



# WebSphere / Portal for System z – A Logical Path into SOA

**Doug Cox**

**Vice President, Workplace, Portal and Collaboration,  
SOA Interaction Services Development**



# Our IBM System z™ Strategy: Bringing People Together

## Objectives:

- Marketplace Trends
  - ▶ SOA, technology and work environment convergence
- IBM's Workplace Strategy for System z
- Customer successes



# Global economic and business issues are driving intense business pressures

IBM Global CEO Study 2006

## Global market opportunities & threats

Nearly all companies now require some level of global business coordination and operations;  
*“Designed in the US, Made in China, Supported in India”*

### Competing business models

The landscape in most industries is constantly changing; *83% of CEOs expect a competitor’s change in business model will disrupt their industry*



## Commoditization pressure & new competition

Number of competitors up; revenue per customer down;  
*the era of “good enough” products and services*

## Adjacent market opportunities & threats

Product segments constantly blur; *56% of mobile phone users rely on previously “non-phone” features such as camera, music, calendar and messaging*

## Global volatility & disruption

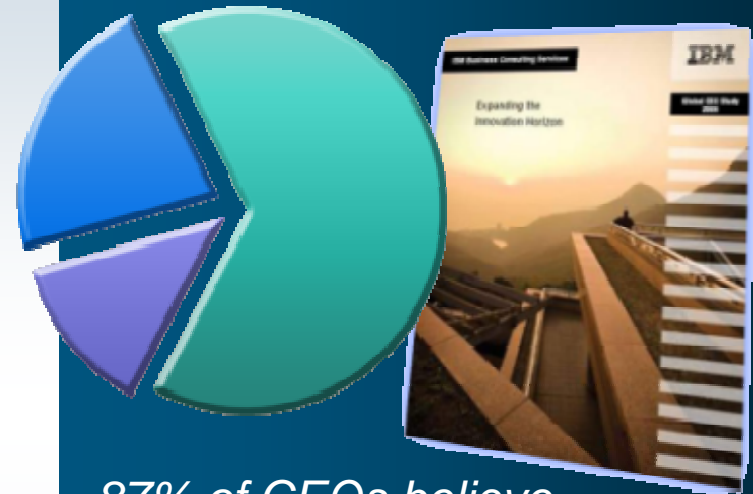
Raw material & energy price spikes, terrorism, political breakdowns or new regulations continually disrupt *business operations*



## Innovation that Matters To CEOs

### *Top Innovation Priorities:*

- Extend the ability to collaborate inside & outside
- Innovate business models & processes
- Leverage information for business optimization



*87% of CEOs believe fundamental **change** is required in next two-years to drive innovation*

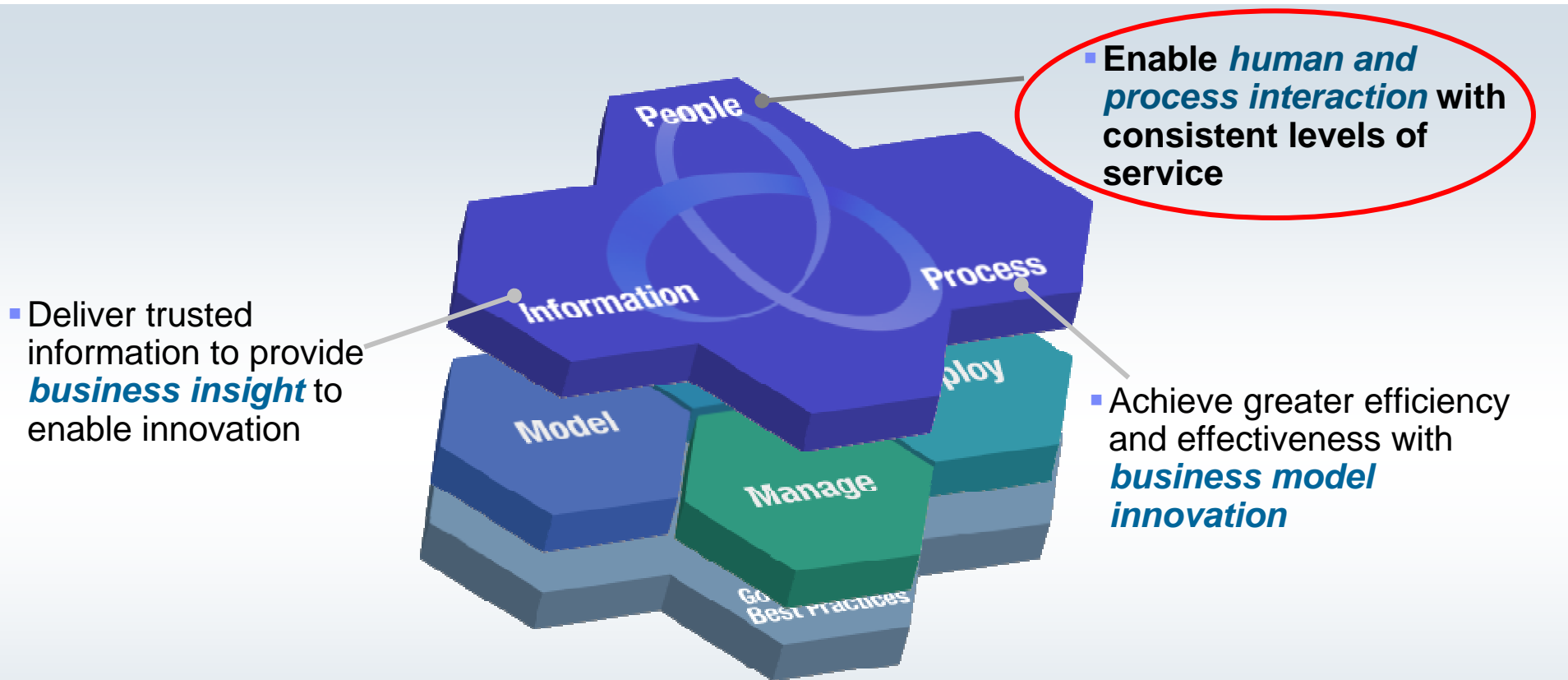
*Source: 2006 IBM Global CEO Survey*

***Innovation is all about change. SOA can help make it easier to change.***



# IBM's View of SOA: Business Centric Objectives

## *Built on SOA Lifecycle*

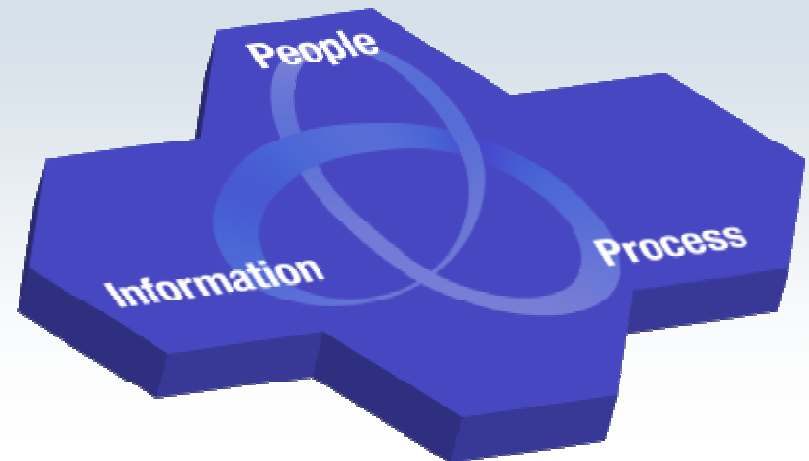


Recent studies of over 1900 customers showed SOA starting points of people, process, information or a combination of all three

# People Are the Fuel of Innovation

## *Marketplace Trends*

- Explosive Connections
  - ▶ 1 Billion Internet Users<sup>1</sup>
- Employees are the main source of organizational innovation<sup>2</sup> and differentiation
- Channel Partners and Customers factor prominently in innovation<sup>2</sup>



*A Flexible and Responsive  
Environment for People to come together to drive Innovation,  
Productivity and Results is a Top Business Imperative*

***System z as the platform for today's new applications & SOA***

1) <http://www.internetworldstats.com/stats.htm>

2) IBM Institute for Business Value, CEO Study 2006

# Business questions



How do I Improve organizational effectiveness?



How do I improve workforce productivity?



How do I do more... with the resources I have?



How do I promote creativity and innovation in my organization?

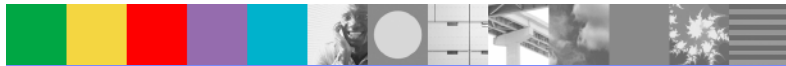
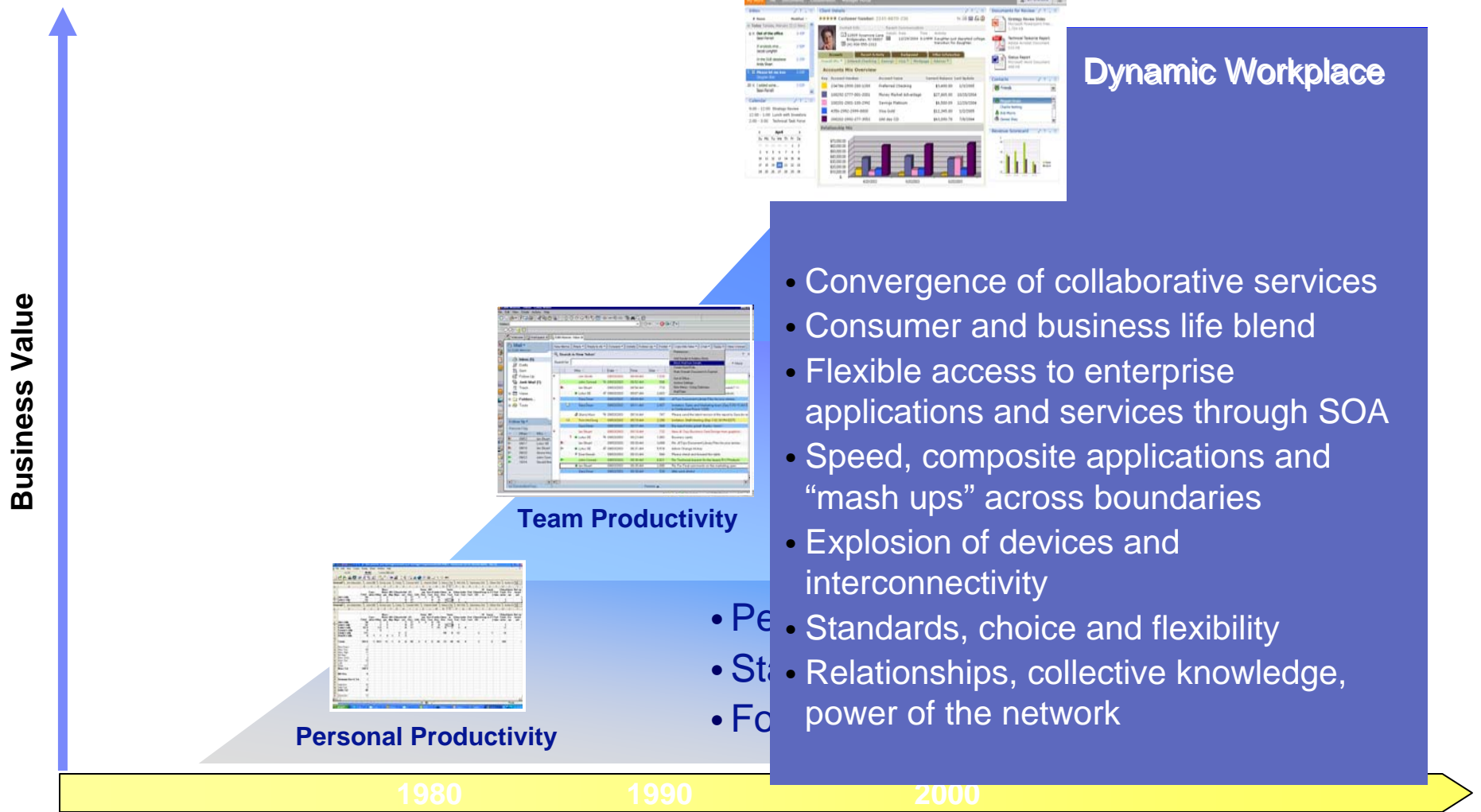
*Future productivity will largely come from the way people innovate, the efficiency with which they can translate innovation into value and how effectively people can work together to make timely well informed decisions.*

# IBM Lotus Software

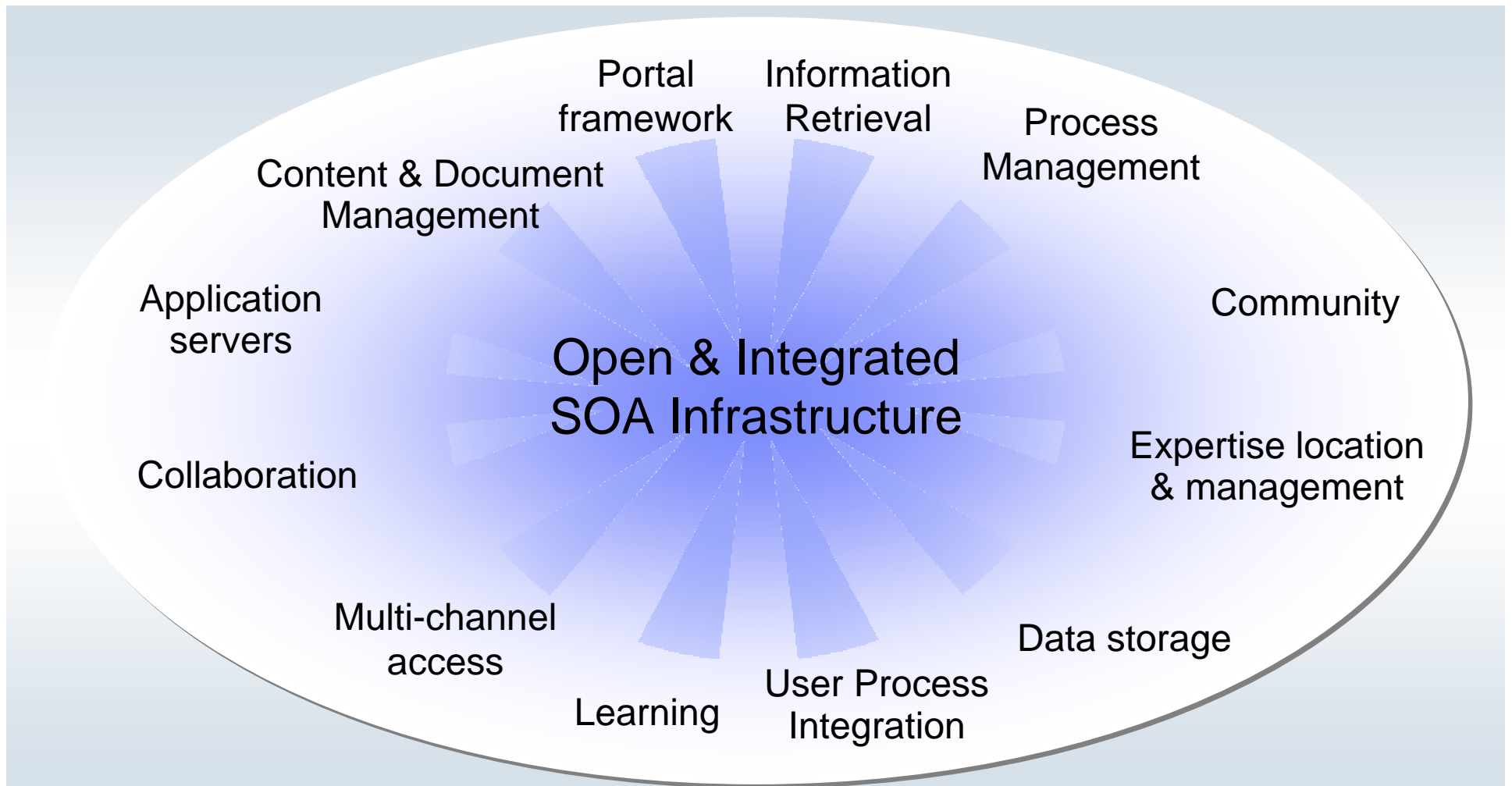




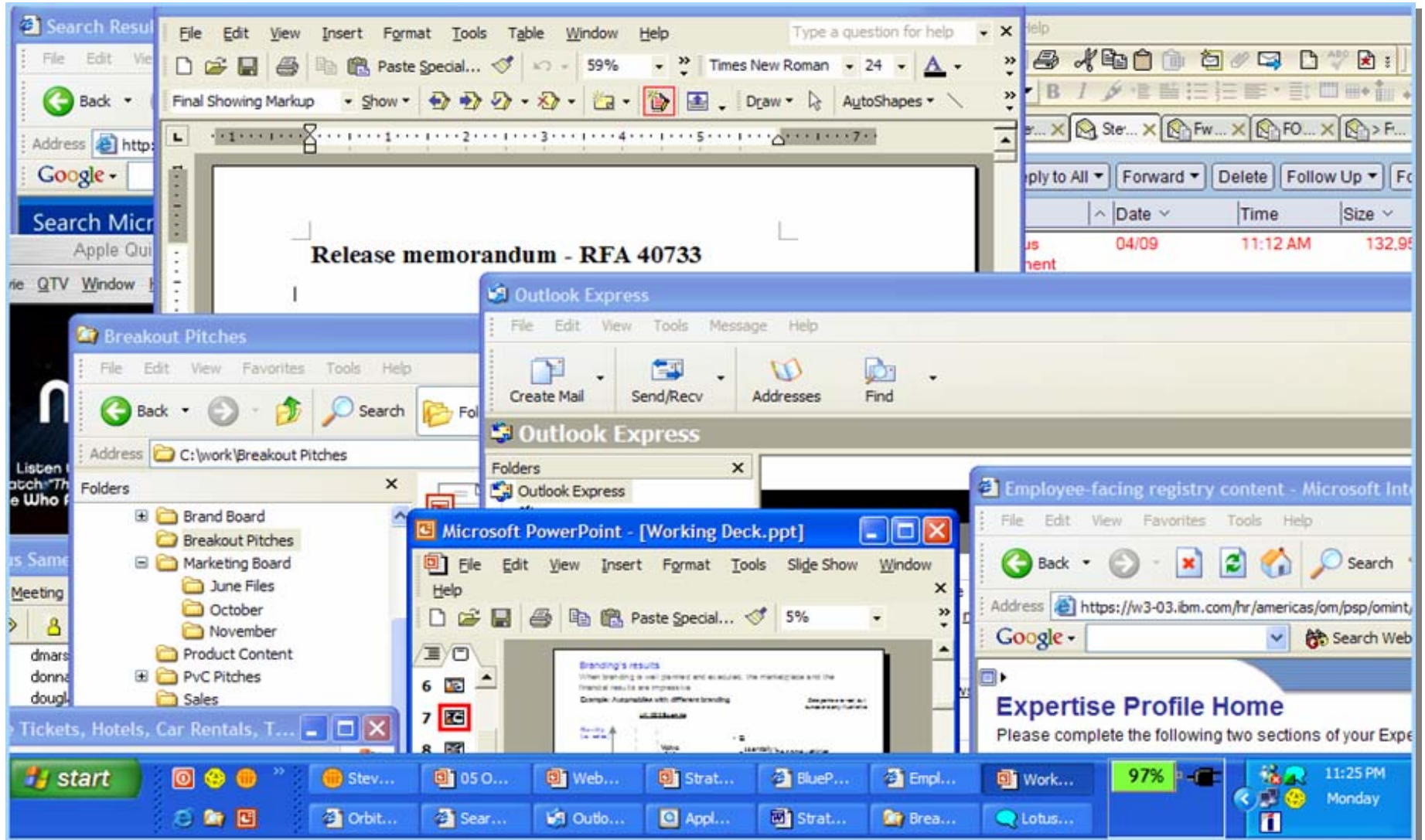
# People Productivity Evolution with System z



In the front-end of computing, we see technology convergence in the marketplace and the real value of System z



Today, many people work like this...  
*Applications and information are delivered in silos*



# ...but desire an integrated work environment

IBM Workplace\_ My Work

My Work | HR | Documents | Collaboration | Manager Portal | I am available

### Inbox

#	Name	Modified
Today Tuesday, February 22 (1 New)		
6	Out of the office Sean Ferrell	3:43P
	If anybody else... Jacob Longfell	2:50P
	In the DUE database Andy Sloan	2:25P
5	Please let me kno Douglas Star	2:05P
20	I added some... Sean Ferrell	2:03P

### Calendar

9:00 - 12:00 Strategy Review  
12:00 - 1:00 Lunch with Investors  
2:00 - 3:00 Technical Task Force

April						
Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

### Client Details

★★★★★ Customer Number: 2245-8870-236

**Contact Info**

12809 Sycamore Lane  
Bridgewater, NJ 08807  
(H) 908-555-2312

**Recent Communication**

Details	Date	Time	Activity
	12/29/2004	8:19PM	Daughter just departed college. transition for daughter.

Accounts
Recent Activity
Background
Other Information

Overall Mix \* Interest Checking Savings Visa \* Mortgage Advisor \*

#### Accounts Mix Overview

Key	Account Number	Account Name	Current Balance	Last Update
Yellow	234786-2999-200-1289	Preferred Checking	\$3,400.00	1/3/2005
Purple	100292-2777-001-2001	Money Market Advantage	\$27,865.00	10/20/2004
Pink	100201-2001-100-2992	Savings Platinum	\$6,500.09	12/20/2004
Blue	4356-2992-2999-0000	Visa Gold	\$12,345.00	1/2/2005

#### Siebel\_Query

Email Address	First Name	Last Name	Middle Name	Work Phone #
<a href="mailto:abrahamdennis@alliedhealth.com">abrahamdennis@alliedhealth.com</a>	Dennis	Abraham	James	4073334005
<a href="mailto:oortiz@raleigh.ibm.com">oortiz@raleigh.ibm.com</a>	Siebel	Administrator		
<a href="mailto:amoore@lemus.com">amoore@lemus.com</a>	Moore	Antonio		4078863394
<a href="mailto:ebenoist@fc.com">ebenoist@fc.com</a>	Emille	Benoist	R	3305942350
<a href="mailto:qbrooks@us.company.com">qbrooks@us.company.com</a>	Graeme	Brooks		
<a href="mailto:hbrooks@us.company.com">hbrooks@us.company.com</a>	Howard	Brooks		
<a href="mailto:ncarter@bowstreet">ncarter@bowstreet</a>	Nicole	Carrier		2079859799
	Guest	Channel Partner		
	Guest	Customer		
	Ronald	Dayton		

### Documents for Review

- Strategy Review Slides  
Microsoft Powerpoint Pres...  
1,704 KB
- Technical Taskorce Report  
Adobe Acrobat Document  
633 KB
- Status Report  
Microsoft Word Document  
468 KB

### Contacts

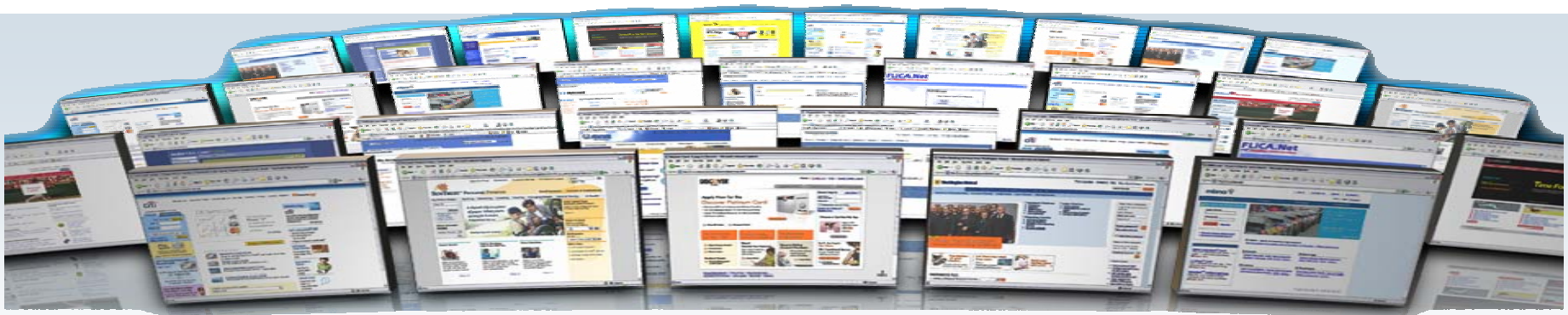
Friends

- Meggan Grupo
- Charlie Notting
- Bob Morris
- Denise Shay

### Revenue Scorecard

Month	Target	Actual
APR	35	33
MAR	35	30
FEB	40	32
JAN	30	28

# The Workplace vision



- *Role Based*
- *Secure*
- *Single Sign On*
- *Content and process integration*
- *Context sensitive*
- *Leverages Forms*

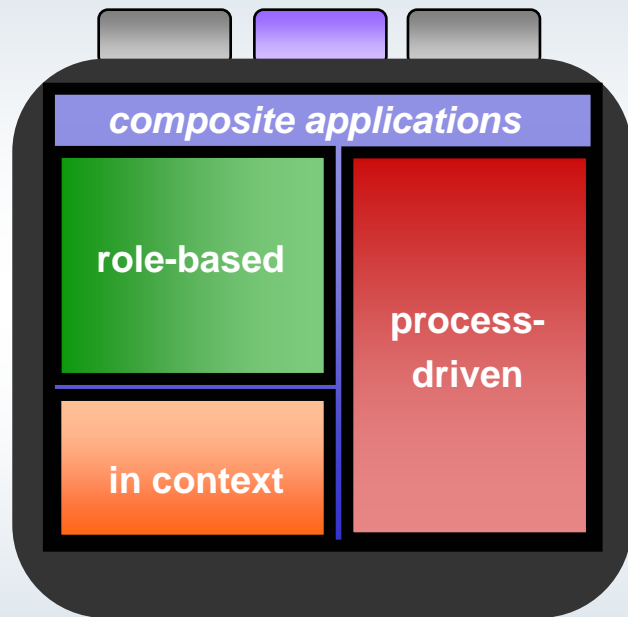


- *Self Service*
- *Easy to deploy*
- *Cost effective*
- *Simple Navigation*
- *Rapid application integration*

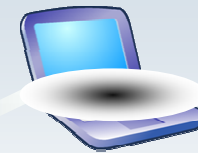


# ...Dynamically Delivered Based on Choice, Openness, Flexibility

“Fit for purpose” access



**IBM WebSphere® Portal is the Foundation**



Rich Clients



Browser



Mobile Clients

**Customers**



**Employees**

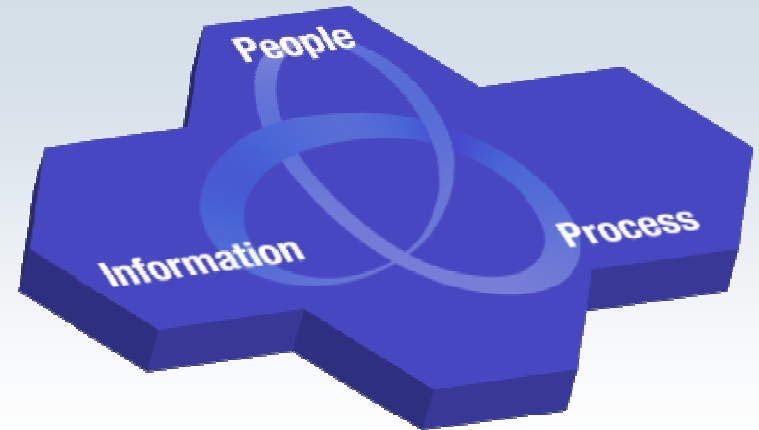


**Partners / Suppliers**

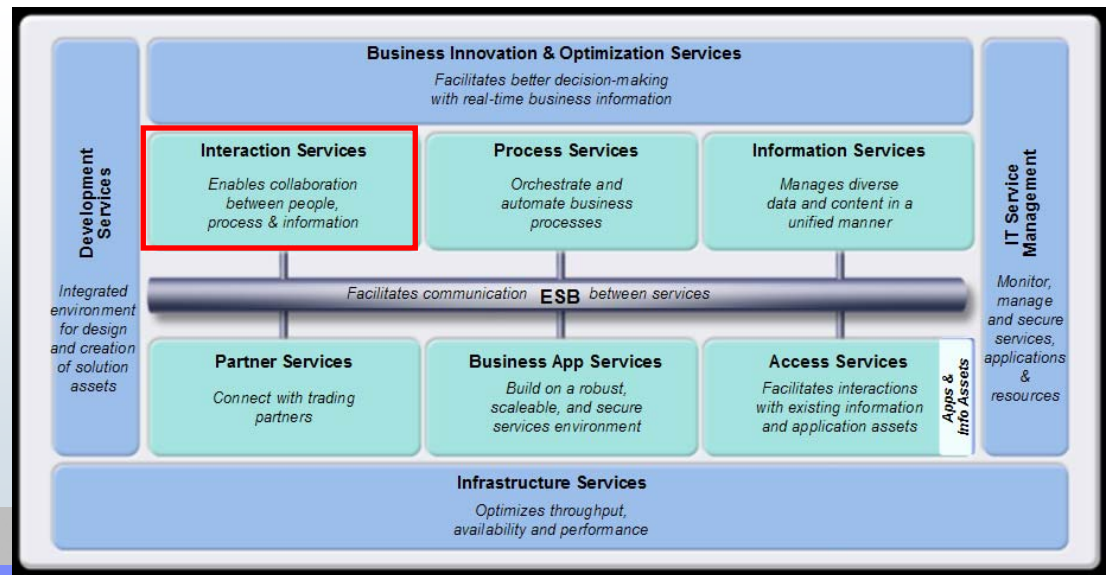


# The Dynamic Workplace is the front end to flexibility and business agility driven by SOA

Integrating people, processes and information within the context of your business



- Composite applications and front-end integration
- Communications and collaboration services
- Open and flexible access methods



# The mainframe as a platform for people integration

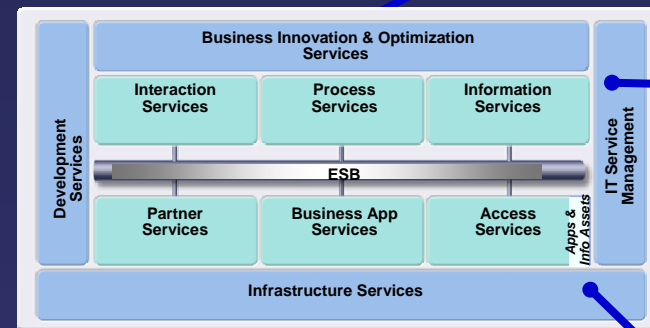
*Can deliver essential SOA qualities*

## Architecturally compatible:

- SOA Reference Architecture
- Architectural services
- Communications and integration
- Process control
- Reuse of core assets
- Helps address industry standards

## Operationally superior:

- End-to-end **security-rich** features in the enterprise
- Designed for **24/7 availability**
- Massive **scalability**
- **Automated recoverability** features
- **Centralized** operations capabilities



Customers  
Employees  
Suppliers



Partner  
Systems



Departmental  
Systems



Server Farms

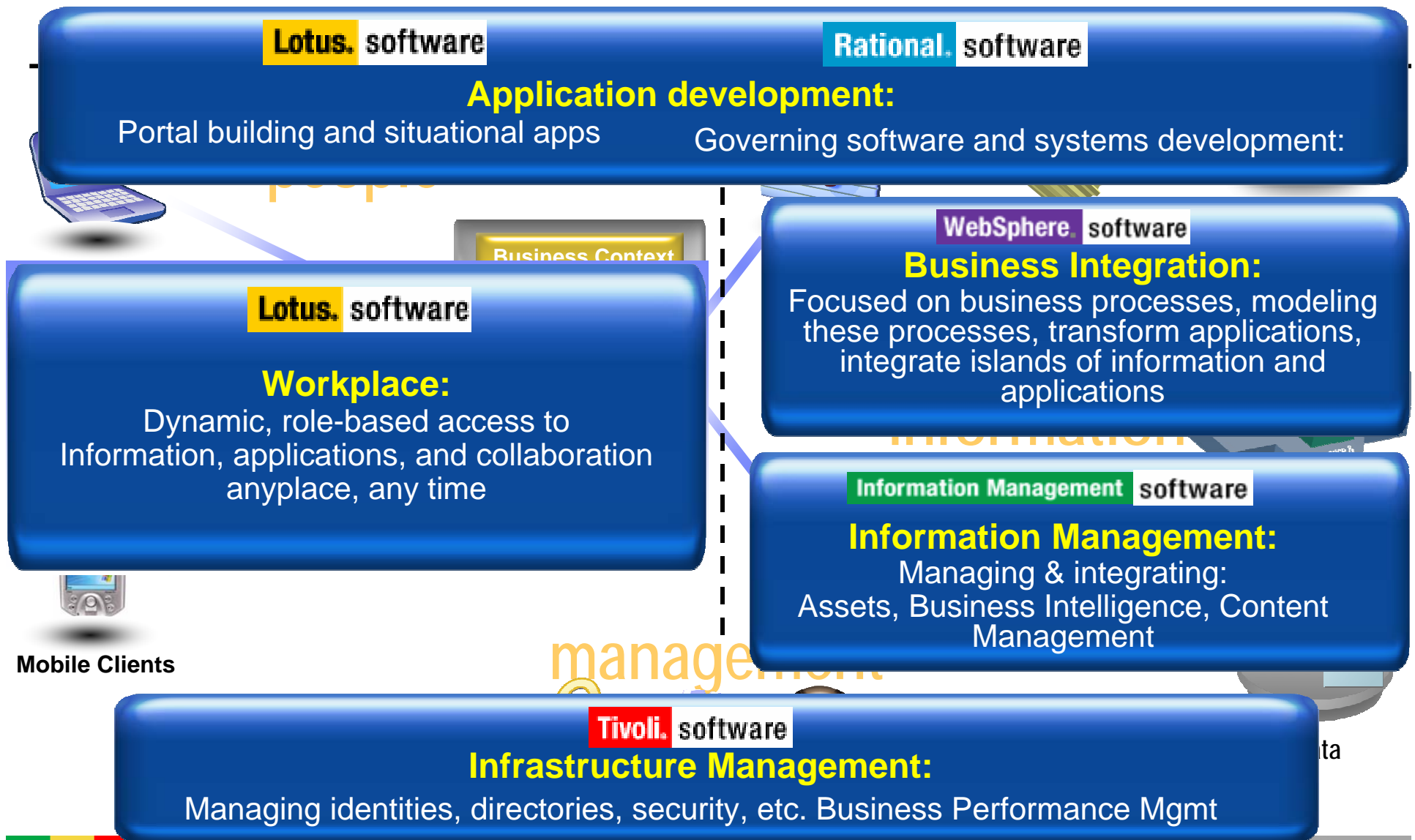


Remote Sites  
(Branch Office,  
Store)



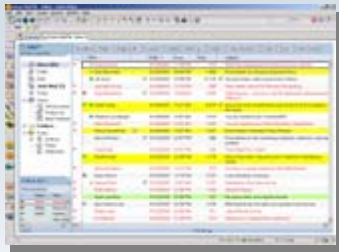


# The Workplace as part of a bigger picture



# IBM Workplace Strategy for System z

*Delivering customers the IBM Workplace vision*



## IBM Lotus® Notes® & Domino™ on System z

Market leading enterprise messaging & collaboration infrastructure

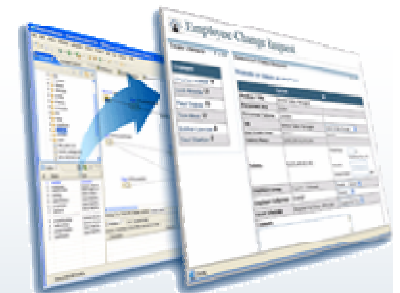
- 60K customer sites
- >125M licenses
- System z support since 1997



**NEW!**

## IBM WebSphere Portlet Factory Version 6.0 on System z

- Rapidly create and deploy SOA services through portlets



**ENHANCED!**

## IBM WebSphere Portal Version 6.0 on System z

Market leading enterprise portal platform

- 4,000+ Customers
- System z support since 2003



# Caisse Nationale d'Allocations Familiales

## The Challenge:

French national organization providing assistance to >11 million families had to simplify info access; standardize quality / accuracy of fees and allowances; and handle demands quickly to speed payments and lower costs.

## The Solution:

WebSphere Portal & Lotus Domino on IBM z/OS® provides the software to consolidate services & web sites for Service Recipients, Partners & Employees; improve the user interface; provide personalized content based on role and improve the efficiency of web content management.

## On Demand Business Benefits:

- z/OS platform chosen for robustness / reliability
- Anticipates:
  - Improved communications / relationships with Recipients and Partners
  - Easier access to apps for Employees
  - Reduced processing time, workload and costs
  - More rapid payments for families in need

(CNAF)



Software	<ul style="list-style-type: none"> <li>▪ WebSphere Portal Enable for z/OS V5.1.0.2</li> <li>▪ IBM WebSphere Application Server for z/OS V5.10</li> <li>▪ Lotus Domino for z/OS</li> <li>▪ CTG V5</li> <li>▪ IBM DB2® for z/OS V7.1</li> </ul>
Hardware	<ul style="list-style-type: none"> <li>▪ IBM eServer™ zSeries® 990 servers (2084-306) leveraging Parallel Sysplex technology</li> <li>▪ z/OS V1.7</li> </ul>



# RENFE

## The Challenge:

To integrate information from across the company consistently while lowering costs and improving scalability.

## The Solution:

IBM WebSphere Portal running under SUSE Linux Enterprise server on IBM eServer zSeries provided a single, consistent source of corporate information

## On Demand Business Benefits:

- Faster access to information on a unified high speed, highly secure platform
- Reduced operational costs through IT consolidation
- Ability to create new virtualized portals rapidly for future growth without the expense of new hardware



***“As you can imagine, it was difficult and time-consuming to manage the 18 different systems that used to provide information to employees. Now that we have consolidated the intranet into two parts, on Linux on the z990, it is very easy to manage and offers much faster access to important information.”***

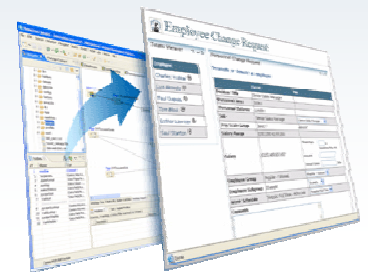
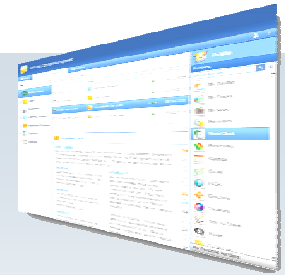
***-- Carlos Varela, Director of IT Systems for Renfe Operadora***



# IBM WebSphere Portal Version 6.0 for System z

## *Meeting the New Requirements for the Front-End of SOA*

- **Helping Organizations to Rapidly Respond to Change**
  - ▶ Integrates with IBM WebSphere Portlet Factory
  - ▶ AJAX support to deliver compelling user experience
- **Easy-To-Use Composite Application Templates**
  - ▶ Flexibility to easily customize interfaces
  - ▶ Portlet Palette & Enhanced Portlets
- **Helping Increase Organizational Productivity and Operational Efficiency**
  - ▶ Enhanced Web Content Management
  - ▶ Leverages IBM Workplace Forms (e-forms) capabilities
  - ▶ Fly Out Menus & Page navigation
  - ▶ Drag & Drop support
  - ▶ Enhanced Search
  - ▶ Native MS Windows & MS Office Integration





Home

# New user experience improves productivity

Home

Workcenter

Career and Life

Getting Started

Search Mail



## Getting Started

Simple tips, product demos, and essential links to help you start using and customizing your site today!

### Demo Central

Get up to speed quickly with these demos and product tours.



Lotus Domino 8  
Product Tour



Lotus Domino 8  
Product Tour

More Demos



#### Add and Rearrange Page Content

Click the + icon to access the palette from the page bar to add content to the page. You can drag and drop content to rearrange the page layout.



#### To Create a New Page

Hover over the page bar, click on the context arrow, and select new page. You can create a new page from scratch or use the current page as a starting point.



#### Need additional help?

Click on the ? icon in the page bar to access the contextual help flyout. Click on the icon in the banner to access main menu and navigate to the IBM Infocenter.



#### Use the Main Menu to move around

**New and Updated Themes and Skins.**

1



#### Edit Portlet Contents

Hover over portlet titles to access the contextual menu. You can also edit content inline or use the content management tool to customize your content.



#### Find Everything...Fast!

Click on the search icon in the page bar to open the search field. Use the drop down menu to select the type of search you want to perform. From the results page, you can navigate to an important document, team space, e-mail, etc. or close the page and return to what you were working on before.

### Need Help?

Access the page bar at the top of the page.

Go to the IBM News Center for more depth product information.

Also, try IBM articles about Content Management.

### Support

Go to the IBM News Center for more depth product information.

### New To IBM?

Wondering how to get started? Take a look at the Getting Started page.

### Existing User?

Wondering how to complete a task? Use the contextual help flyout.

### Other Links

IBM.com

IBM software

IBM WebSphere

IBM Workspaces

IBM Software Development

IBM Software Partner World



Help & Support

Search Help



### Contextual Help

Contents  
Index

#### Customize this page

- Hover over the page name in the page bar and select edit page from the drop down menu
- Once in edit mode, you can edit the contents of the page inline using the editing tools and choose to apply the changes to the current page or a new page

#### Create a new page

- Hover over the page bar and select new page from the drop down menu

3

Simply grab a portlet on the page or from the slide out palette and drag to the desired location on the page

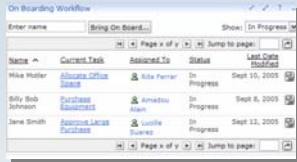
2

Slide out palette lets you add new portlets to that page

IMAGES AND SCREENSHOTS ARE SUBJECT TO CHANGE

# WebSphere Portal V6 integrated with Process Server

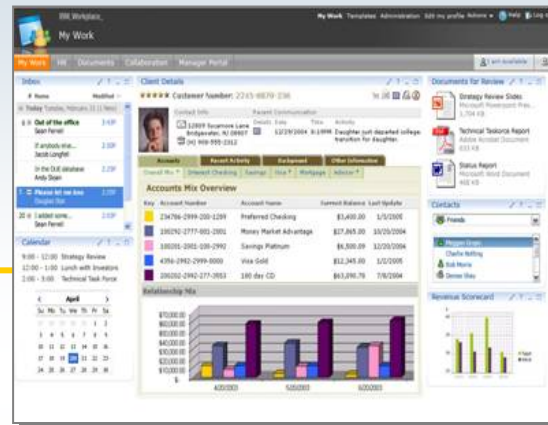
*Integrate Process and Flow on System z* **ENHANCED!**



**Process  
Orchestrating  
within Portal**

---

**Form Driven  
Workflows**



**Portlet to Portlet  
Interaction**

**Ad-Hoc Person to Person  
Exception Handling and  
Problem Resolution**

***Dynamically Presented Based on  
Role & Security***



# Easily deploy Content with IBM Workplace Web Content Management Version 6.0

## ■ Improved authoring usability:

- ▶ Welcome page to help new users get started
- ▶ Inline Editing for infrequent users
- ▶ User-friendly, simpler templates for entering content
- ▶ Full text, attribute and taxonomy search and searches within searches
- ▶ Simplified process for including personalization rules in content and layout
- ▶ New views allow users to find their content easily
- ▶ User interface can be customized easily to provide tailored experience

Web Content > Welcome >

Welcome | Web Content Management | Content Preview | JCR explorer | Content Creator

## Welcome to Web Content Management

Author, edit, and manage content for your site in a few simple steps.

**Get Started Now** →

**Need Help?**  
Go to the [IBM Information Center](#). The information center has complete and in-depth product information.

Try [IBM developerWorks](#). developerWorks features articles about various topics related to IBM WebSphere Portal.

**Need Support?**  
[IBM Software Support](#)  
[IBM Newsgroups](#)

**Need More Information?**  
Get additional information and product news. Visit the [IBM WebSphere Portal home page](#)

**Other Links**  
[IBM.com](#)  
[IBM Software Home Page](#)  
[IBM WebSphere](#)  
[IBM Software Support](#)  
[WebSphere Portal Zone](#)  
[Partner World](#)  
[Linux at IBM](#)

1 Templates. Separate content from design by using authoring and presentation templates.

2 Search. Simple and advanced search functionality and the My Items views ensure that you can quickly find and work with Web content.

3 Libraries. Use automatic versioning and new library capabilities to organize content just the way you want.

4 Personalization. Use Web Content Management with Personalization to present the right information to the right people -- where and when they need it.

5 Task bar. Access common tasks quickly from the task bar. Use tabs to work with multiple content items when you create, edit, delete, and preview.

6 Simplified authoring environment. Anyone can quickly and easily create, edit, and publish content on the site.

place holder for simple authoring experience

Web Content Management enables end-to-end content creation, approval, management, retention, and publishing across Internet, intranet, extranet, and site assets. By leveraging content in back-end systems, Web Content Management reduces development and implementation time and ensures "author once, publish everywhere" control.

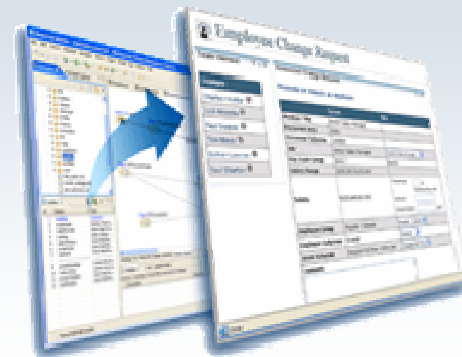
[Home](#) | [Administration](#) | [Documents](#) | [Web Content](#) | [Messaging](#) | [Site Map](#)



# IBM WebSphere Portlet Factory V6 for z/OS and Linux on System z **NEW!**

- **Accelerate:** Portlet Factory allows for faster WebSphere Portal deployment, typically requiring lower-order development skills than other tools
- **Respond:** Help organizations large and small to create *dynamic* portal solutions, that are easy to modify as market conditions dictate
- **Strengthen:** Fortify the overall IBM SOA tooling advantage with the compelling value of Portlet Factory

## Portlet Factory Tooling



- Rapid application development
- Service-oriented architecture (SOA)
- Integration extensions including Lotus Domino
- Profiling engine



# WebSphere Portal Version 6.0 as platform for *Approachable* Composite Applications

**Improve Operational Efficiency**

*"We need to be more efficient, to drive more business and add to the bottom line."*

- Management
- Administrators
- General User
- Developers

- **Easily Build and deploy composite applications using portal services**

- Personalization, collaboration, search, orchestrated workflow,....
- Portal framework provides aggregation and integration

- **New Concepts:**

- Portlet Factory; Templates; Application Context; Membership/Community; Application Roles

- **Business Value**

- Reuse critical assets
- Business flexibility since it is easier to make changes

**Company Tracker**

Company	Last	Change	Chgt%	Volume	Quote	Detail
International Business Machi.	85.1	0.39	0.46%	3,304		

**CT Stock**

Wednesday, August 25, 2004 04:00:56 PM EST  
**IBM - International Business Machi.(NYSE)**  
 ▲ 85.07 0.36 0.42%  
 Day's Range: 85.27 - 84.25  
 Volume: 4,414M  
 Shares Outstanding: 1,666  
 Mkt Cap: 142,518  
 Bid/Ask: 84.99/84.95  
 Open: 85  
 Prev. Close: 84.71  
 52 Week Range: 100.43 - 81.27  
 Fundamentals: EPS:4.68 P/E:18.10

**CT Chart**

IBM International Business Machi. Daily 8/25/2004

**CT Profile**

Thursday, August 26, 2004 3:05:00 AM EST  
**International Business Ma**

One New Orchard Road  
 Armonk, NY 10504  
 Phone:(914) 499-1900

**Industry Information**

Industry: Computer Hardware  
 Sector: Technology  
 Employees: 319,272  
 Market Cap (M\$): 142,558.41  
 Updated: 20040730

**Business description**

IBM provides customer solutions through the use of advanced information technology. These solutions include technologies, systems, products, services, software and financing. For the 6 months ended 6/30/04, revenues rose 5% to \$45.4B. Net income from cont. ops. rose 13% to \$3.28B. Results reflect higher revenues from all industry sectors except Global Financing across all geographies due to the growth in demand and new applications.

**Key ratios**

	Indust.	Indust.	Sector
P/E Ratio(TTM)	18.28	24.99	29.11
P/E High - Last 3 Yrs	33.50	54.33	63.08
P/E Low - Last 3 Yrs	16.22	27.26	16.91

**Officers & Inquiries**

**Officers:** Samuel J. Palmisano, Chairman, CEO, John S. Hines, CFO/Co. VP, Daniel E. O'Donnell, VP/Co. Pres, Jesse J. Green Jr., VP/Treas.

**Transfer Agent:** First Chicago Trust Company of NY. Company incorporated 1811 in NY. Direct inquiries to: Stockholder Relations.

**Competitors**

- ▶ Hewlett-Packard Co.
- ▶ Dell Computer Corp.
- ▶ Oracle Corporation
- ▶ Microsoft Corp.

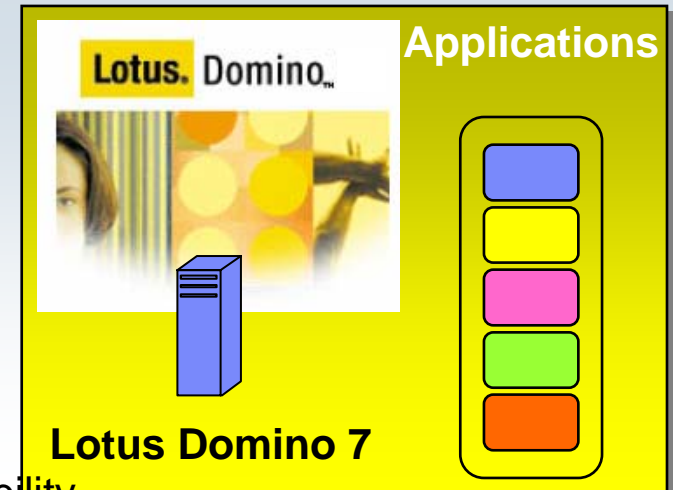
# IBM Lotus Domino for System z Advantages since 1997...

- **Lotus Domino for System z on Linux**

- ▶ Outstanding reliability
- ▶ Virtualization technology with IBM z/VM®
- ▶ Portable skill base
- ▶ Outstanding scalability

- **Lotus Domino for z/OS**

- ▶ Superior RAS and FFDC at OS level improves serviceability
- ▶ Impressive Backup capacity
- ▶ Integration with z/OS & DB2: RACF, SMF, SSL, etc
- ▶ Extensive Debug tool set
- ▶ Automation can help reduce Lotus Domino administration costs
- ▶ Standard support includes delivery of hotfixes without waiting for the next maintenance release



# LINDORFF

## Lindorff Oy

**The Challenge:** Needed to build a single reliable, scalable and future-proof platform for current and future Web applications – enabling quick and easy delivery of information to customers & employees via the web with a high level of security

**The Solution:** Migrate to a single IBM System z mainframe using IBM WebSphere and IBM Lotus software for competitive advantage. Lotus Domino software is for both its e-mail system and to run intranet applications.

### On Demand Business Benefits:

- Increased customer satisfaction through continuity, reliability and security features for real-time information
- Realized cost savings by upgrading platform and easy management of new infrastructure



"The results of the project, especially the performance and stability of the system, are better than I expected!"  
 — Aarni Järvelä  
 Executive Vice President, IT  
 Lindorff Oy

#### Software

- IBM z/OS operating system
- IBM WebSphere Application Server
- IBM WebSphere Host Access Transformation Services
- IBM Lotus Domino software

# IBM Internal Deployment

## The Challenge:

To simplify the server and storage infrastructure for more than 400,000 IBM Lotus Notes users, to improve availability, performance and reduce costs.

## The Solution:

Over the past several years, IBM has implemented Lotus Domino on z/OS as part of the consolidation & improvements of the server network. This continues in 2006 with Lotus Domino 7 for z/OS.

## On Demand Business Benefits:

- More effective use of resources: human, IT and information
- Improved availability and manageability of the server network
- Able to implement new innovative solutions for users



“We continue to deliver cost and expense improvements, but now we’re tackling a more complex agenda — focusing on growth and innovation as powerful ways to manage and measure our progress.”

— *Linda Sanford, IBM Senior Vice President, Enterprise On Demand Transformation and Information Technology*

### Software

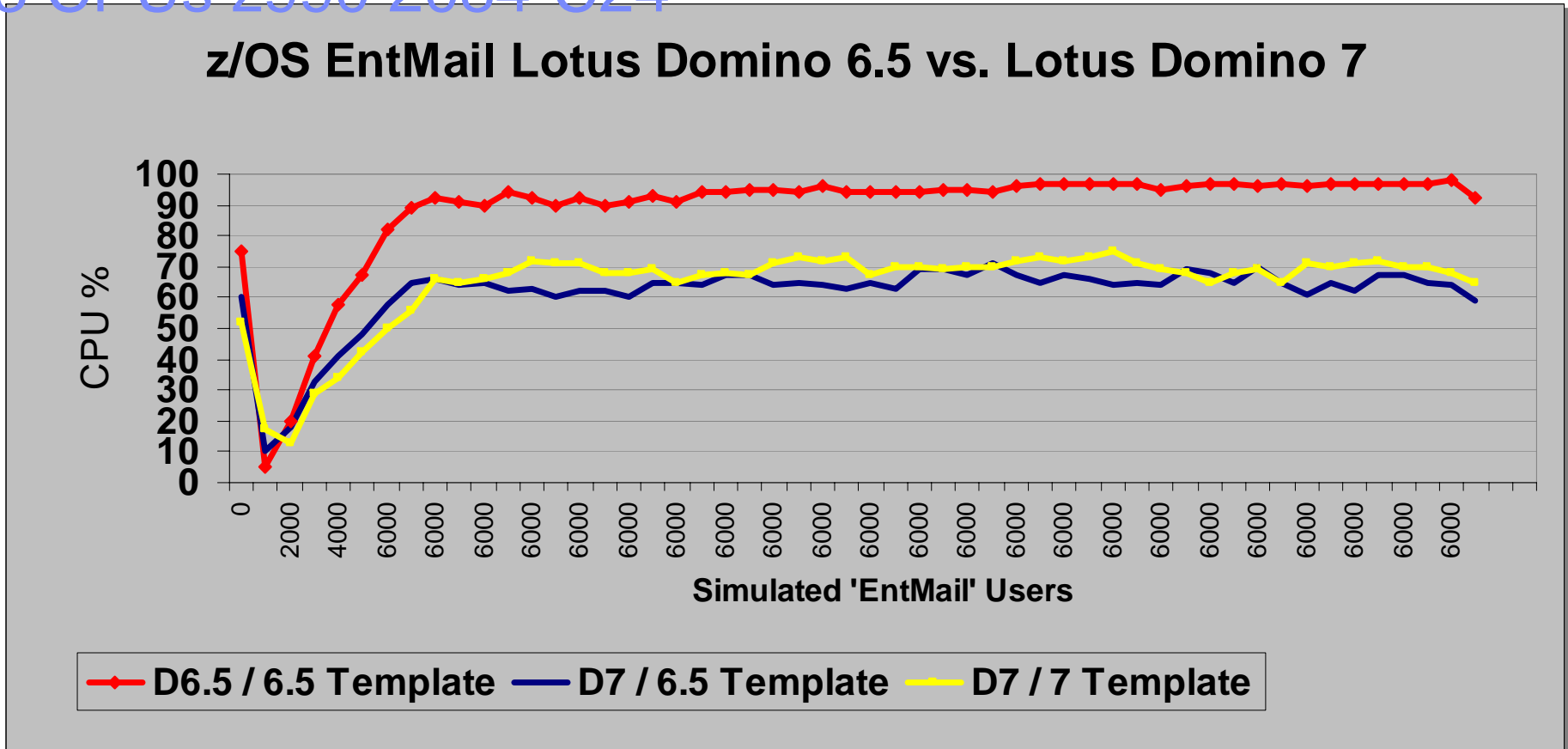
- Lotus Domino 6.5.4 and 7.0.2 for z/OS
- Lotus Notes 7 client
- RIM Blackberry offering, 25K IBM Lotus Domino Web Access deployment planned for 2006

### Hardware

- IBM z900, z990 and z890s models

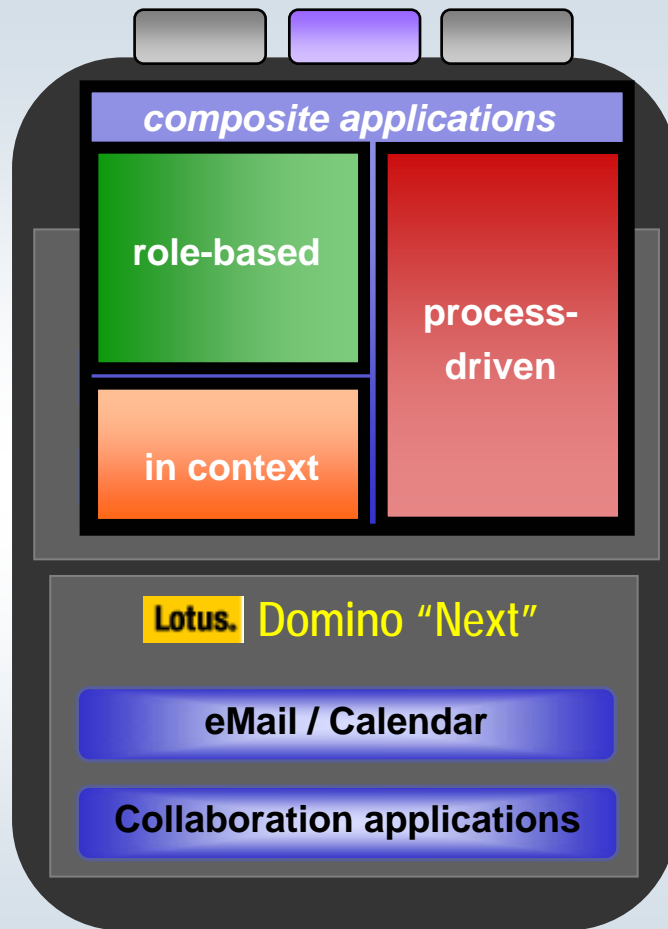


# CPU Savings with EntMail Workload on z/OS 1.5 on 3 CPUs z990 2084-C24



**IBM's Enterprise Mail workload Benchmark Report dated Nov 29, 2005:**  
<http://www-128.ibm.com/developerworks/lotus/library/domino7-enterprise-performance/>

# Extending Lotus Notes and Domino with WebSphere Portal



## *Domino + Portal Integration*

- Integrated installation
- Integrated administration
- Directory integration
- Composite application support
- Server-managed client technology



# IBM Lotus Domino for System z

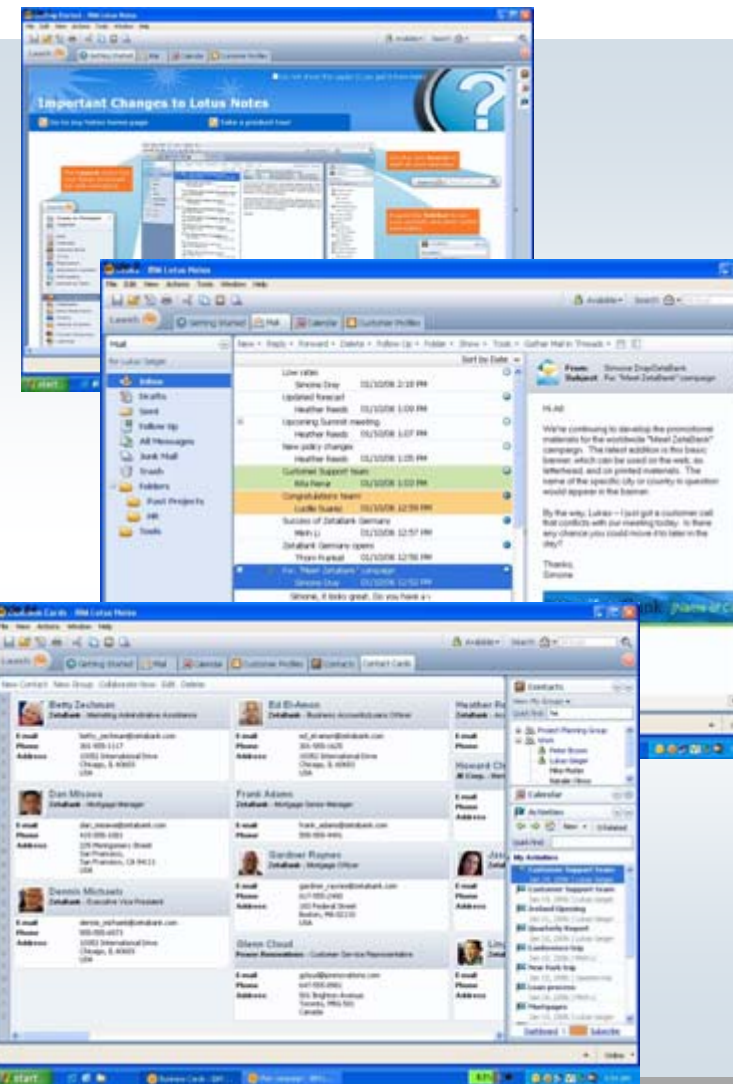
## “Hannover”

### The next generation of Notes

- Expansion of capabilities and integration
- Adapting technologies to new uses
- Server-managed technology that can be tailored for your business

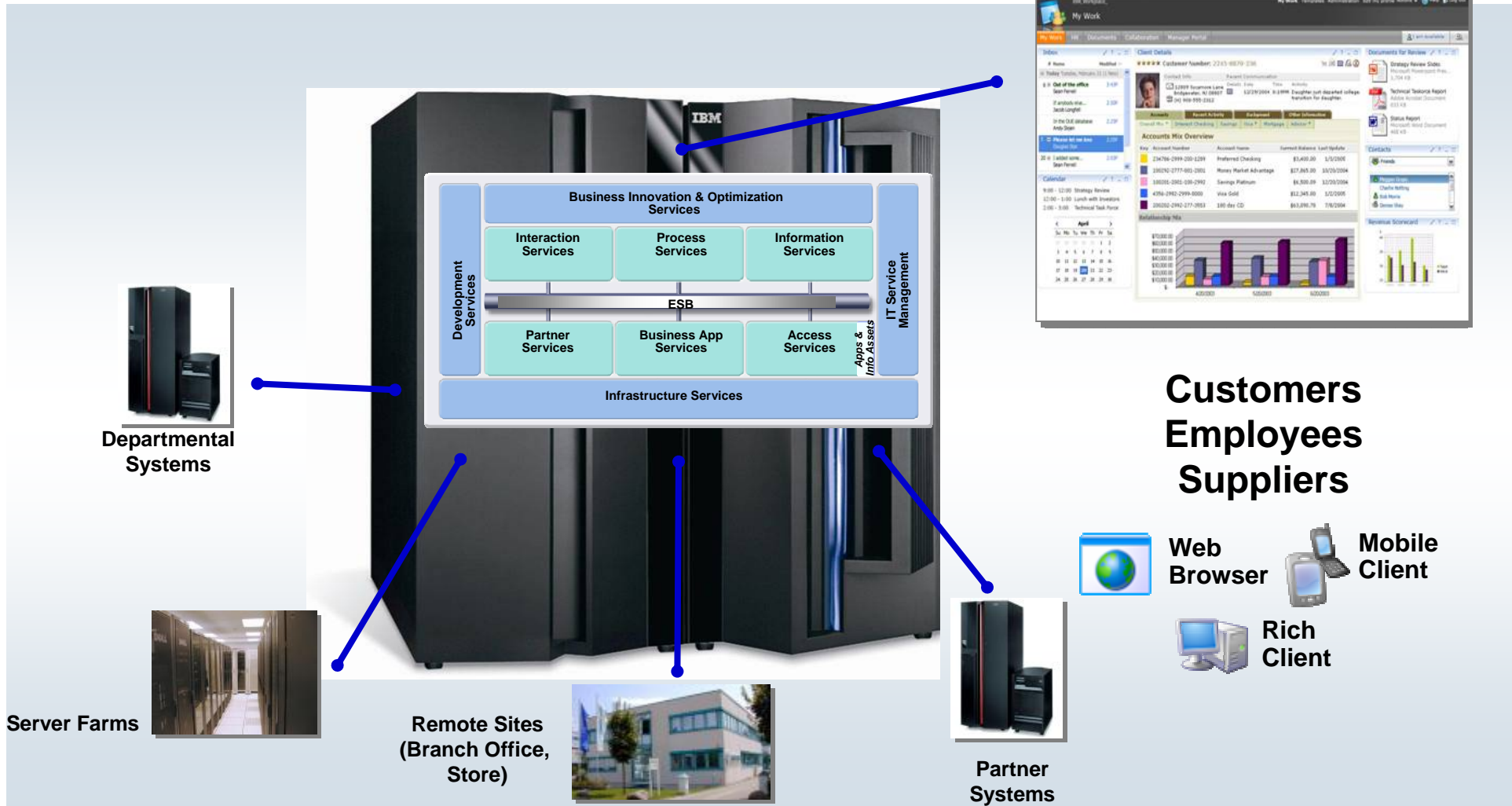
### Extends the unique qualities of the Notes collaboration platform

- Mail, Calendar, and Contacts
- Composite Applications
- Productivity Tools (Word processing, spreadsheets, and presentations)
- Activity Centric Computing
- Java/Eclipse development environment





# Bringing People & Processes together on System z: Open, Integrated, Security-Rich, Scalable, SOA



# Summary

**1** People & high performance work environments drive innovation and productivity for businesses



**2** Portals represent the front-end of SOA and an “easy-first-step” SOA project with the opportunity for rapid ROI resulting in people productivity and innovation



**3** System z platform provides the security-rich, reliable & manageable environment for high volume interaction between people, process, & information



**4** WebSphere Portal and Portlet Factory Version 6.0 together with Lotus Domino on z/OS and zLinux extends workplace innovation for System z users



Thank  
You



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