



*The future runs on System z*

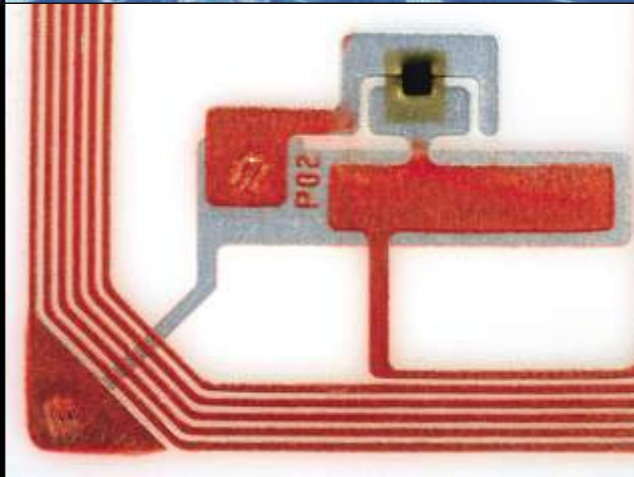
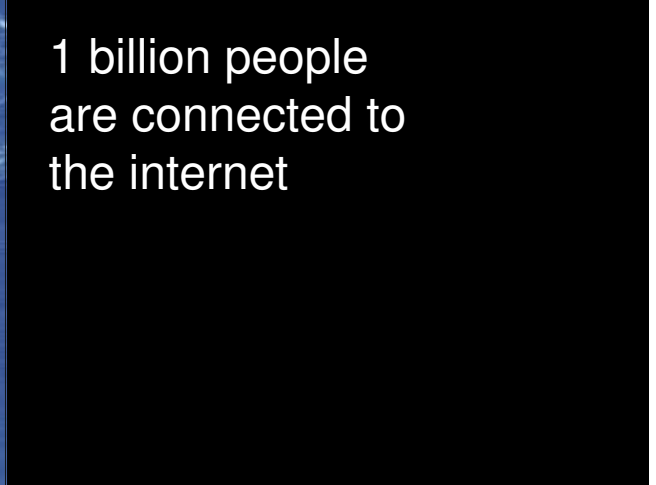
# Leveraging Service Oriented Architecture to Thrive in a Dynamic Market Place

***Yvonne Perkins***  
***Vice President***  
***Enterprise Platform SW / SWG***





1 billion transistors  
for each person  
on earth.



## IBM Vision at a Glance...

# Smarter Planet

- instrumented
- interconnected
- intelligent



People



Companies, Institutions, Industries



Man-made Systems



Nature's Systems

## The Need for Action is Clear



**The U.S. healthcare system loses more than \$100 billion a year to fraud.**



**\$11.5B worth of produce is wasted in India because of outdated post-harvest infrastructure**

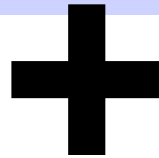


**In North America, up to 22 percent of total port volume is empty containers.**

## Today's Imperatives Are

### **Cost Optimization**

to slash operational and maintenance expense and maximize efficiency necessary for all economic climates



### **Agility**

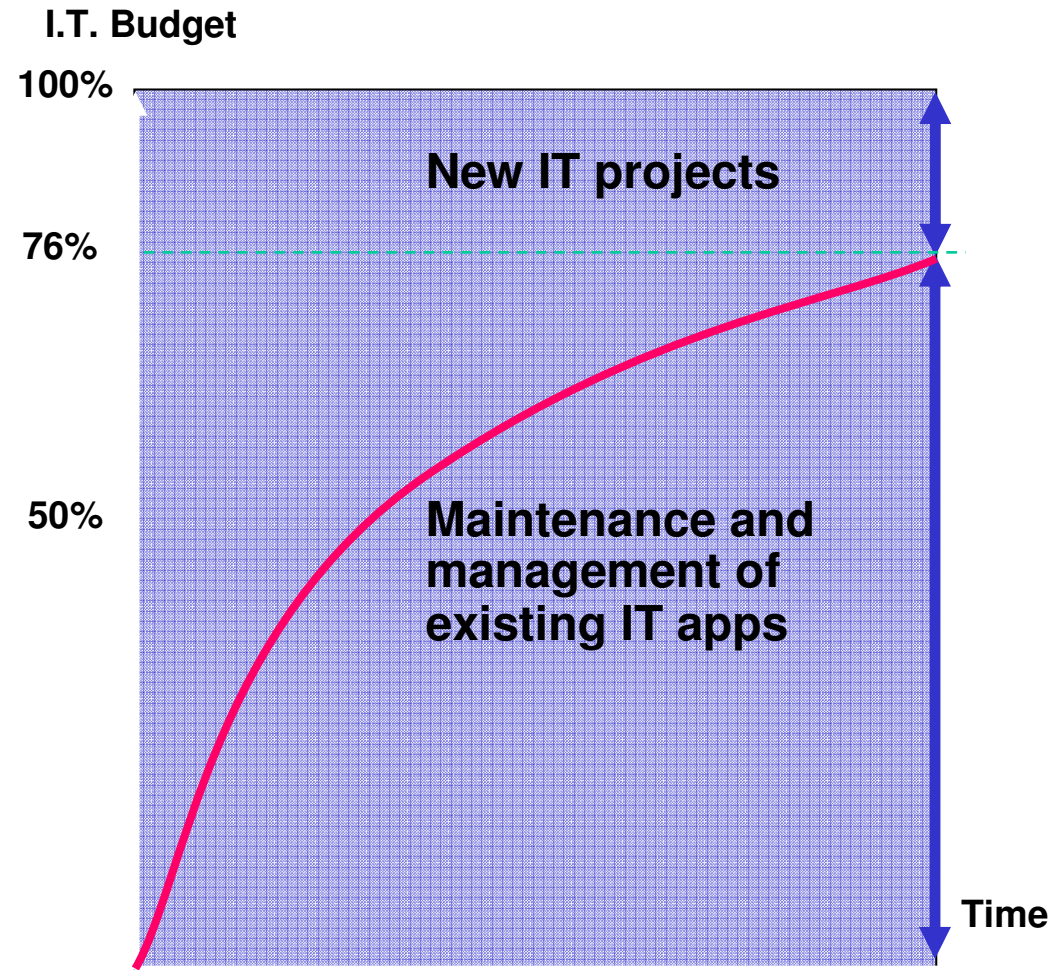
to take advantage of new revenue opportunities and address competitive threats

**To Survive... To Succeed!**

## Where are IT Budgets Being Spent?

***“76% of I.T budgets are spent on MAINTENANCE, leaving only 24% for NEW INVESTMENTS.”***

--- Forrester Research



## Is Your Company Agile Enough?

# 98%

Of CEOs plan business model changes

# 3X

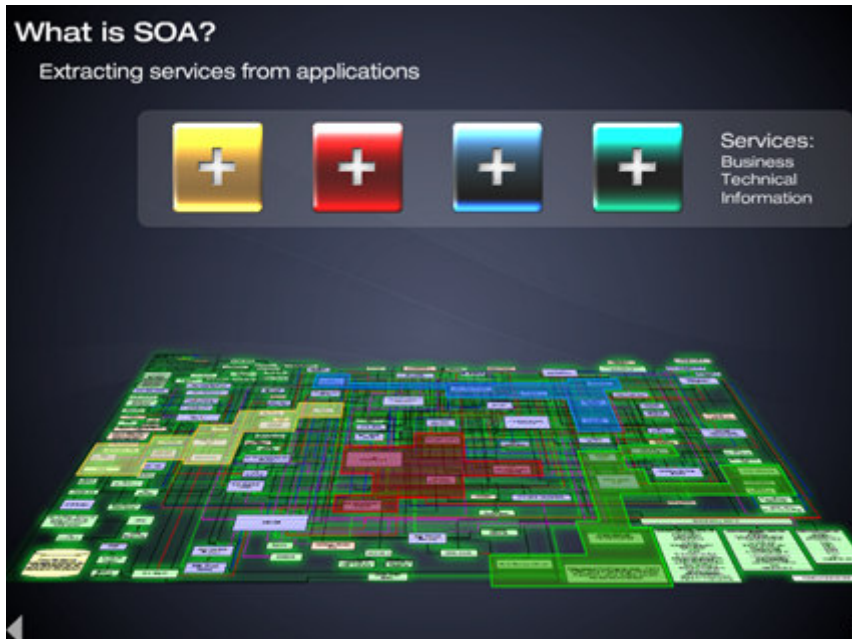
Increase in gap between expected change and ability to handle change



### *In a Time of Turbulent Change*

Source: CIO Study conducted in 2008: [http://w3.ibm.com/articles/workingknowledge/2008/12/gbs\\_ceostudy.html](http://w3.ibm.com/articles/workingknowledge/2008/12/gbs_ceostudy.html)

# Service-Orientation, key to Agility and Cost Optimization



- Quickly shift direction to reflect economic realities
- Flexibly connect information and application
- Optimize reuse of existing assets

*Unlock the value of your own...  
...Business Resources  
...Application Resources  
...Infrastructure Resources*



# Three Ways SOA Projects Deliver Value

## *Business Needs*

“Ensure applications consistently deliver on business needs in all situations”



Application  
Infrastructure

“Adapt & respond to dynamic business situations”



Connectivity &  
Integration

“Quickly respond to changing customer expectations and business demands”

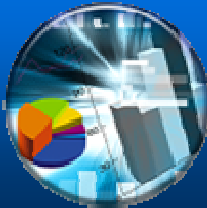


Dynamic Processes

# The Power of a Smart SOA Application Infrastructure

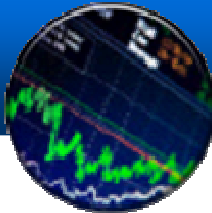


## Modernize Applications



Expand revenue opportunities and improve customer satisfaction with Web 2.0

## Execute High Volume Transactions



Reduce costly business risks with high availability, secure business applications

## Worldwide e-commerce Rollout



Increase utilization, lowering energy and maintenance costs

## New Billing System



Quickly roll out new services and lower operational costs to increase revenue and market share

# Smart SOA Application Infrastructure

## *Delivers on Business Objectives and Reduces Cost*



### *Healthcare*

- Reduced \$30 million in capital & operating costs
- 150% increase in processing capacity
- 40% reduction in IT infrastructure floor space requirements
- 67% reduction in number of physical servers



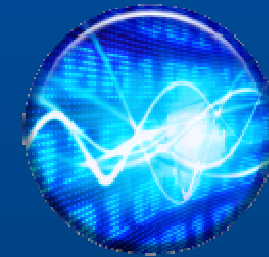
### *Government*

- 80% reduction in time to build new systems
- Improved ability to coordinate operations amongst multiple organizations



### *Manufacturing*

- New level of collaboration via Web 2.0
- Reduced Total Cost of Ownership by 40%



*“Three years ago, we set out to build a shared enterprise IT infrastructure that would allow MetLife to grow with agility...we now have a solid framework for integrating the systems of the companies we acquire.”*

Bob Fratangelo, Vice President of Distributed Systems at Metlife

# HUK-COBURG



## Industry Pains

- Need to access more functionality and spread out its data processing load
- Reduce CPU usage to cut operating costs

## Smarter Business Outcomes:

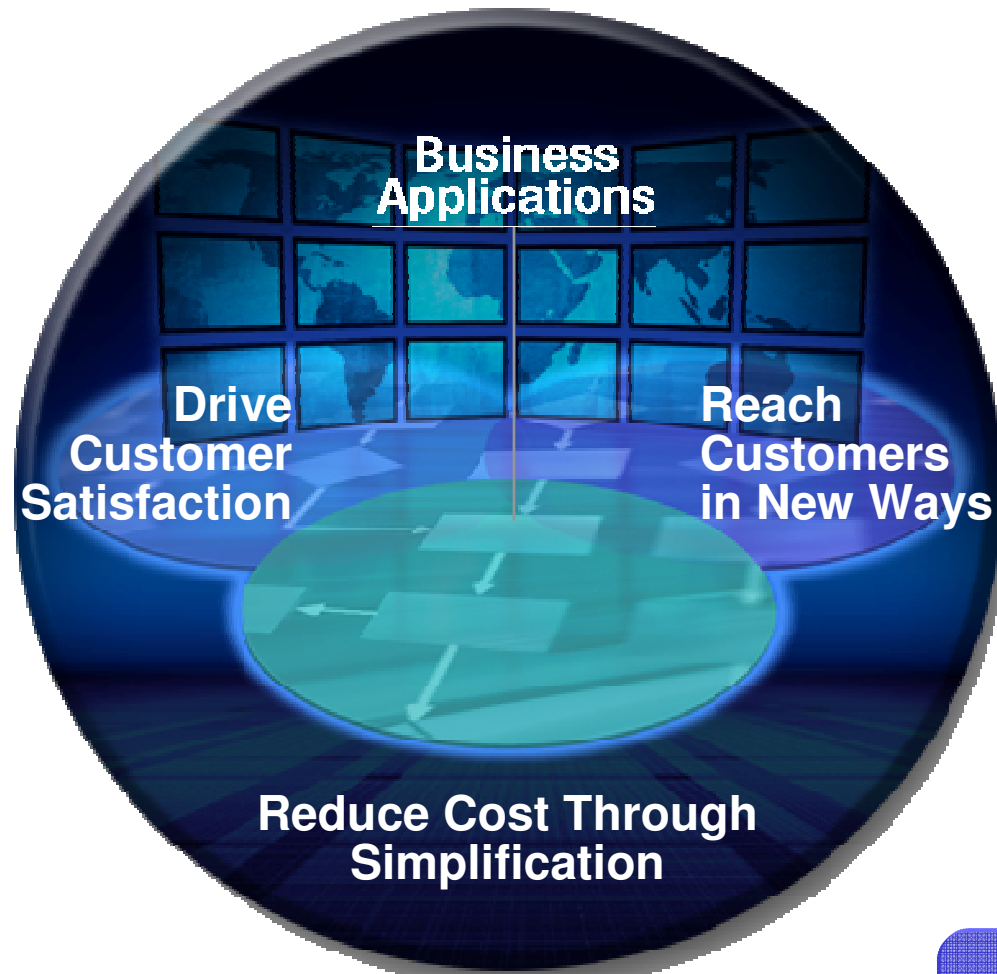
- Reduces CPU usage for CICS technology by 400 million instructions per second (MIPS), for savings of \$320,000
- Cuts CPU usage in the internal coupling facility by 40%
- Achieve CPU savings through threadsafe functionality



## Why Smart SOA Infrastructure?

Deliver on business objectives and reduce operating costs

# Address Your Critical Business Needs *Using a Smart SOA Application Foundation*



**IBM CICS Transaction Server**

**IBM CICS Explorer**

**IBM WebSphere Application Server for z/OS**

# Thriving in a Dynamic Marketplace

## *Intelligent Management of Applications*



- Reduce Rising Costs
- Deliver Superior Customer Service
- Roll Out New Services Faster



**IBM WebSphere  
Extended Deployment  
Compute Grid for z/OS**

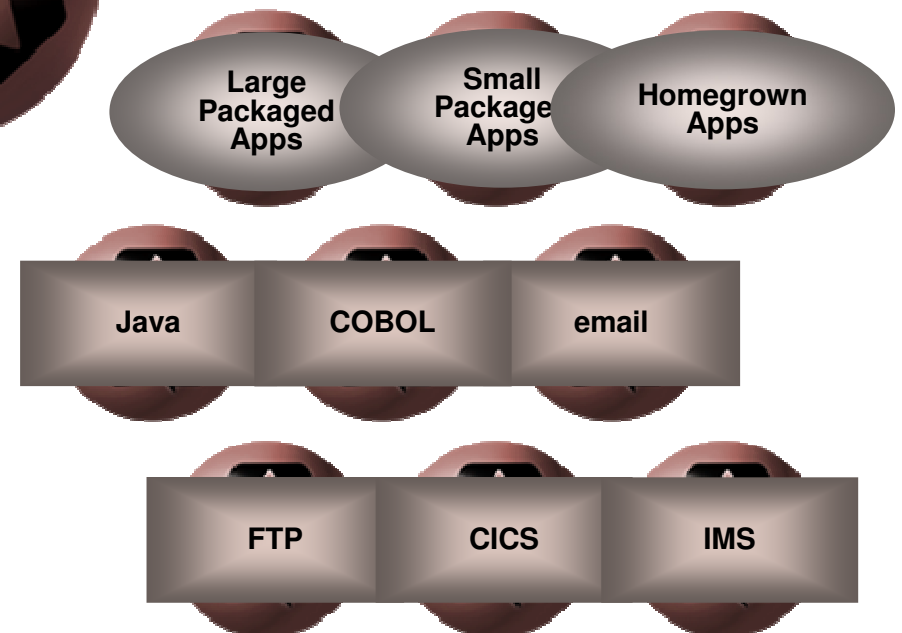
# Reuse Business Applications

*Enable Agility Required for Smart Business Outcomes*



## Get More Value from Applications & Expand Business Opportunities

- Service-enable existing packaged and existing apps
- Create new, reusable services
- Extend reusable services to the web
- Consume external reusable services



## Benefits

- Extend ROI by reusing prior investments
- Reduce risk and costs by leveraging robust applications
- Speed time to market with faster development cycles

# Benefits of Running Applications on System z



- ✓ Integration with Existing Assets
- ✓ High performance
- ✓ Server consolidation
- ✓ Dynamic scalability
- ✓ 99.999% Availability
- ✓ Exploitation of Java/J2EE
- ✓ Uninterrupted support
- ✓ Low TCO of applications

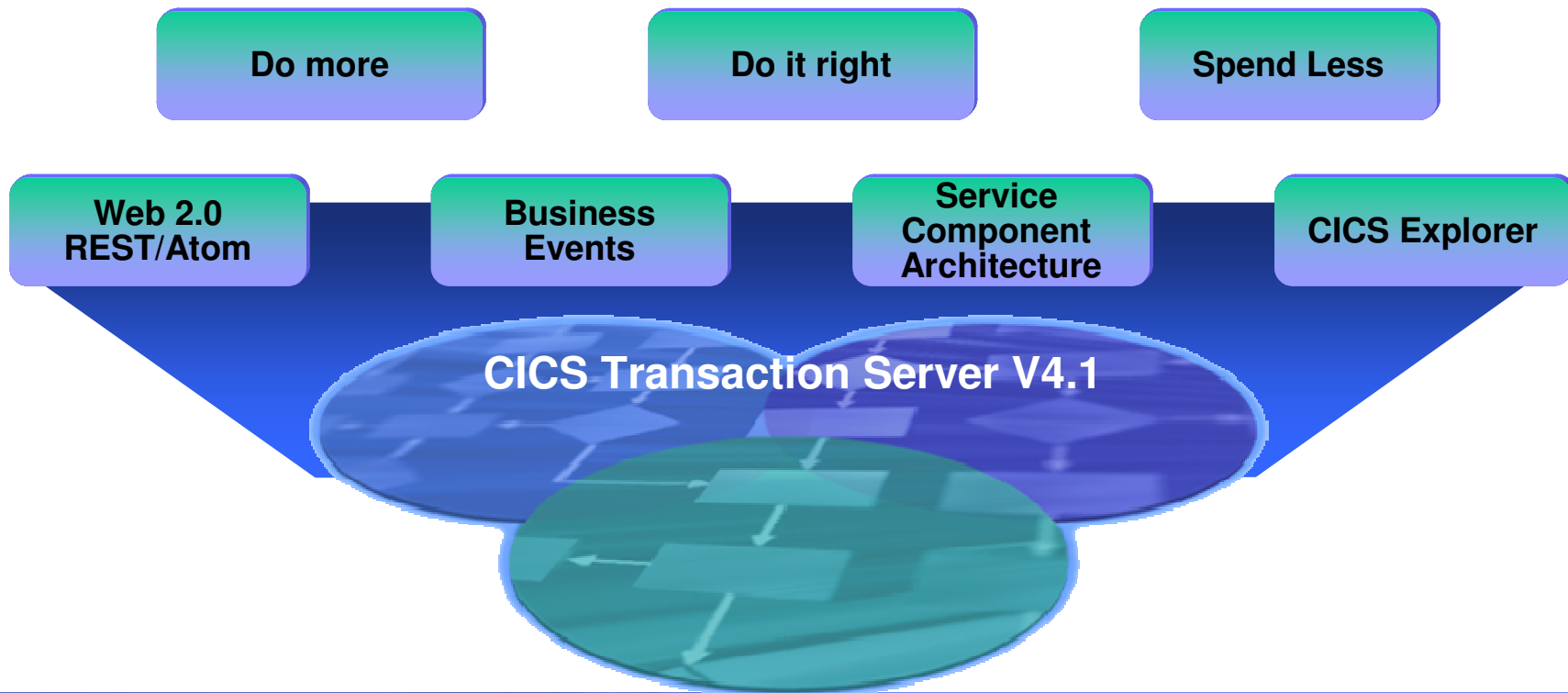




# Spotlight: CICS Transaction Server V4.1



- **Compete** with insight into business processes and modify business applications quickly
- **Comply** with corporate, industry, and government policies to manage business risk
- **Control** costs by simplifying IT infrastructure and productivity through easier-to-use interfaces & functions



# CICS Explorer – The New Face of CICS Transaction Server

*Reduce the need for multiple interfaces*



**Before...**

**Web**



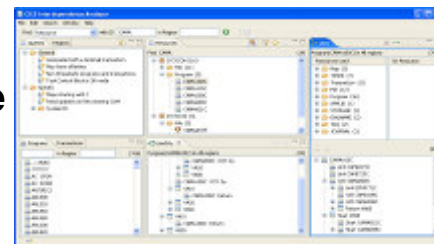
**ISPF**



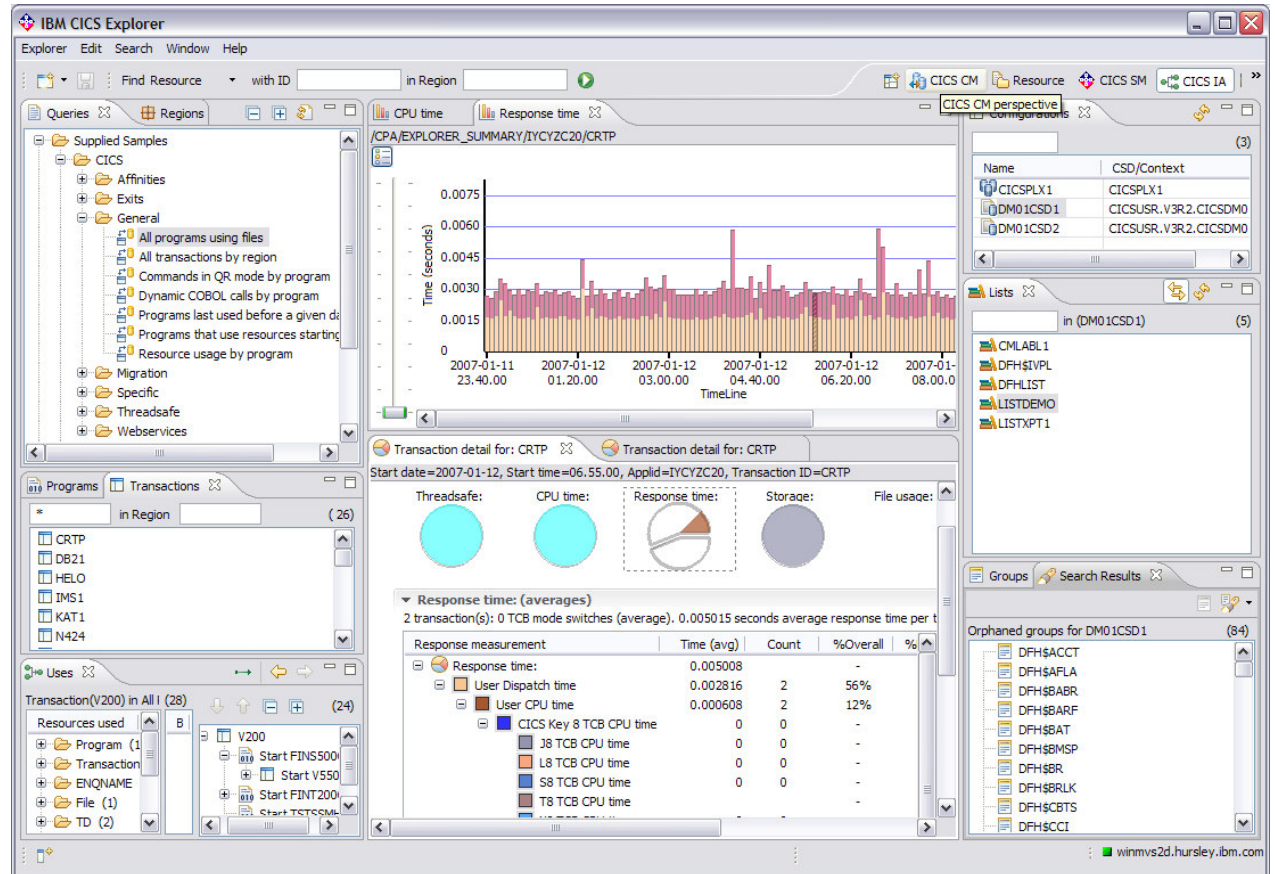
**CICS 3270**



**Eclipse**



**Now ...**



More info and downloads at [ibm.com/cics/explorer](http://ibm.com/cics/explorer)

# An Edge in the Market – Smart Connectivity & Integration



**Confirmed  
Flight  
Booking**



Lower process disruptions with reliable data movement

**Central  
Airport  
Checkpoint**



Create new revenue-generating services from current core business applications

**Routing  
Bank  
Transactions**



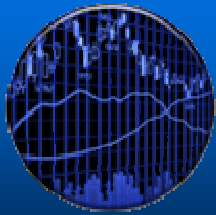
Adapt business faster by easily connecting services & apps

**Centralized  
Information  
Source**



Reduce cost & duplication by leveraging existing assets

# Proven and Trusted Messaging and Enrichment



## Financial Markets

- Delivering \$1 trillion transactions per day
- Exchanging £400B+ in messages



## Government

- Agency sends 675m messages per day
- ~ 7,500 agency users & 50,000 citizen transactions daily



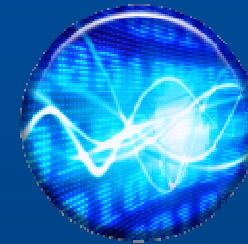
## Banking

- \$7-\$35 trillion messaging traffic per day
- 213+ million messages daily



## Insurance

- 95% of the top global insurances firms use ESB enrichment
- Single firm improved transactional elapsed time by over 39%



*“ We needed a single integration platform that would allow all our applications to access and share information and enable them to collaboratively process transactions based on common business rules.”*

Chief Architect,  
Health Insurance

# Ball State University



## Industry Pains

- The need to streamline administrative systems and ensure integrity

## Smarter Business Outcomes:

- SOA with Enterprise Service Bus to connect siloed applications without hand-coding individual API calls
- Resolve name and address discrepancies in 10 months, as opposed to several years

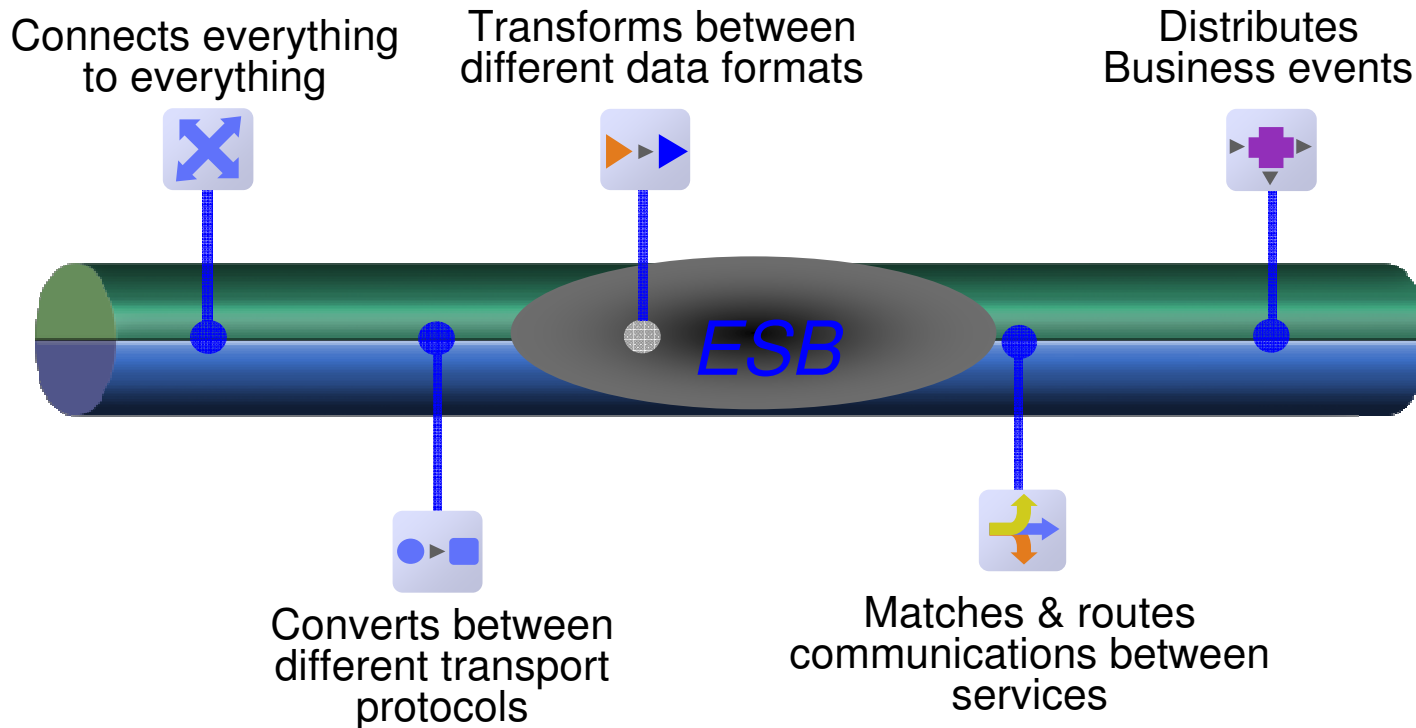


## Why Smart SOA Connectivity & Integration?

Communication between decoupled back and front ends, choosing the destination for a message, and transforming it into the correct format

# Agility and Savings Begin with Integration

## *The Enterprise Service Bus (ESB)*



**Optimize Costs by:** Integrating new customers and partners up to 80% faster, Improving performance more than 10x - with lower costs, and Achieving full ROI within as few as 6 months

IBM WebSphere  
Message Broker for z/OS

IBM WebSphere  
Enterprise Service Bus

IBM WebSphere  
MQ for z/OS

# Service Visibility & Governance



- **Trust:** Publish & find Your Services to extend business applications
- **Manage** & govern your ESB messaging & services
- **Secure:** Ensure consistent policy enforcement

IBM WebSphere MQ File  
Transfer Edition for z/OS

IBM WebSphere Service  
Registry & Repository for z/OS

# When to use System z for Connectivity & Integration

## ▪ Virtualization

- High resource utilization
- Massive consolidation and simplification

## ▪ Performance

- Improvements when co-locating with z/OS data



## ▪ Efficient growth

- Pay for what you use

## ▪ Business critical workloads

- Automated recovery from failures
- Dynamic workload balancing

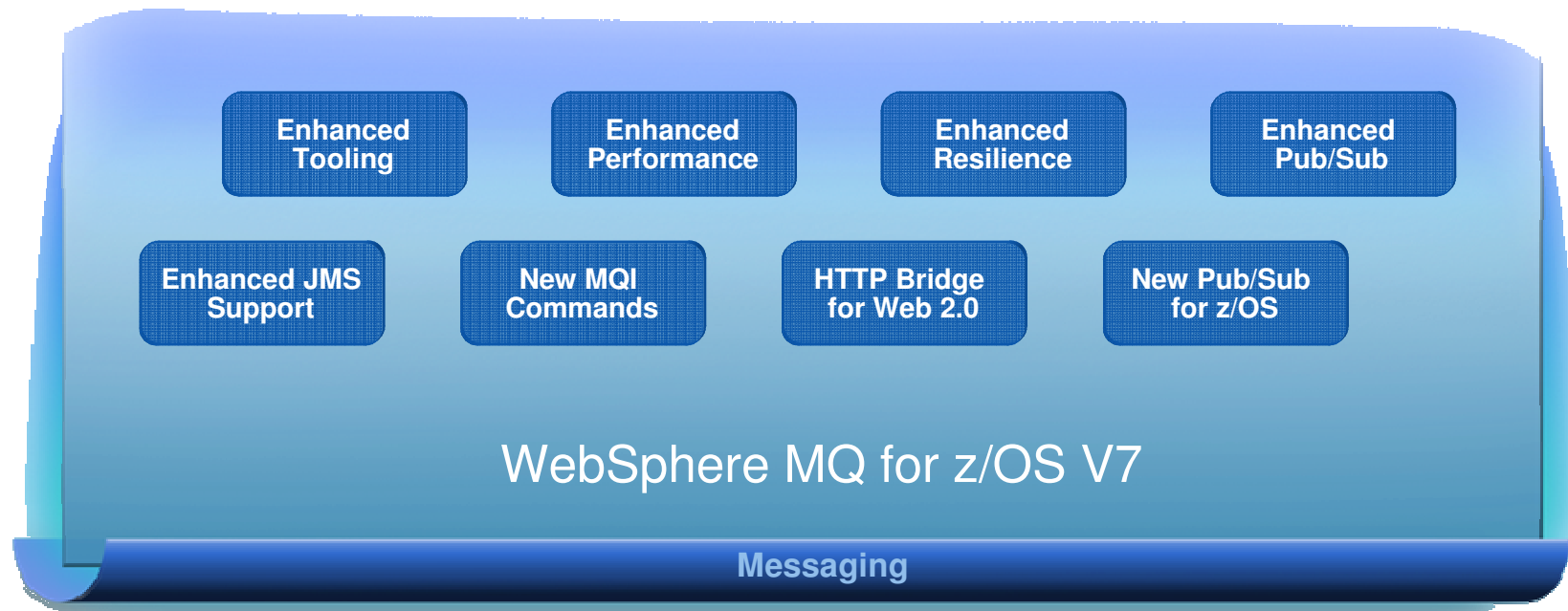


# The Latest Evolution of SOA Messaging



## WebSphere MQ for z/OS V7

- Highly consumable & easy to use for faster time to market
- Turbo-charged performance to do more with less
- More dynamic & scalable Pub/Sub features



# The Power of Dynamic Business Processes



## Supply Chain Management



Automatically adjust forecasts and shipments to increase accuracy and reduce costs

## Retail Inventory



Detect and respond to inventory changes in real-time to meet customer demands

## Telecom Services



Quickly deliver more compelling and profitable service bundles to increase customer retention

## Insurance Claims Processing



Improve productivity and customer satisfaction by automatically routing claims to the right knowledge worker

# Dynamic Business Processes *Deliver Real Results*



## Supply Chain

- Reduced costs by 63%
- Reduced staffing requirements for manual tasks by 85%
- Reduced compliance penalties by 75%



## Government

- 80% reduction in tax return exception backlogs
- 80% reduction in average age of work queue, avoiding extra interest costs



## Insurance

- Decreased costs by 30%
- Increased revenues by 15%



*"...in this era, flexibility and the optimal operation is really needed. We are in the recession time, so optimization is something which is a must for all of us...this is something which is not found in other vendors...Fabric (and the Telco Pack)...gives us a possibility to dynamically select the service based on the policy. ...one of the strong points of IBM BPM SOA solution is that it covers the complete lifecycle of the process, so starting from modeling and ending at monitoring and operating."*

Mitja Stular. CTO for Mobitel

## “European Bank”



### European Bank

#### Industry Pains

- The market for home loans has been transformed by a new breed of independent mortgage brokers who now account for 40 percent of the market.
- To respond to this marketplace change they needed a channel to reach these brokers.

#### Smarter Business Outcomes:

- Mortgage application processed in just hours compared with 2-3 days taken by competitors; independent mortgage broker channel now accounts for substantial portion of their business after only 6 months, far exceeding expectations; new channel added without significantly increasing staff levels



### Why Smart SOA Business Process Management?

WebSphere Process Server improved the reuse and efficiency of service components to reach the independent mortgage broker market

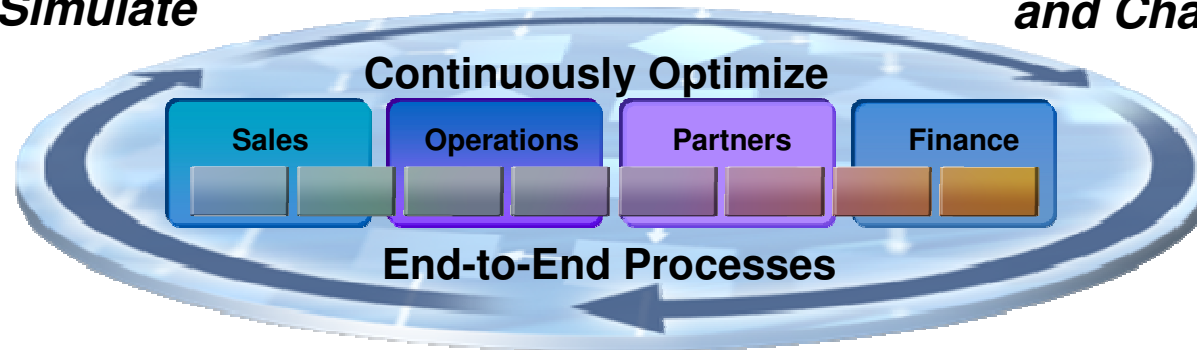
# Process Automation

*Improves Operating Efficiency and Reduce Costs*



**Model and Simulate**

**Rapidly Deploy and Change**



**Monitor, Predict and Act**

Streamline business activities

**Lower Costs**

**IBM WebSphere Process Server for z/OS**

Complement and extend existing applications

**Reduce cycle time**

**IBM WebSphere Business Monitor**

Leverages reusable process components

**Easier to Manage**

**IBM WebSphere Business Modeler**

# Insight contained in business events all around us



## What is a Business Event?

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

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



Large companies can experience up to **800 Billion** business events (shipments, weather, customer contacts, delays) daily



Over **190 Billion** emails are sent daily



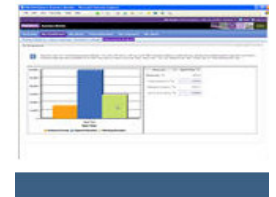
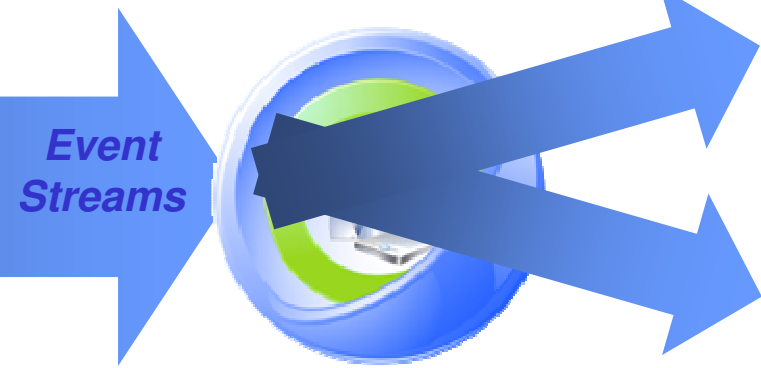
# Capture mainframe events for smarter business outcomes



## CICS Event Sources



**Detect fraud and take action**



**WebSphere Business Monitor**



**WebSphere Process Server**



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

## WebSphere ILOG BRMS and SOA

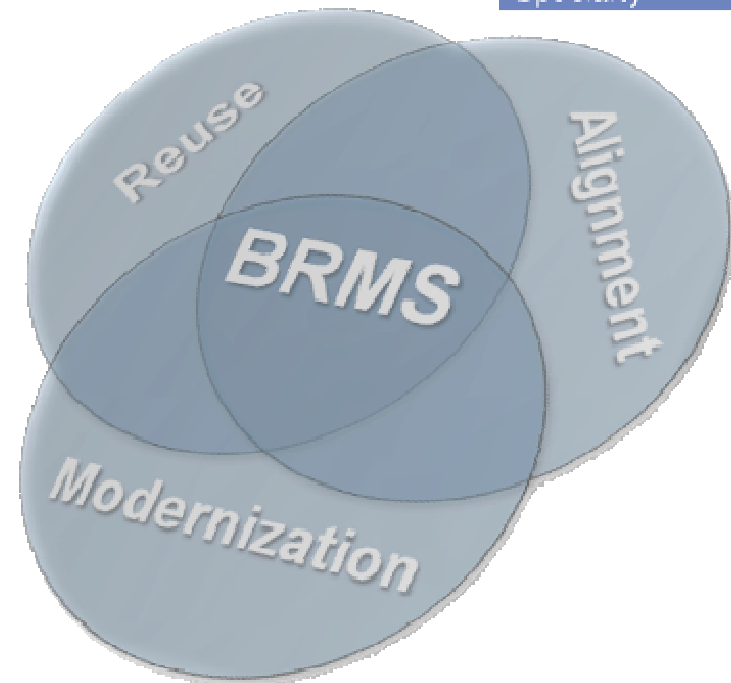
**ILOG BRMS is *the IBM technology* for creating, maintaining and implementing decision services...**

Ready for

**IBM | SOA**

Specialty

- Provides a convenient communication channel between IT and business teams
- Allows for easy implementation and reuse of business rules across the enterprise
- Offers flexible options for progressive IT modernization

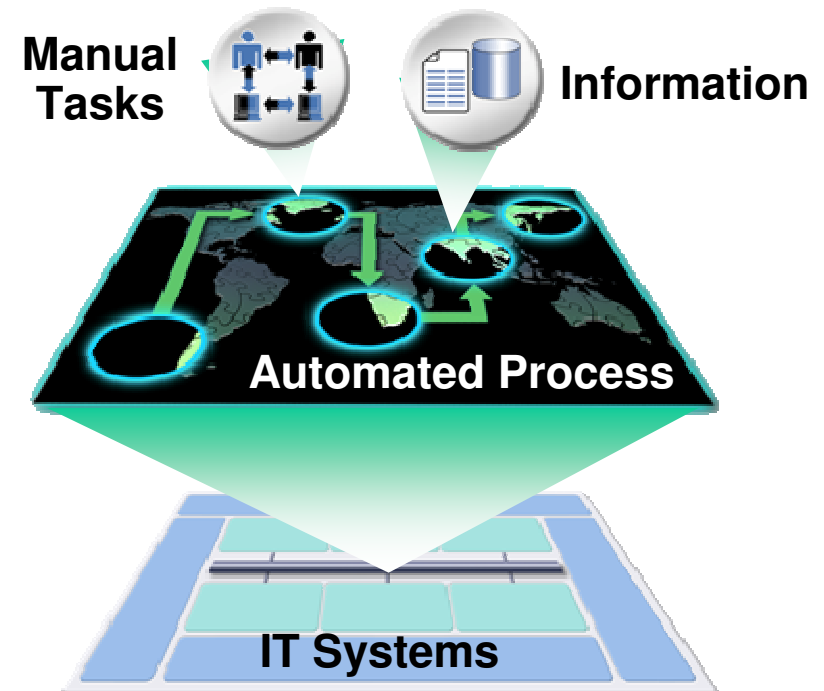


Watch ILOG customer testimonials at: <http://www.ilog.com/dialog/>



# When to Use System z for Process Management

- ✓ Process Efficiency
- ✓ Improve Integration
- ✓ Reduce Human Processes
- ✓ Workload Management



# WebSphere Process Server for z/OS®

*Application Robust platform that is easy to deploy*

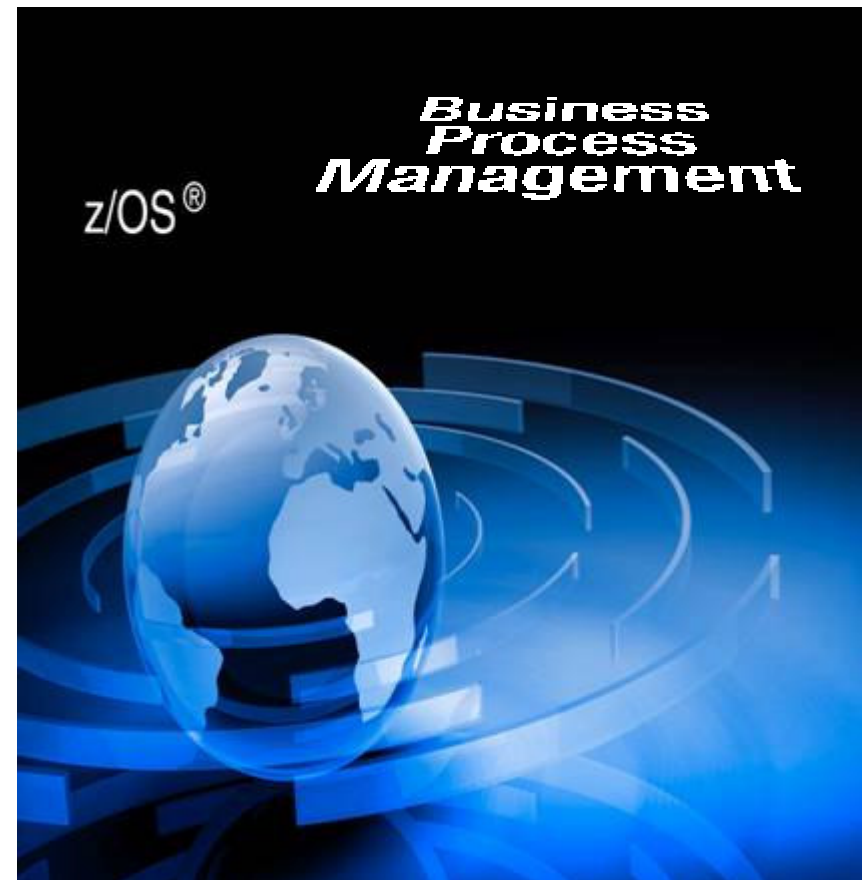
*Leveraging a strong SOA foundation on z/OS for process flexibility, responsiveness and access to information assets*

## New with Version 6.2

- 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

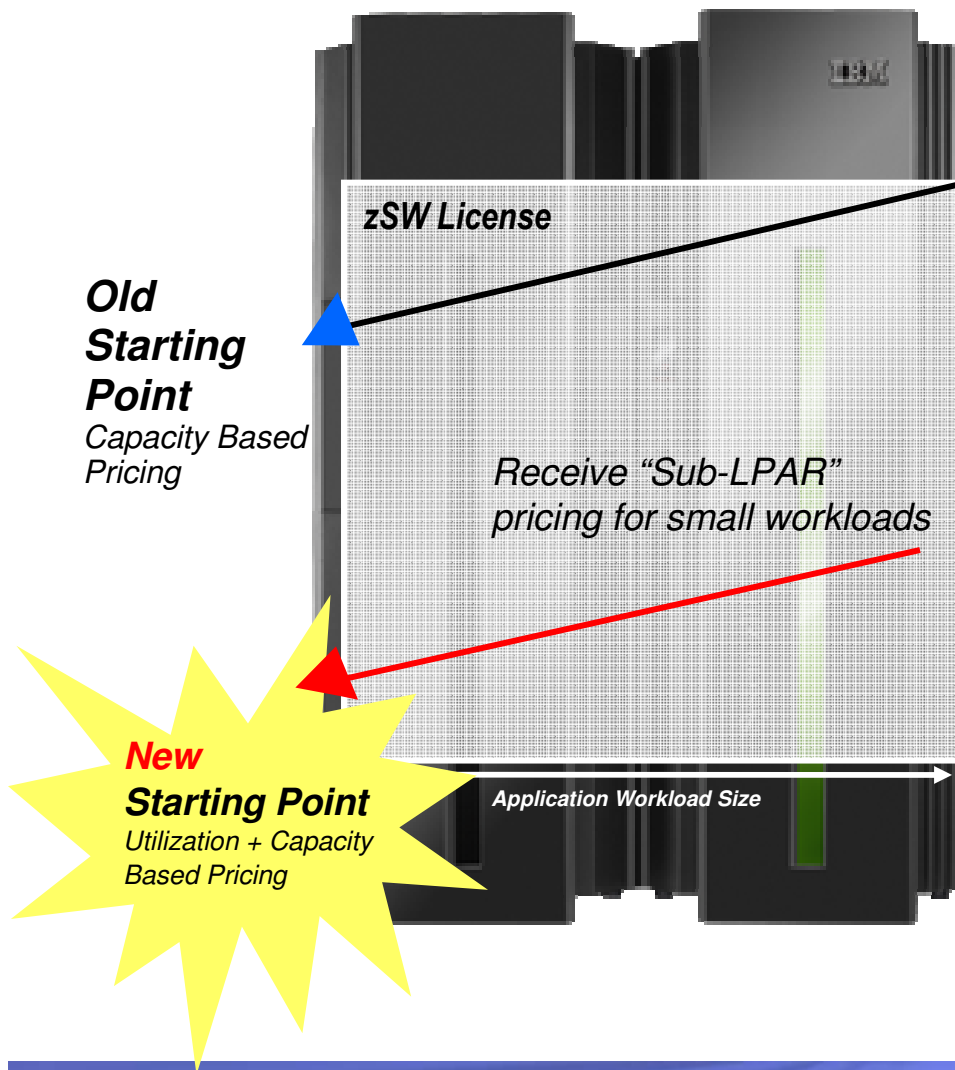
## Integration with CICS

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



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

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



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

# Let's Build a Smarter Planet on System z

