



*The future runs on System z*

# Business Results Powered by WebSphere on System z

**Yvonne Perkins**  
**Vice President,**  
**Enterprise Platform Software**



# Change is Accelerating . . . Will You Keep Up?



**83%** Expect substantial or very substantial change

The change gap **Triplies**

**98%** Plan business model changes

*Agility is a Smarter Business Outcome*

# What Does an Agile Organization Look Like?

## Characteristics Behaviors

Deep, continuous *alignment*  
between business and IT

Active LOB participation  
in IT strategy formation

Interdisciplinary *skills*

IT is part of business strategy, not  
an afterthought

Efficiently *deliver and reuse*  
business applications

Efficiencies are realized; applications  
fully meet user needs

A non-complex, robust and resilient  
*connectivity infrastructure*

Broader and faster collaboration and  
decision-making across ecosystem

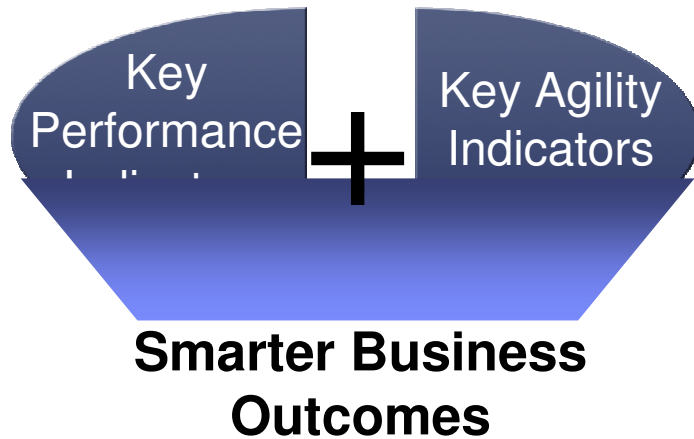
*Governance* that makes it easy to  
make the right decision

Reuse is incentivized; clear decision rights  
management; consistent, enforced policies

*IT's strategic importance*  
reflected in org chart

CIO is part of executive council

# Key Agility Indicators Set the Bar for Success



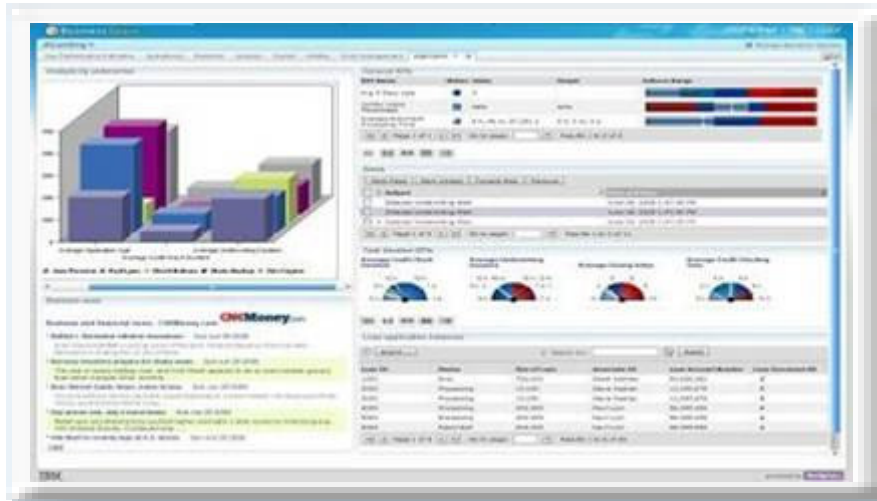
## 300+ KAIs across multiple service lines:

- Supply Chain Management
- Financial Management
- Human Capital Management
- Information Technology

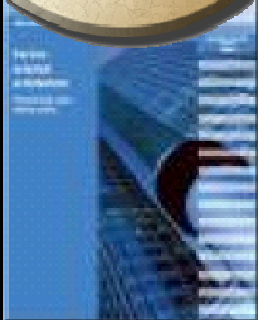
Enhanced!

KAI library embedded in WebSphere Business Modeler & Monitor

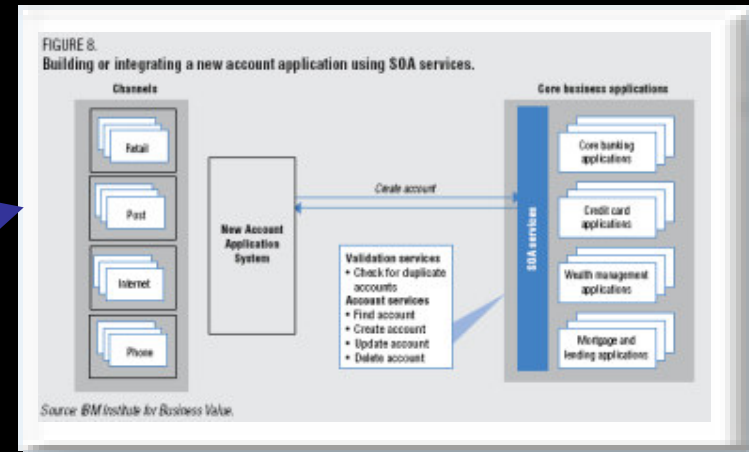
Benchmark against your peers how adaptable you are in rapidly changing times



# 1 Tap Into SmartBusiness INsight To Achieve Agility ...And Chart Your SOA Course



- Introduction
  - What is SOA?
- Simplifying payments
  - The business challenge
  - How it works today
  - Integrating payment applications
  - The value SOA can bring
- Integrating multiple channels
  - The business challenge
  - How it works today
  - Information when and where needed
  - Returning value with SOA
- Standardizing account opening
  - The business challenge
  - How it works today
  - Simplifying the process
  - The value to the bank
- Conclusion



**How SOA helps** with actionable guidance for Today

Your industry

Current and future business process insight



Retail



Banking™



Government



Cross Industry



Insurance



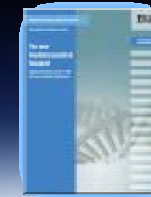
Healthcare



SCM



Electronics



Biopharma

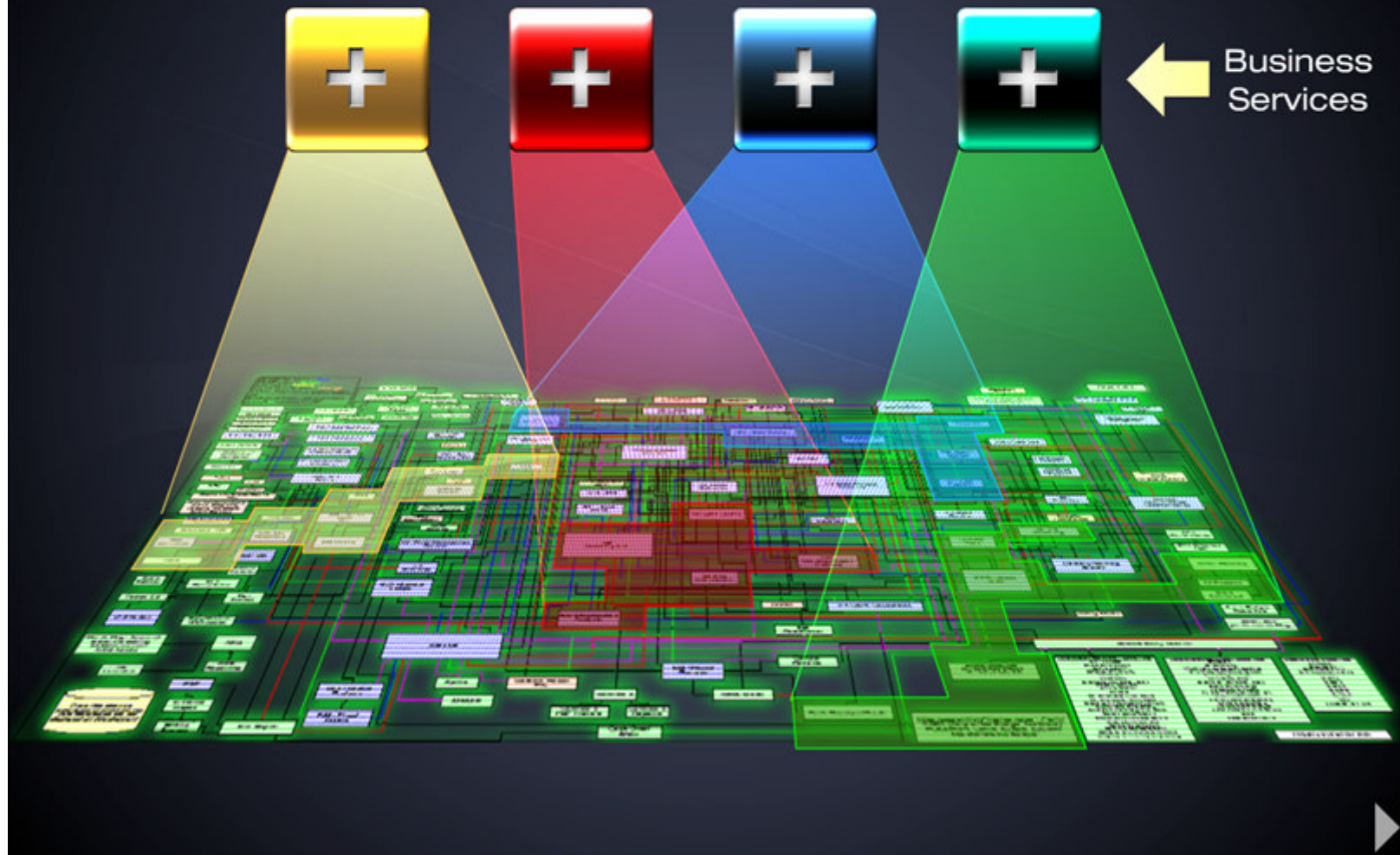


SOA WORLD TOUR



## What is SOA?

Extract services from applications



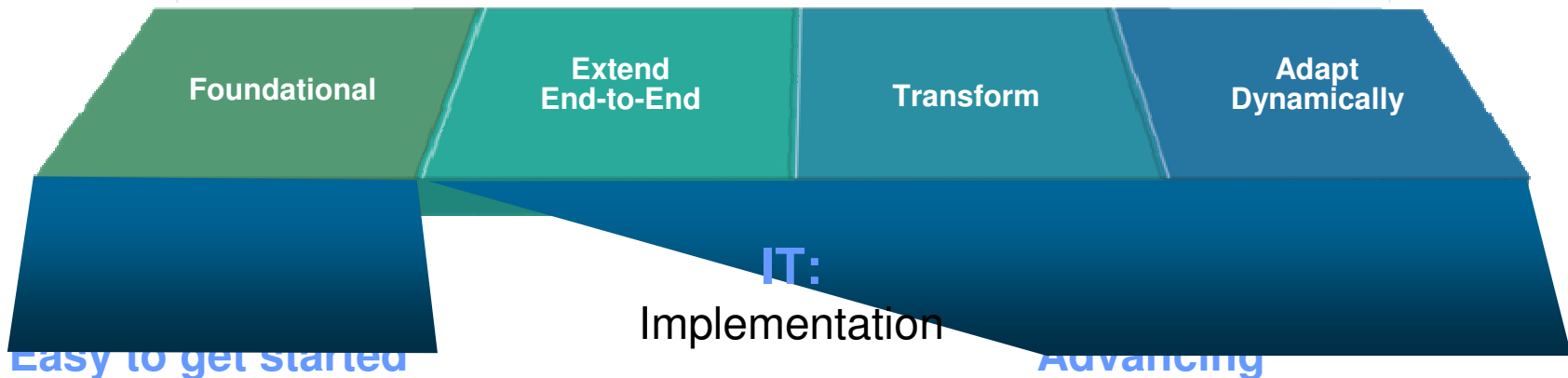
# Smarter Technology Makes it Even Easier to *Get Started* quickly and *Advance* incrementally



***A set of guiding principles to extend business value of deployment***

## Business:

Best practices & Guidance



- SOA Business Value Assessment
- SOA Entry Points
- SOA Sandbox

- Applying Best Practices
- Management & Security

# Distinct Value for z Customers with Every Style Regardless of Where You Choose to Engage

<i><u>Value to business</u></i>	Greater agility in specific, departmental business areas	Optimization and innovation across end-to-end business processes	Business model innovation to support the Globally Integrated Enterprise	Predictive business automatically responding to market forces
	Collaboration within a line of business	Coordination across lines of business	Enterprise-wide organizational cooperation	Enact significant shifts without direct IT involvement
Scope				
	<b>Foundational</b>	<b>Extend End-to-End</b>	<b>Transform</b>	<b>Adapt Dynamically</b>
	<b>Basic</b>			<b>Advanced</b>
<i><u>Value to IT</u></i>	Focused, proven, high-ROI projects Start with what you have and what works	End-to-end process management to innovate Draw new value from existing assets	IT for strategic advantage and business model innovation Assets drive new business opportunities	Technology becomes invisible
% functions expressed as services	<10%	<40%	<80%	>80%
% of services reused	<5%	<20%	<50%	>50%

Based on 5700 customers using our SOA offerings



# Deploying on System z provides differentiated value

## *Enabling intelligent IT that works for your business*

### *The New IBM System z10 Enterprise Class*

The power of many . . .



. . . the simplicity of ONE

### ***Server Leadership: 40+ years in the making!***

Mainframe utilization rates often exceed 80%, and are designed to handle sustained peak workload utilization of 100% without service level degradation.

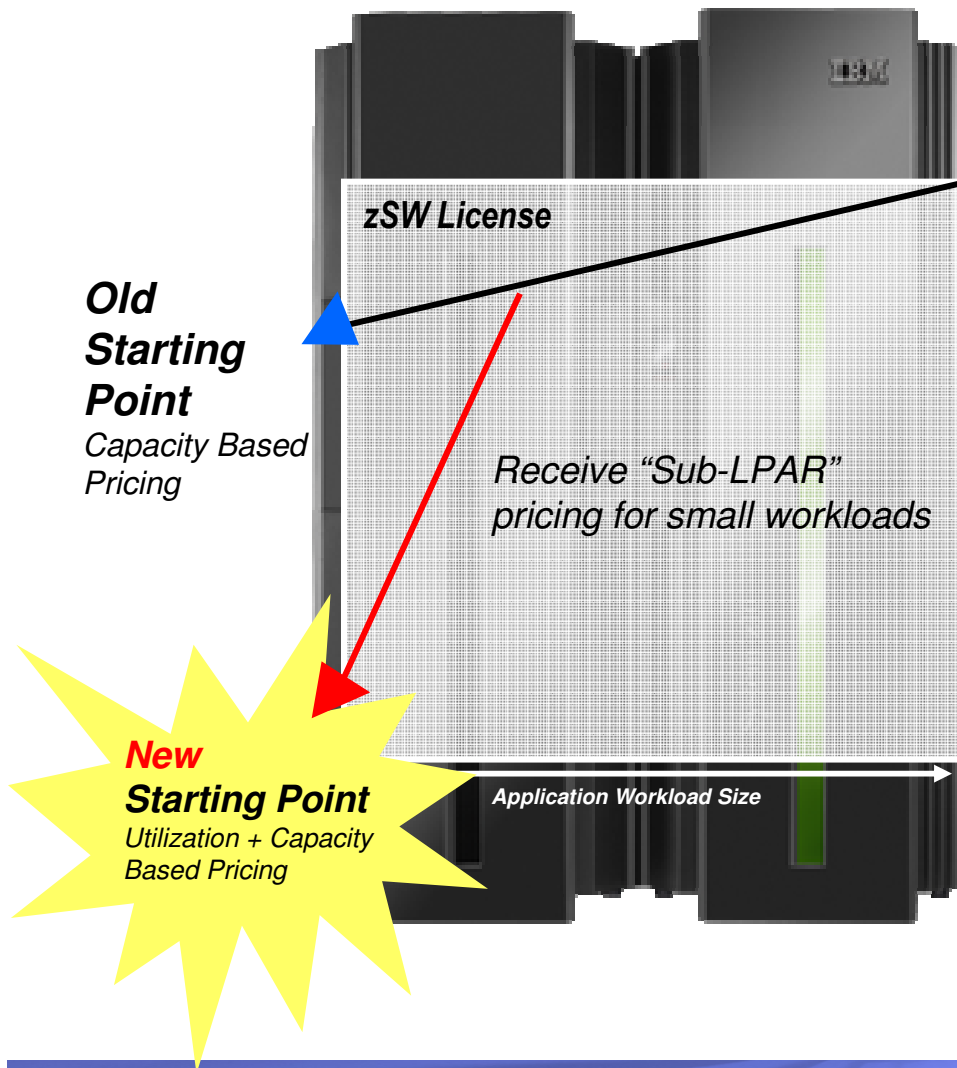
*CICS is IBM's premier transaction processor in 90% of the Fortune 500 customers*

- Processors, CPU speed, memory, network I/O
  - Growth of traditional workloads
  - Consolidation of hundreds of applications
  - Granularity of WebSphere deployments
  - Access to corporate data
  - Messaging speeds to support SOA
- Price / performance improvement of specialty engines
- Just in Time capacity and management
  - Adapt faster to workload variations such as dynamic SOA
  - Respond automatically to demand from CICS, IMS, DB2, WebSphere, ...
  - Deploy new WebSphere workloads in minutes

# Getting Started Sub-capacity Pricing for z/OS IPLA Software

Helping to Make It Easier To Deploy New Projects on z/OS Software

**\* New!**

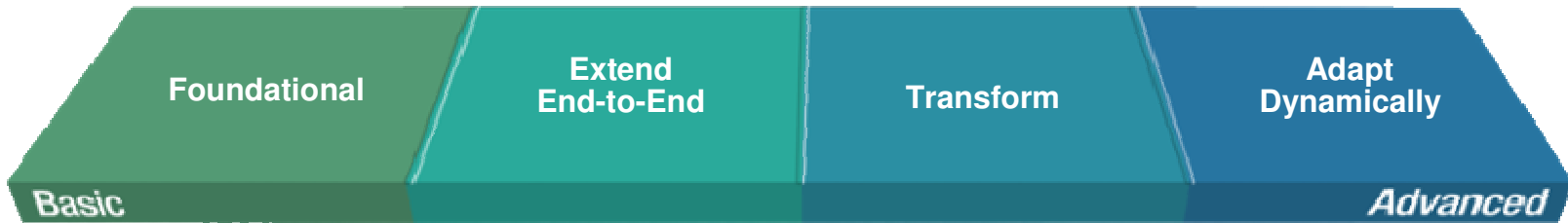


- ✓ Help customers start their projects
- ✓ Help improve alignment between software use and software charges
- ✓ Enable greater flexibility with software licensing
- ✓ Change LPAR capacity without changing software charges
- ✓ Improve price/performance

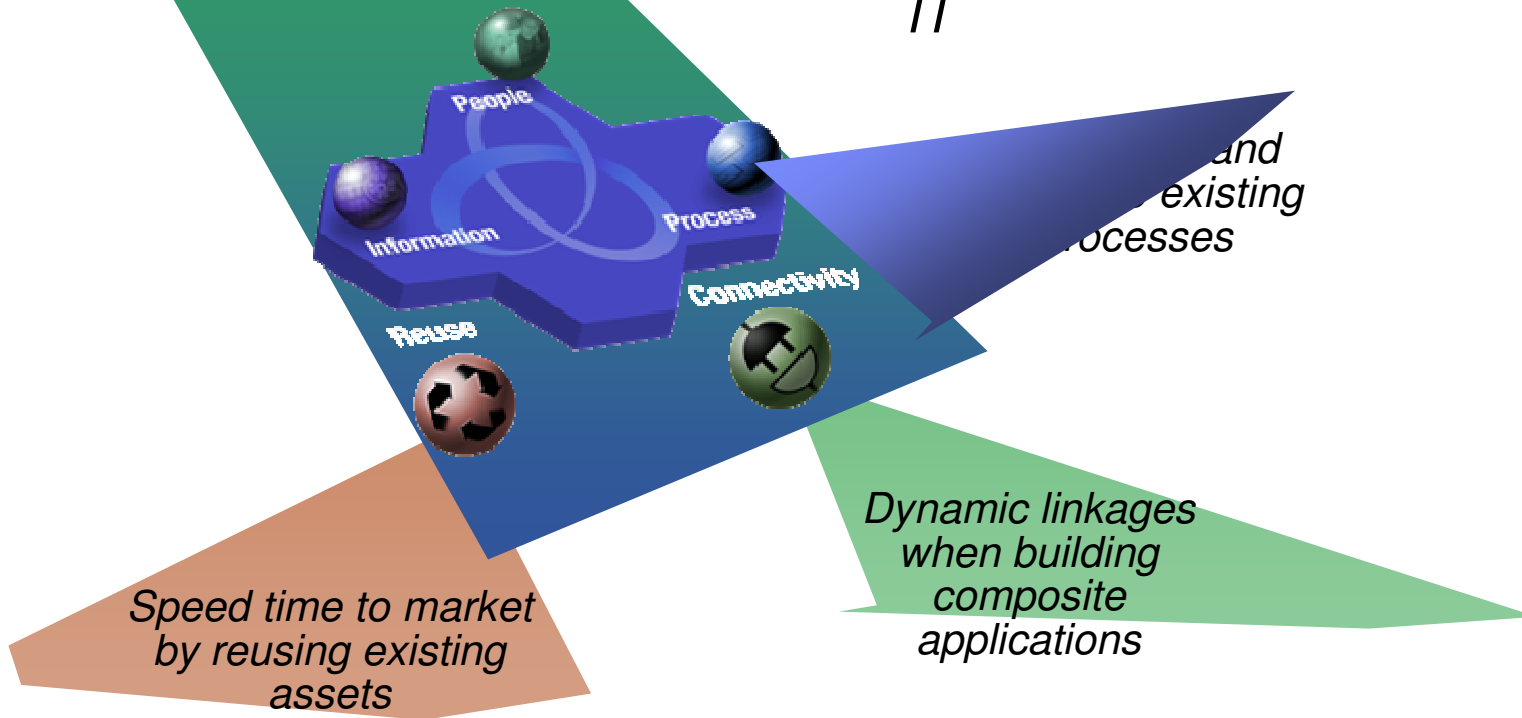
# SOA Entry Points are a great way to build for agility

*For rapid business return*

*Business*



*IT*



# Speed Time to Market by *Reusing* Existing Assets

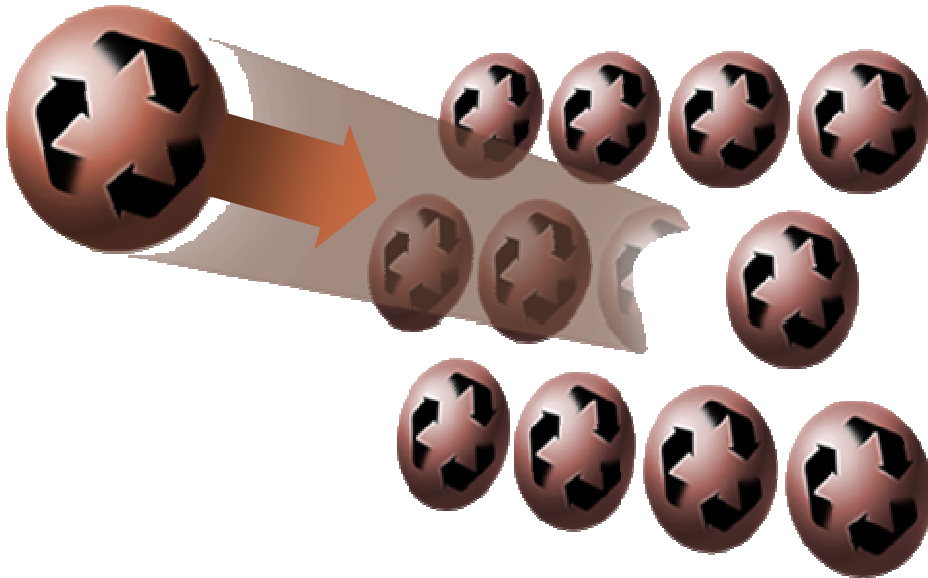
*Accelerate service development and deployment*

## Reusing Existing Assets will provide:

- High performance access to customer information
- Dynamic scalability for unpredictable workloads
- Helps customers achieve lowest TCO
- Designed to achieve the goal of zero downtime

## Benefits:

- Extend ROI by reusing prior investments
- Reduce risk and cost
- Speed time to market



## Supporting Portfolio

- WebSphere Application Server V7 \* New!
- Open Source Consolidation Package \* New!
- CICS Explorer \* New!
- WebSphere Virtual Enterprise V6.1.0.3 Enhanced!
- WebSphere eXtreme Scale V6.1.0.3 Enhanced!
- WebSphere Compute Grid V6.1.0.3 Enhanced!
- IMS V11 \* New!
- CICS Transaction Server V3.2
- DB2 V9.1



# WebSphere Application Server for z/OS®

## *Application Transparent z/OS Integration*



Combining Industry Leading SOA Runtime and z/OS  
to Deliver Superior Customer Value

### Integration with z/OS

- Workload Management - Leverages Workload Manager
- Security - Use of the Security Authorization Facility
- Transaction Management - uses Resource Recovery Services
- Thread Management - OS level threads for monitoring & control
- Scalability - Multiple Servant Regions
- Recovery - Leverages Automatic Restart Manager
- Reporting - System Management Facility

### New with Version 7

- Reduced response time with support for FRCA
- Reduced overhead for High Availability Manager in a Sysplex
- Improved thread failover, recovery, reliability and performance
- Reduced overhead associated with collecting SMF records
- Improved resource usage reporting, esp. for zAAP utilization

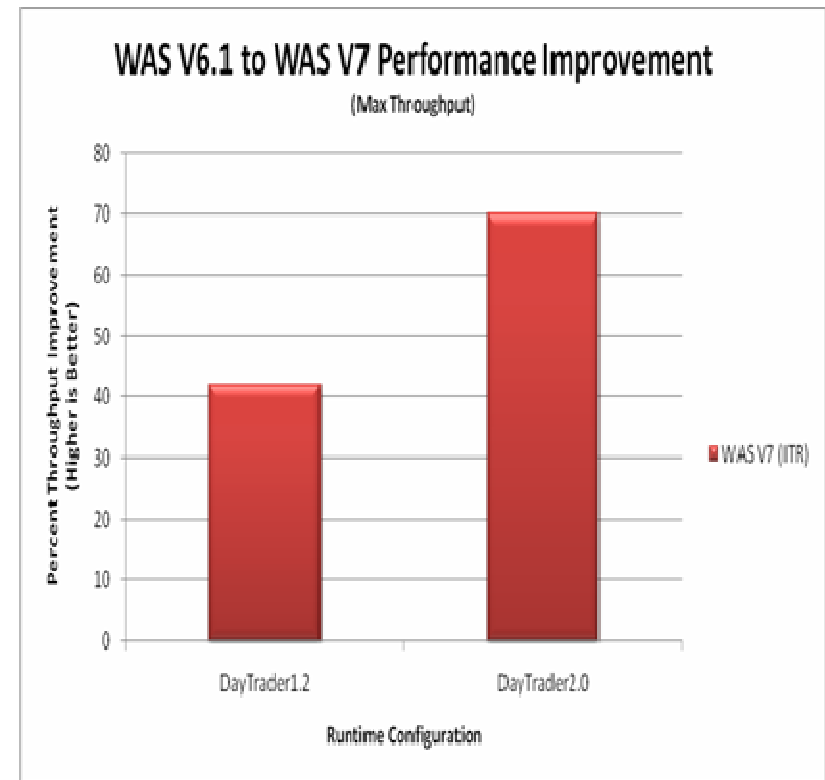


# WebSphere Application Server for z/OS V7

## *Leading Edge Performance for Your Business*



- WAS V7 improves upon WAS V6.1 up to:
  - 42% faster for legacy apps
  - 47% faster for Web Services
  - 70% faster for Java EE apps
- z10 EC + WAS V7 outpace z9 EC+ WAS V6.1 up to:
  - 103% faster for legacy apps
  - 128% faster for Java EE apps



\* Based on IBM benchmark metrics, 2008.

# Virtualization & Consolidation for Greater Efficiency

## *Open Source Consolidation Package*



- Enables consolidation and intelligent management of
  - Applications running on alternative open source application servers
  - IBM System z servers running Linux
- Enhanced Qualities of Service
- Lower operational and energy costs
- Increase Flexibility and Agility
- Better Manage Health, Improve Service and Application Performance

New  
Sept  
2008



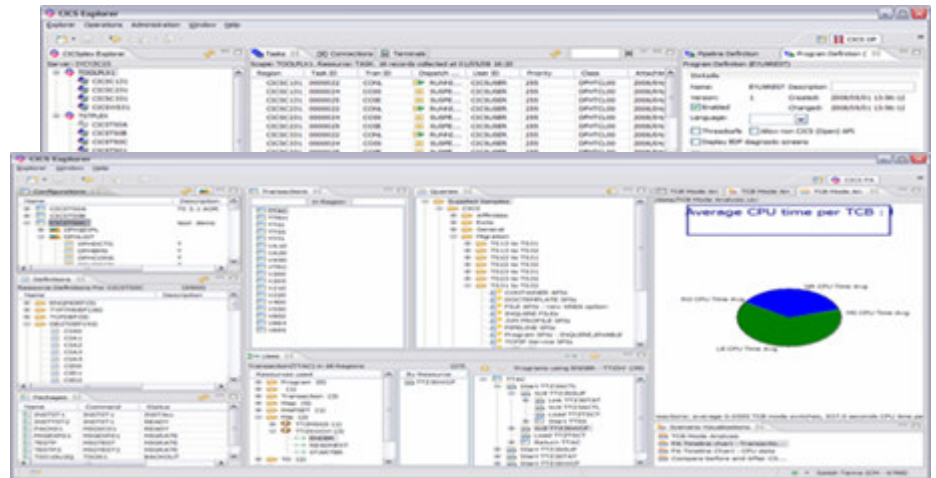
# Simplification for faster time to market

## *CICS Explorer - New Face of CICS*



Coming  
4Q2008

- Simplified access to CICS
  - Extending the success of eclipse based Explorers to CICS
  - Revolutionary integration of development, administrative, and operations tools
- Rapidly enable staff
- Shorter development cycles
- Faster time to market
- Improve productivity
- Protect service-levels
- Reduced TCO for CICS apps



“1000 times better than the previous UI.”

- Customer

“If you are not using it,  
or you're not trying it, well, you should!”

- Gary Barnett, The Bathwick Group



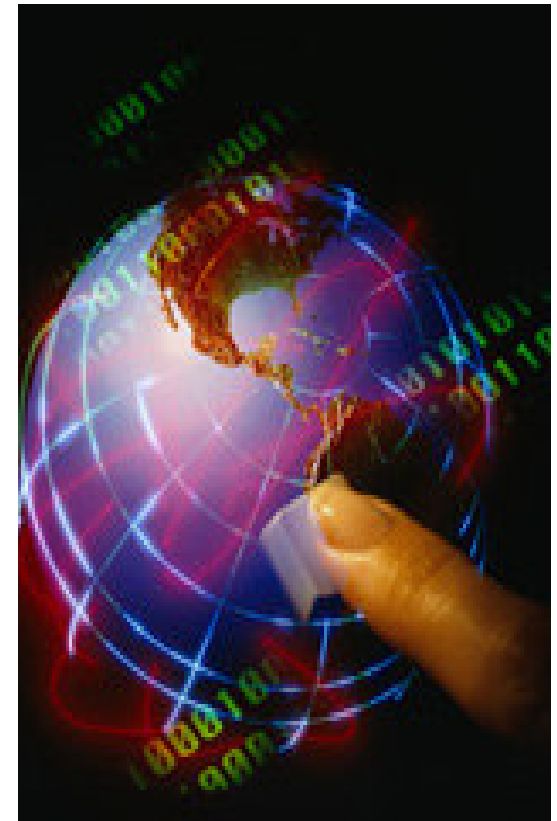


# Benefits of Running Applications on System z



***Combine the availability, scalability and security of System z with the industry leading Application Server for:***

- ✓ Integration with existing mainframe assets
- ✓ High performance access to customer information
- ✓ Server consolidation and simplification of spiraling server assets
- ✓ True dynamic scalability for unpredictable workloads
- ✓ Zero downtime for services that drive the business
- ✓ Exploitation of Java/J2EE programming skills
- ✓ Uninterrupted support of unpredictable workloads
- ✓ Lowest TCO for the lifetime of the application environment



**Hardware, operating system, and middleware working together to bring true 99.999% application availability to your business critical services.**

**Industry:** Consumer Products  
**URL:** <http://www.datev.de/>

*“With more than 1,000 developers, our organization strives for flexibility in creating new applications and managing the whole application portfolio. CICS Transaction Server gives us that advantage by enabling us to create Web services with ease.”*

*–Guenter Schneider, Online Systems Architect, DATEV eG*



## DATEV eG

***Easy linkage between time-proven core business processes and new business models***

### Challenge

Manage change in tax and regulatory environments by taking advantage of new technology that provides flexibility to application developers

### Why IBM?

DATEV has a longstanding relationship with IBM and has experienced consistently strong and reliable performance with its IBM CICS® Transaction Server

### Solution

Service oriented architecture enabling application developers to reuse existing code, speeding up time to market

### Key Benefits

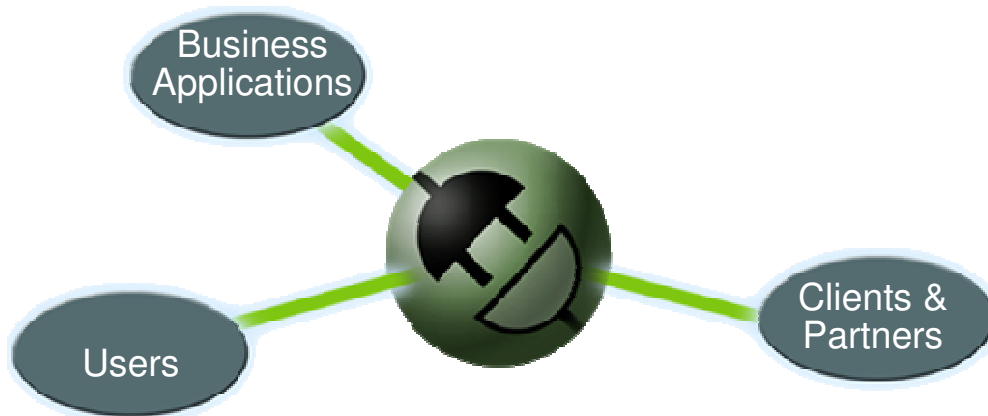
Better cost efficiency due to lower requirements on CPUs; faster application development time

# Connectivity for Greater Agility

## Connect systems, users, and business channels

### Connectivity links applications, services and users to:

- Deliver a robust, resilient connectivity infrastructure that fully leverages your System z investment
- Provide integration between departments and partners without complexity
- Bring together new and existing IT assets



### Benefits:

- Easy, reliable access across systems
- Lower maintenance cost
- Dynamic linkages when building composite applications

### Supporting Portfolio

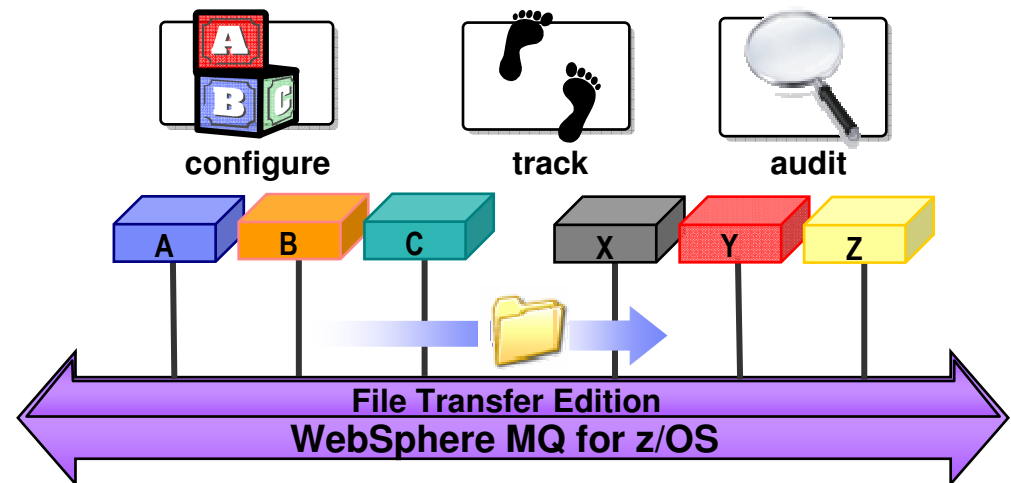
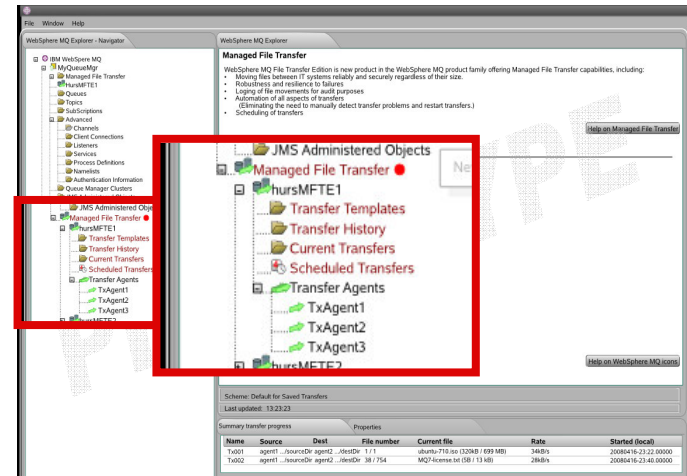
- WebSphere MQ File Transfer Edition V7.0 **New!**
- CICS Web 2.0 ATOM Feed - Support Pack **New!**
- WebSphere Enterprise Service Bus V6.2 **Enhanced!**
- WebSphere Service Registry & Repository for z/OS V6.2 **Enhanced!**
- WebSphere MQ for z/OS V7 **New!**
- WebSphere DataPower® SOA Appliances **Enhanced!**
- WebSphere Adapters V6.2 **Enhanced!**
- WebSphere Message Broker for z/OS V6.1 **Enhanced!**
- CICS Transaction Gateway for z/OS V7.1
- WebSphere Transformation Extender for z/OS V8.2

# Delivering Managed File & Application Integration

## WebSphere MQ File Transfer Edition for z/OS



- File transfer services on top of industry leading WebSphere MQ
- Enable managed movement of files, regardless of size
  - Reliable
  - Auditable
  - Secure
- Reducing operational costs through synergies
- Lowering skills requirements
- Helping to make file transfers an integral part of your overall SOA connectivity strategy

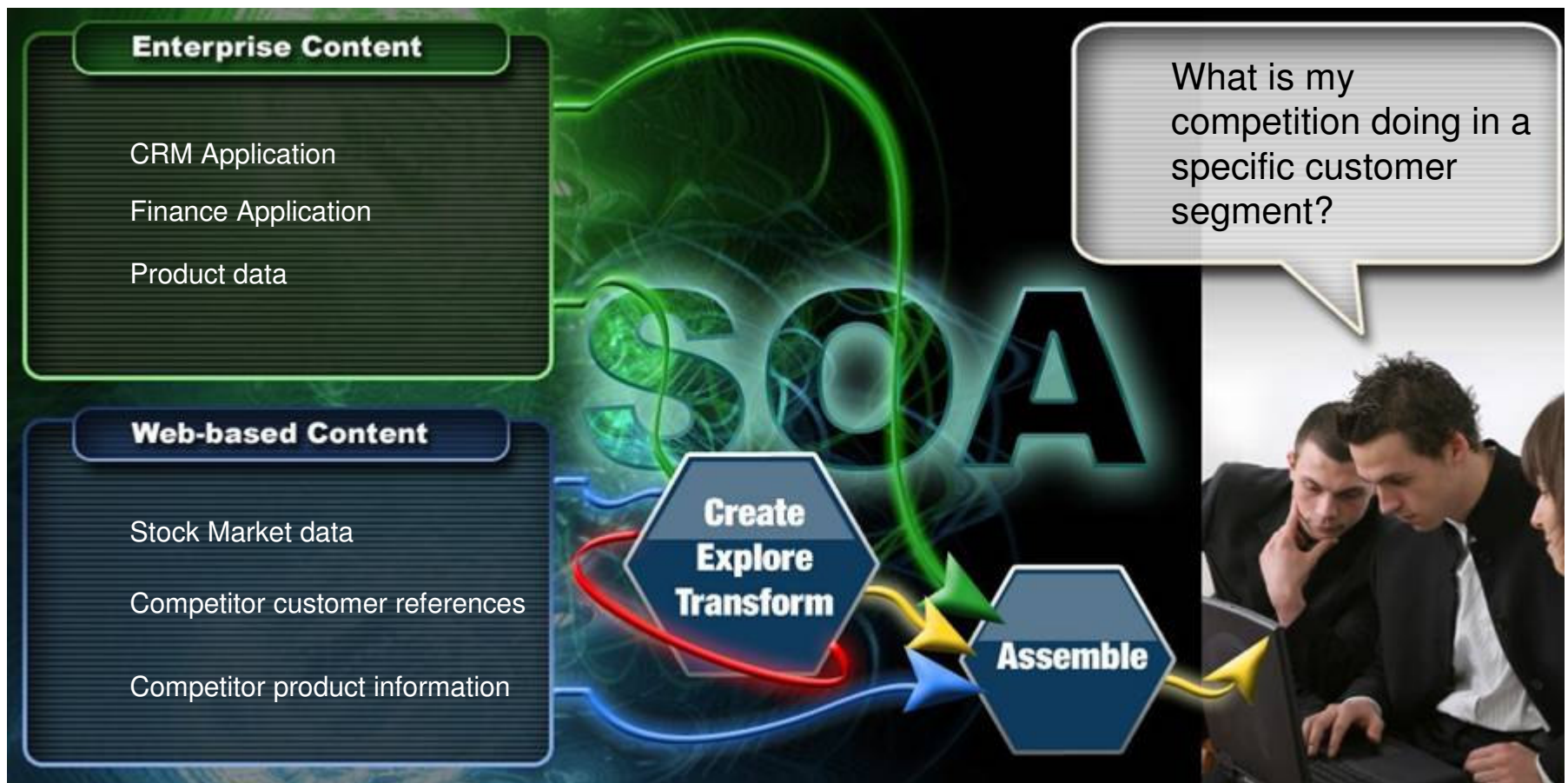




# Greater Empowerment with Web 2.0 & Mashups



People can solve business problems more effectively by remixing enterprise and web information



# CICS Web 2.0 ATOM Feed

*Business benefit in a state-of-the-art solution*



**Enterprise Content**

- Enable CICS applications to
  - Provide Live information for Web 2.0 consumption
  - Integrate with related data
  - Give full picture in a single holistic view via WebSphere Mash.

**Web-based Content**

- Create decision-support tools for knowledge workers
- Build composite user interfaces for expert workers
- Make new kinds of applications based on up-to-date content and information
- Deliver information feeds & widgets to consumers to use in their own mashups

Available  
In  
SupportPac

Create  
Explore  
Transform

Assemble



# Underwriter Scenario

Go to View

Search All



Tools

Content Feeds

Carrefour

Tools

Favorites

Collaboration

CICS Insurance Demo

## Request Reader

Insurance feed delivered from CICS[8]

- 1 IBM
- 2 Shirley Pastie
- 3 Arthur Daley
- 4 Skynet Angelo
- 5 Harvey Weinstock
- 6 Hotel Bob
- 7 Bed Bug
- 8 Smokey Jackson

## insure Display

### Insurance Details

#### Personal Details

Customer Name: IBM  
Customer Id: 000000001  
Address: 658 W Belden Ave, Chicago, Illinois  
Zip code: 60614

#### Policy Details

Request Date: 2008-09-0  
Requested Start Date: 2007-09-0

#### Property Details

Property Type: Office  
Fire Rating:   
Crime Rating:   
Flood Rating:   
Weather Rating:

[Show nearby properties on map](#)

## insure Map

# Integration Across Your Business

## *Building and Governing Your ESB*

New and Enhanced!



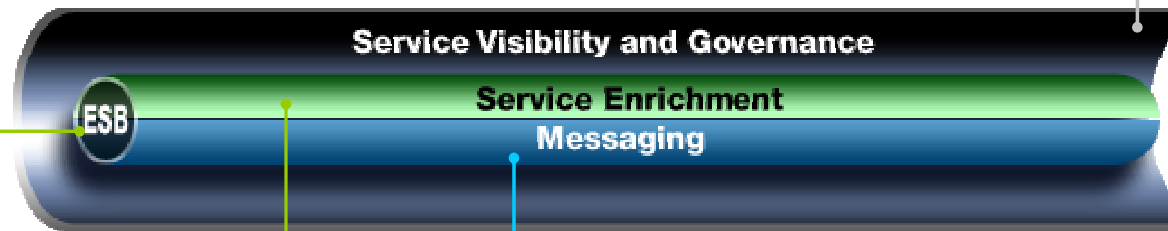
Enhanced!

### WebSphere DataPower SOA Appliances

- Expanded WMQ, WSRR, WTX, and 3<sup>rd</sup> party interoperability
- Enhanced SOA Security management features
- DB2 and ODBC Enhancements

### WebSphere Service Registry & Repository for z/OS V6.2

- SOA Governance Validation and profile updates
- Consumability and performance enhancements
- Optimize use of services



Enhanced!

### WebSphere ESB for z/OS V 6.2

- Delivers Policy-driven connectivity
- Enhances web services standards support
- Enhances service mediation capabilities

New and Enhanced!

### WebSphere MQ for z/OS V7

- Publish and subscribe support integrated into the z/OS queue manager
- Improved ease of use for publish and subscribe and Java Message Service messaging
- Web 2.0 support

# When to use System z as the Hub for your ESB



## For a successful SOA implementation, you need an ESB that:

- Provides connectivity to all your existing environments
- Helps ensure quality of service to support your service-level commitments
- Handles complex transactions across multiple resource types and rolls back distributed transactions when problems occur
- Supports effective end-to-end monitoring and measurements
- Meets security and regulatory requirements



## System z is the platform of choice for..

### ▪ Virtualization

- High resource utilization
- Massive consolidation and simplification
- Enterprise-wide workload management
- Leverage existing infrastructure and skills

### ▪ Handling business critical workloads

- Up to 99.999% availability
- Automated recovery from failures
- Dynamic workload balancing

### Performance

- ESB performance improvements when co-locating with z/OS data.

### ▪ Efficient growth

- Pay for what you use



**Industry:** Education  
**URL:** <http://cms.bsu.edu/>

***“SOA has been such a gift to us. It enables us to embrace a new technology that provides services at a level that we couldn’t even imagine before.”***

*–Dr. O’Neal Smitherman*



BALL STATE  
UNIVERSITY

IBM



## Ball State University

*Ball State University bridges disparate systems and solves key administrative issue with IBM SOA solution.*

### CHALLENGE

- Coordinate 40 name and address systems to streamline administrative processes and ensure information integrity for users

### SOLUTION

- SOA with Enterprise Service Bus to connect siloed applications without hand-coding individual API calls

### BENEFITS

- Ability to develop and implement services in an SOA environment for resolving name and address discrepancies in 10 months, as opposed to several years for hand-coding individual application connections
- Confidence that IBM solution can lead to wider use of SOA to further streamline administrative business processes
- Services created here can be reused in later SOA efforts

# Automate and Integrate *Processes*

## *Treat tasks as modular services*

### Achieve business process innovation through:

- Streamlining and simplifying business activities
- Controlling processes where they run
- Improving the flow of existing processes
- Eliminating the need for manual steps
- Integration with workload manager / intelligence resource director
- Security built into system layers
- Connections delivering automated processes



### Benefit:

- Streamline processes
- Manage and automate workflow
- Reduce error rate

### Supporting Portfolio

- CICS TS Event Processing – Support Pack New!
- WebSphere Process Server for z/OS V6.2 Enhanced!
- WebSphere Integration Developer V6.2 Enhanced!
- WebSphere Business Modeler V6.2 Enhanced!
- WebSphere Business Monitor V6.2 Enhanced!
- WebSphere Business Events V6.2 New!
- WebSphere Business Service Fabric for z/OS V6.2 Enhanced!

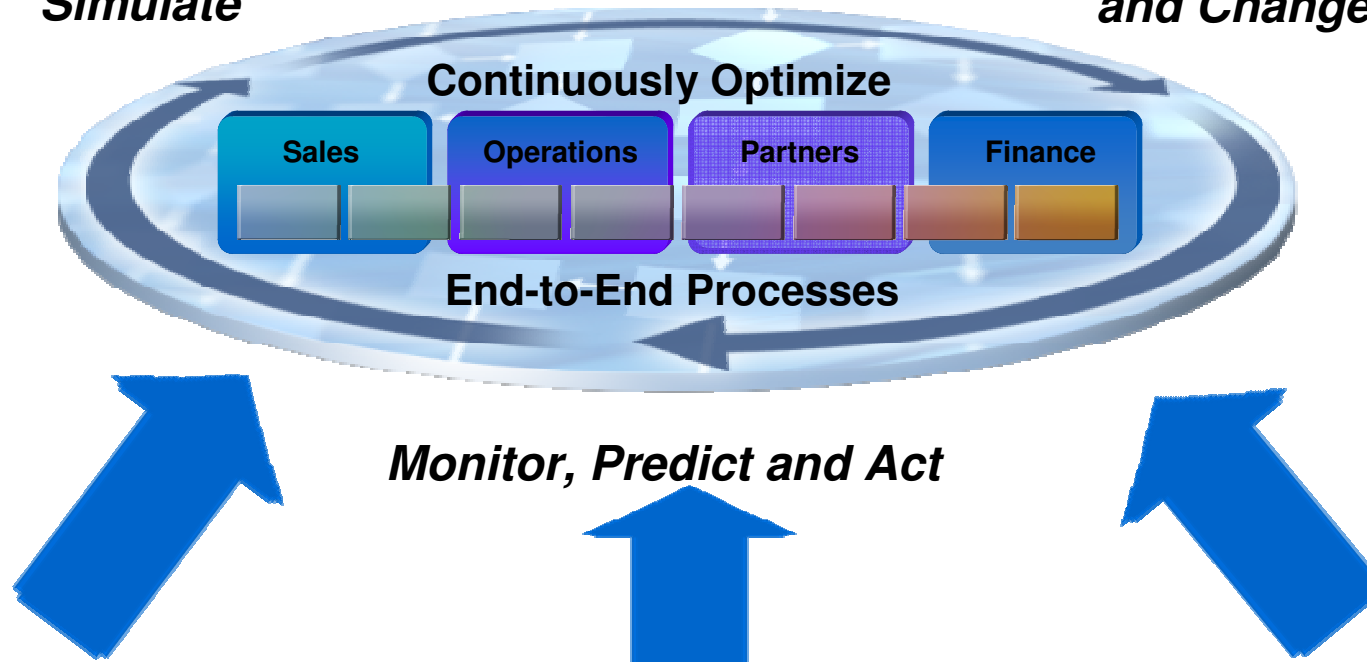


# Process Automation

*Improves Operating Efficiency and Reduce Costs*

***Model and Simulate***

***Rapidly Deploy and Change***



Streamline business activities

Complement and extend existing applications

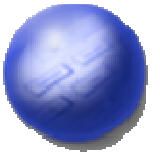
Leverages reusable process components

**Lower Costs**

**Reduce cycle time**

**Easier to Manage**

# Tame The Flood of Business Events for Knowledge and Insight

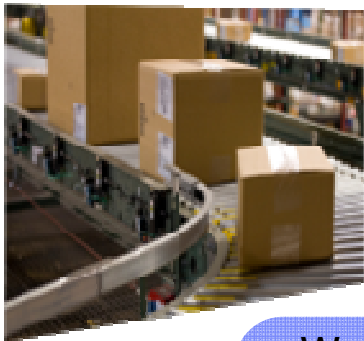


## What is a Business Event?

*An action that has occurred, or the absence of it occurring, which has relevance to the business*

Large companies can experience up to **800 Billion** business events daily

Nearly **4 Trillion** RFID events are emitted each day



Over **190 Billion** emails are sent daily

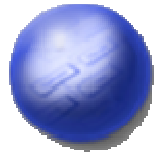


- **WebSphere Business Events & eXtreme Scale**
  - Exploits WebSphere eXtreme Scale capability for high event volume customers
  - Trial code and marketing kits for Business Partners
- **CICS Transaction Server Support Pac**
  - Brings Business Event Processing to the mainframe

Turn a flood of seemingly unrelated events into actionable business context

Source: zdNet; idtechex ,  
didyouknow.com

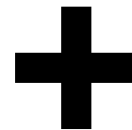
# Capture actionable insights from real-time business events with Business Event Processing



## Actionable Business Context

### Complex Event Processing

Causality    Aggregation  
Complex Queries



## Real-time business event visibility

Patterns and correlations  
elevated to business users

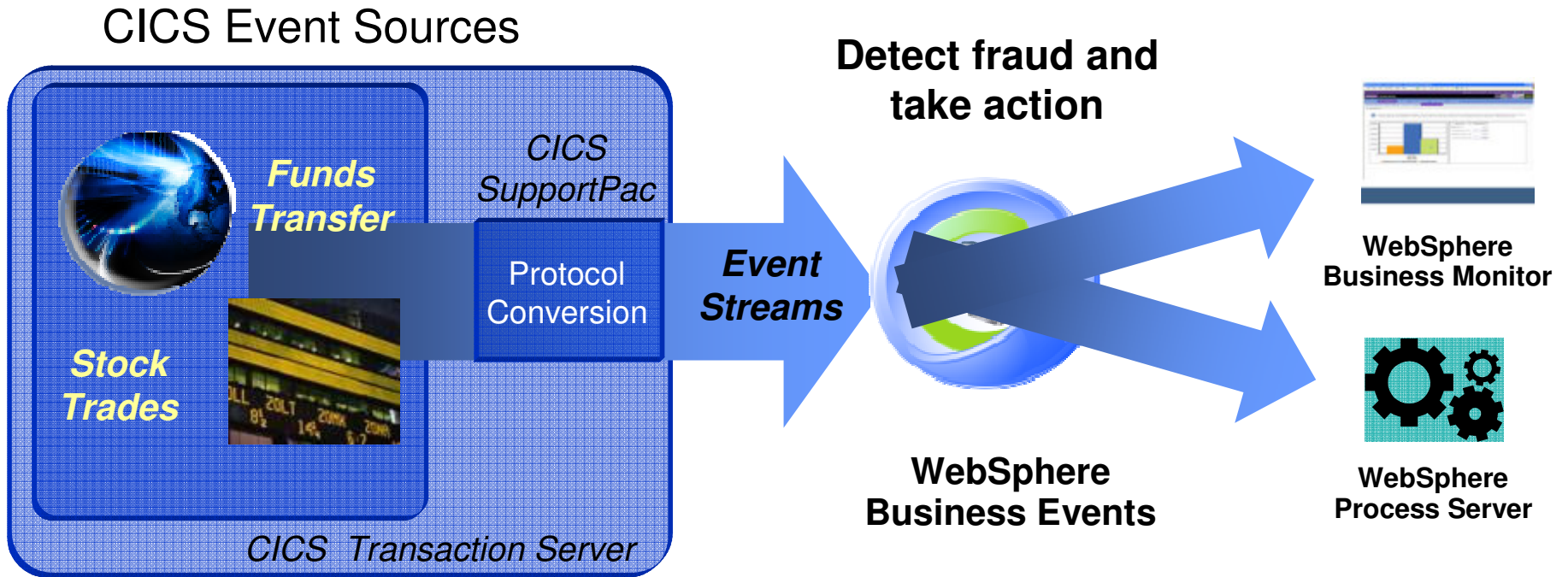
*Event emitters  
and sources*

*Event pattern detection  
Correlation analysis*



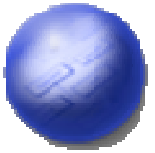


# Capture mainframe event sources for greater insights and action



*WebSphere Business Events integration with WebSphere Business Monitor, Tivoli NetCool and CICS Transaction Server*

# The IBM BPM Suite Tames Chaos with Process



- Unified, integrated packaging to rapidly accelerate BPM initiatives
- Greater consumability for end users
- Attractive pricing bring BPM into easier reach

## IBM BPM Suite

- Dynamic Process Edition
  - Integrated packaging for end to end dynamic BPM
- Active Content Edition
  - Integrates Enterprise Content Management BPM for process-driven, active content



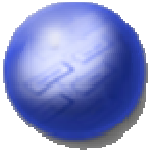
## BPM Healthcheck Services

Identifies current strengths and shortcomings in different dimensions and articulates a BPM Strategic Roadmap

\* New!

# WebSphere Process Server for z/OS®

*Application Robust platform that is easy to deploy*



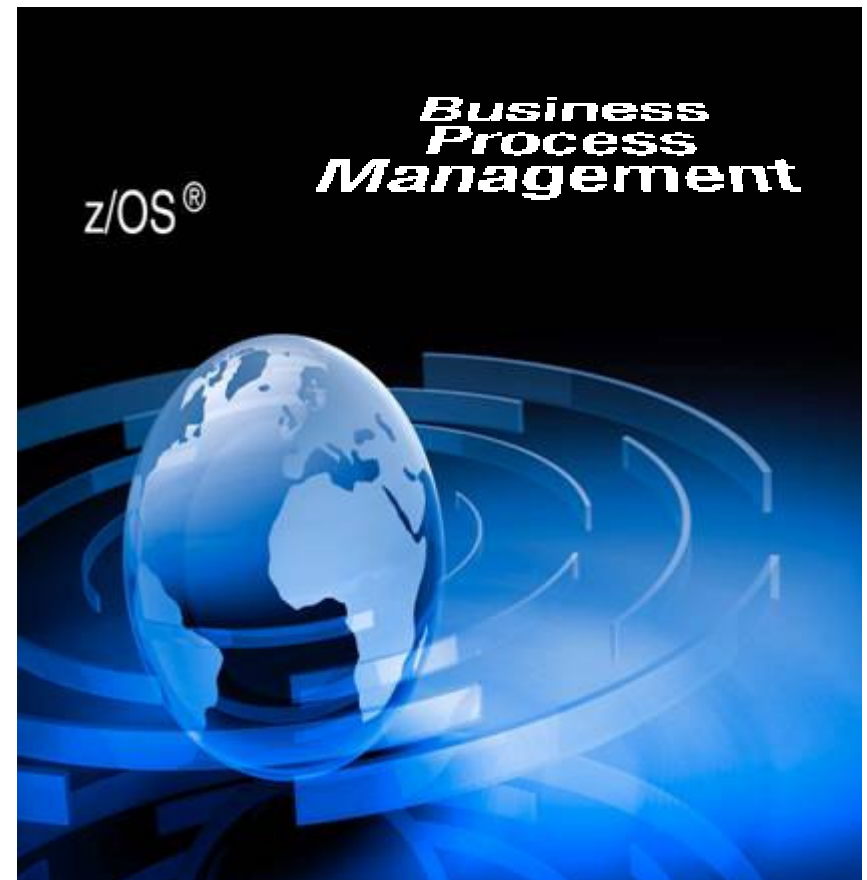
*Leveraging a strong SOA foundation on z/OS for process flexibility, responsiveness and access to information assets*

## New with Version 6.2

- A compelling new Web 2.0 business user interface to manage human tasks, timetables & orchestrated processes
- Lotus Forms integration for human tasks
- Greater flexibility and control for business rules, ad-hoc tasks & process execution

## Integration with CICS

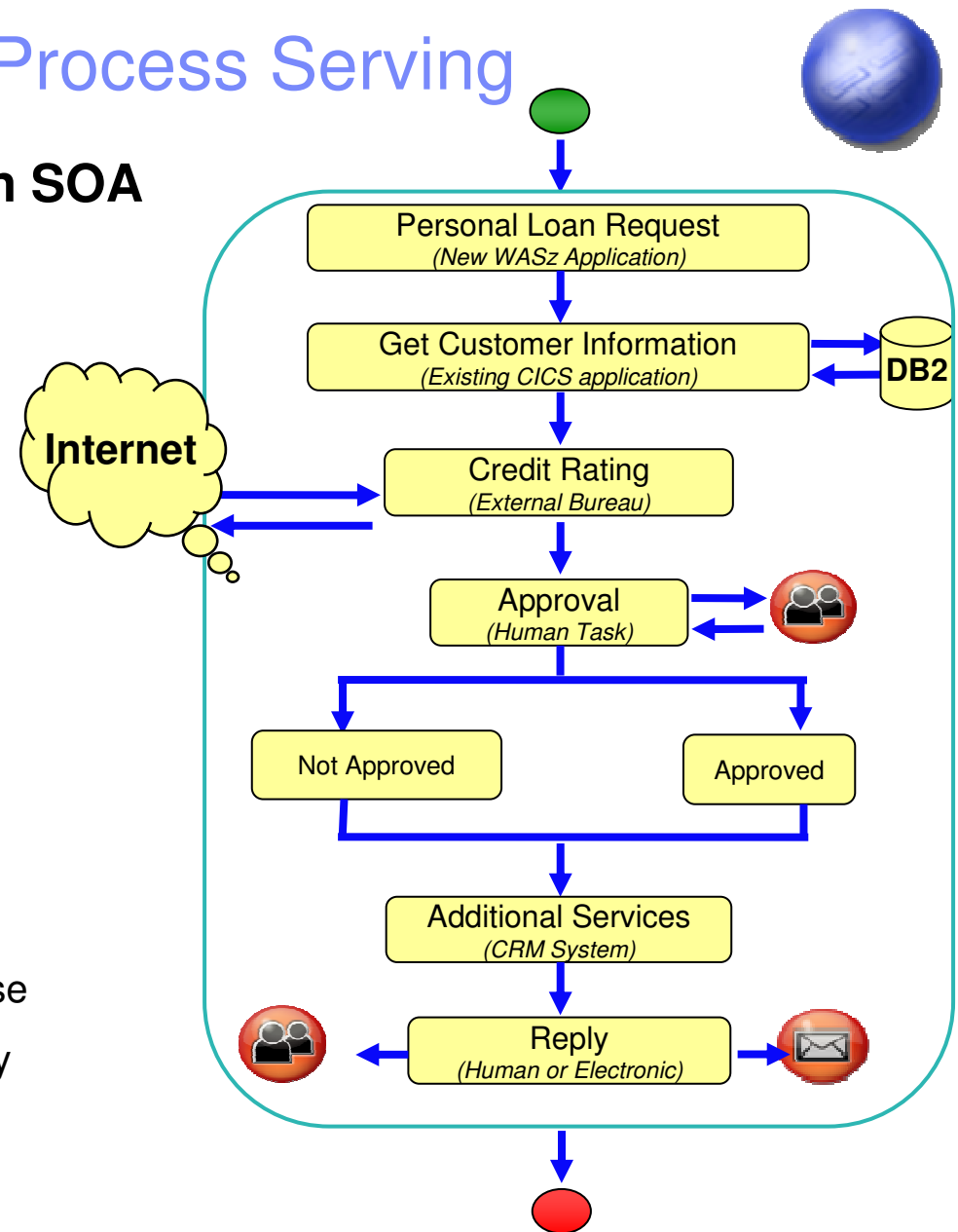
- CICS applications can be part of business processes
- CICS events feeding WebSphere Business Events to identify patterns of interest



# When to Use System z for Process Serving

## System z—The choreographer for an SOA

- ✓ **Efficiency:** Control processes next to the transactions they invoke
- ✓ **Integration:** Improve and extend the flow of an existing process
- ✓ **Automation:** Reduce the human enter keys
- ✓ **Reliability:** Guaranteed connections and coordinated transactions deliver automated processes with integrity
- ✓ **Workload Management:** Intelligent use of system resources for mixed workloads supporting composite applications
- ✓ **Security:** Built into all system layers
- ✓ **Availability:** (zero downtime)/OS brand promise
- ✓ **Performance:** Full utilization of system capacity with same class of service



# The New Customer Wants To Experience at the Click of a Button!

## Introducing Smart SOA™ Sandbox through Cloud Services

### Delivers...

- Hosted software trial
- Tutorials
- Best practices and implementation guidance

Coming Soon!

Enhanced!

- Extended Experience – up to 30 day Trials
- Business patterns: Industry-focused end-to-end use cases
- Exercises for all entry points, Governance, and Green
- Enterprise Modernization
- Available to Business Partners at 40 Innovation Centers World-wide



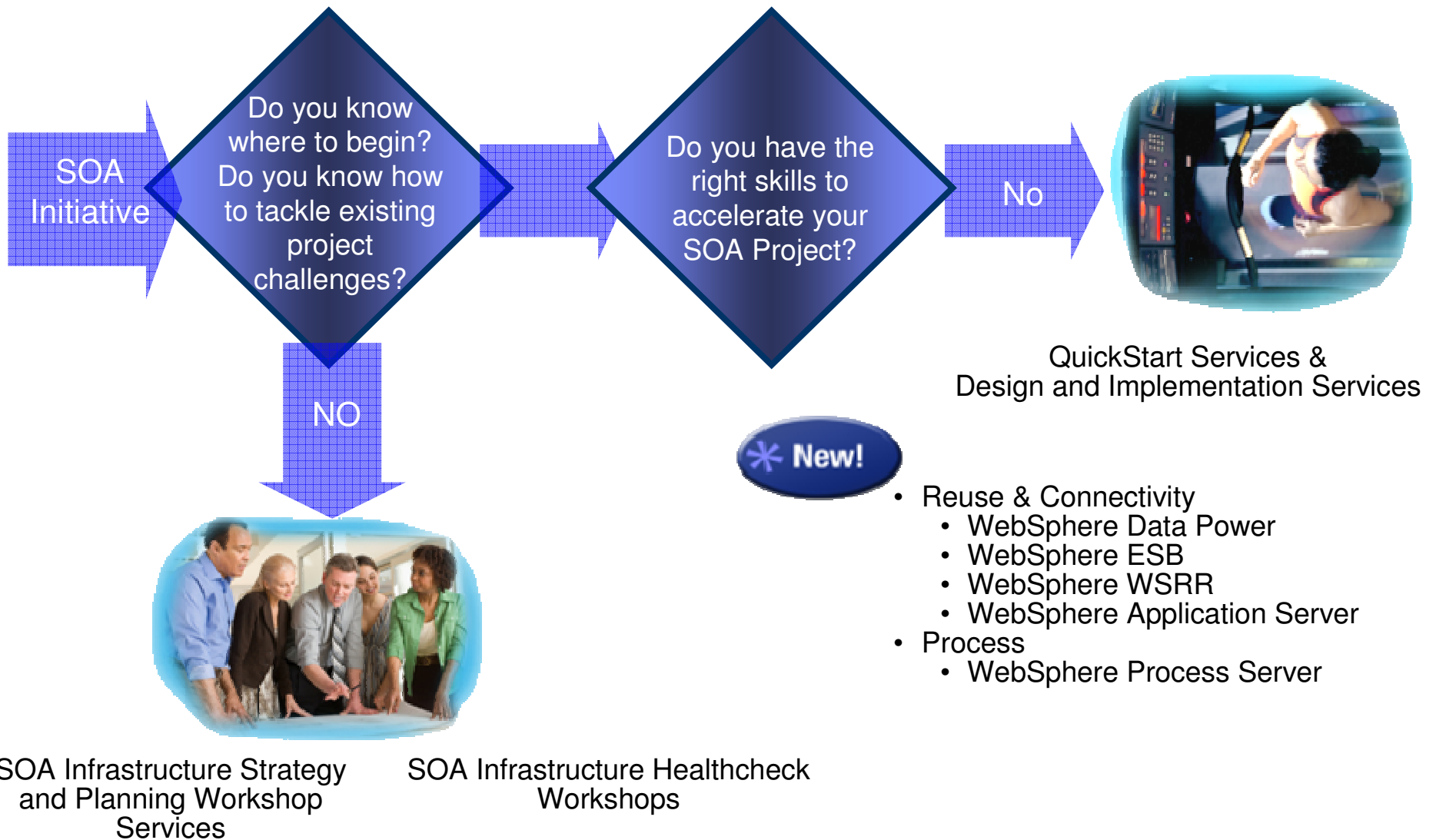
### For easier...

- Access to embedded best practices
- Hands-on SOA experience and education
- Ways to get started

Build skills and evaluate options with zero cost or commitment



# Experience proven SOA Infrastructure Services to get you started and ensure success



2009 **IMPACT**

SMART SOA CONFERENCE  
MAY 3 - 8 LAS VEGAS

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May 3-8, 2009

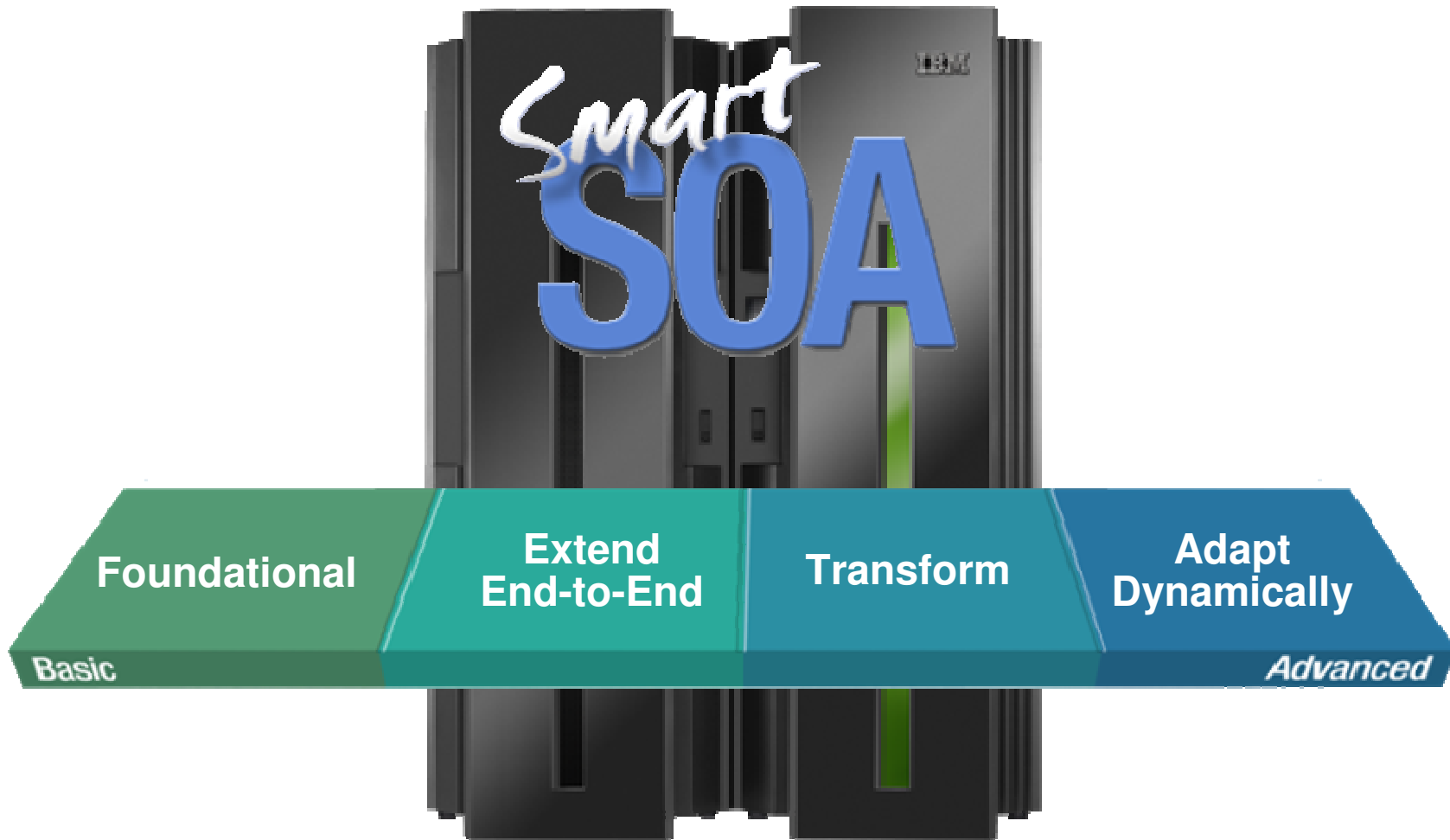
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