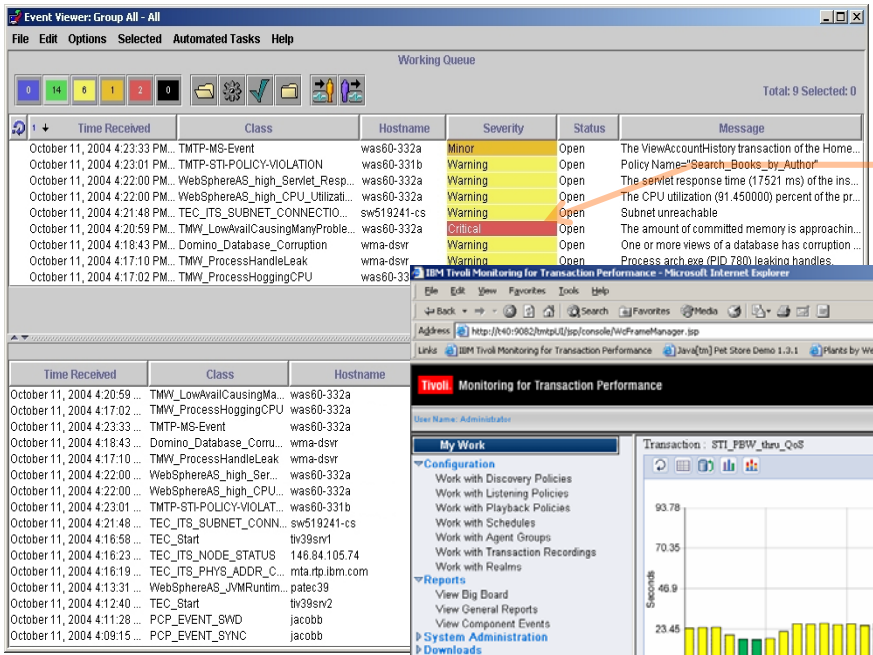
Deployment team builds capacity plans based on performance tests

IBM Rational Performance Tester
IBM Workload Simulator

ITCAM for WebSphere
IBM Fault Analyzer
IBM Candle
IBM Application Performance Analyzer

Step *end*: Manage

Monitor service levels with a centralized view into your network, systems, middleware, and application performance



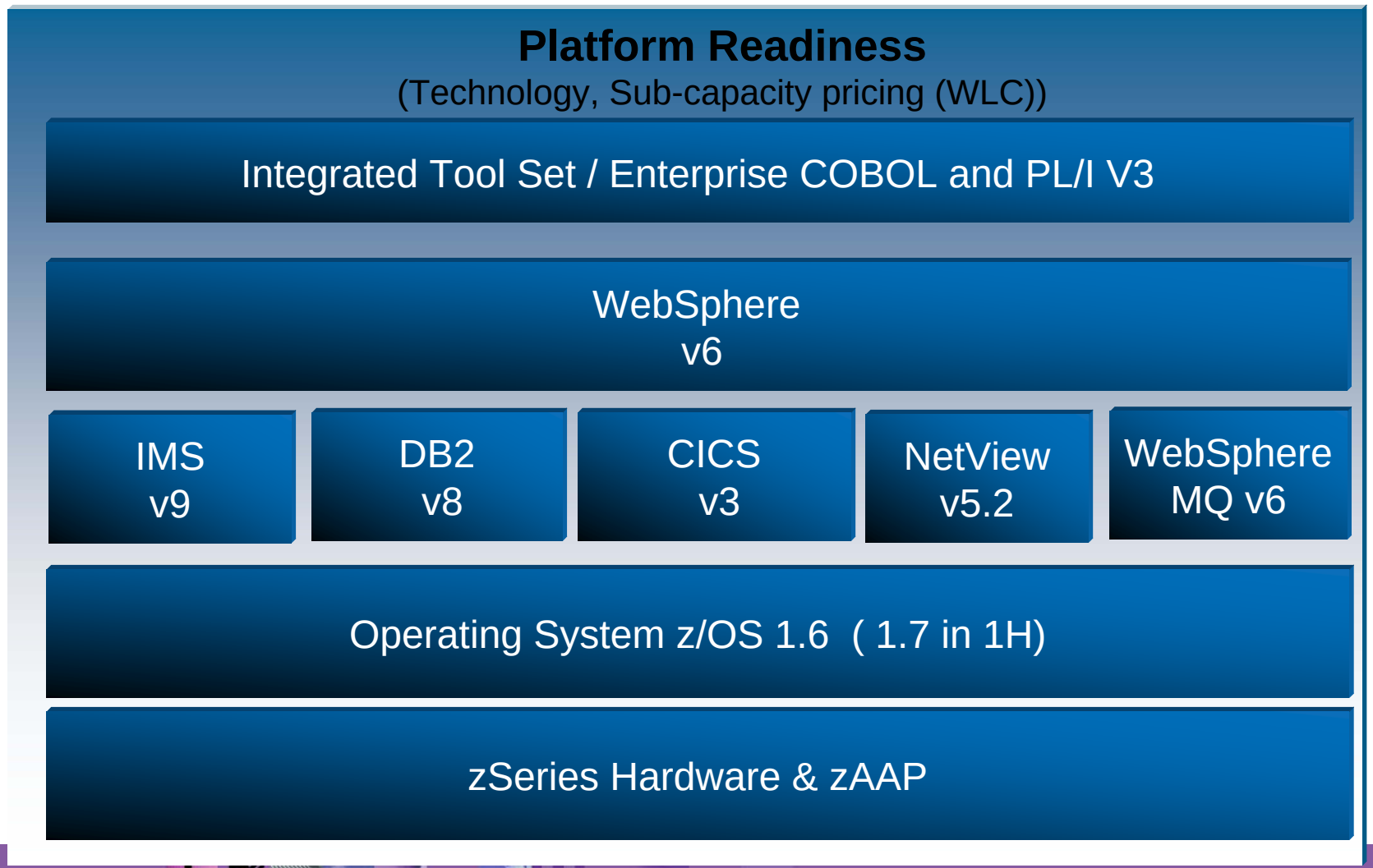
Operations Manager monitors application performance and is automatically notified of problems, enabling fast triage to the right stakeholders (application, DB, network, etc.)

IBM Tivoli Enterprise Console

ITCAM for Response Time Tracking

IBM zSeries Software Solutions

Platform Readiness is Key



Creating SOA composite applications with existing assets

Model

Model a new business process that builds on your current capabilities …..

WebSphere Business Modeler

…and discover program units and business rules you can reuse in the new process.

WebSphere Studio Asset Analyzer

CICS Interdependency Analyzer

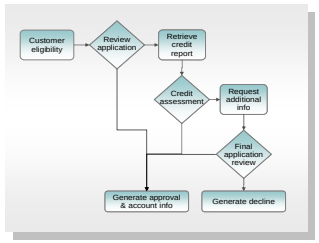
Asset Transformation Workbench

Assemble

Wrap programs as services, creating composite appl'ns from core assets….

WebSphere Developer for zSeries, *plus Service Flow Modeler*

Rational Application Developer



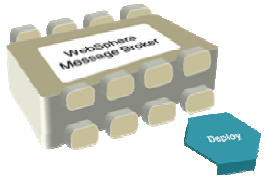
… and assemble the services across multiple platforms

WebSphere Integration Developer

Deploy

Choreograph and deploy your new composite applications ….

WebSphere Process Server



… using an advanced ESB to power your SOA

WebSphere Message Broker

Manage

Monitor the processes across your SOA, and intervene if necessary ….

WebSphere Business Monitor

Tivoli Composite Application Manager for WebSphere

…. and export data for analysis and process improvement, back to ….

WebSphere Business Modeler


Thank
You