



IBM SOA Technology Summit

Front End to SOA

Collaboration & Interaction Services

SOA on your terms and our expertise



Agenda

- SOA and User Experience
- Portal to deliver an Adaptive User Experience
- ... and to integrate with Processes
- Tools to create reusable Components for Composite Applications
- Workplace Services to provide advanced Productivity and Collaboration services
- Leveraging Domino Collaboration Infrastructure

Agenda

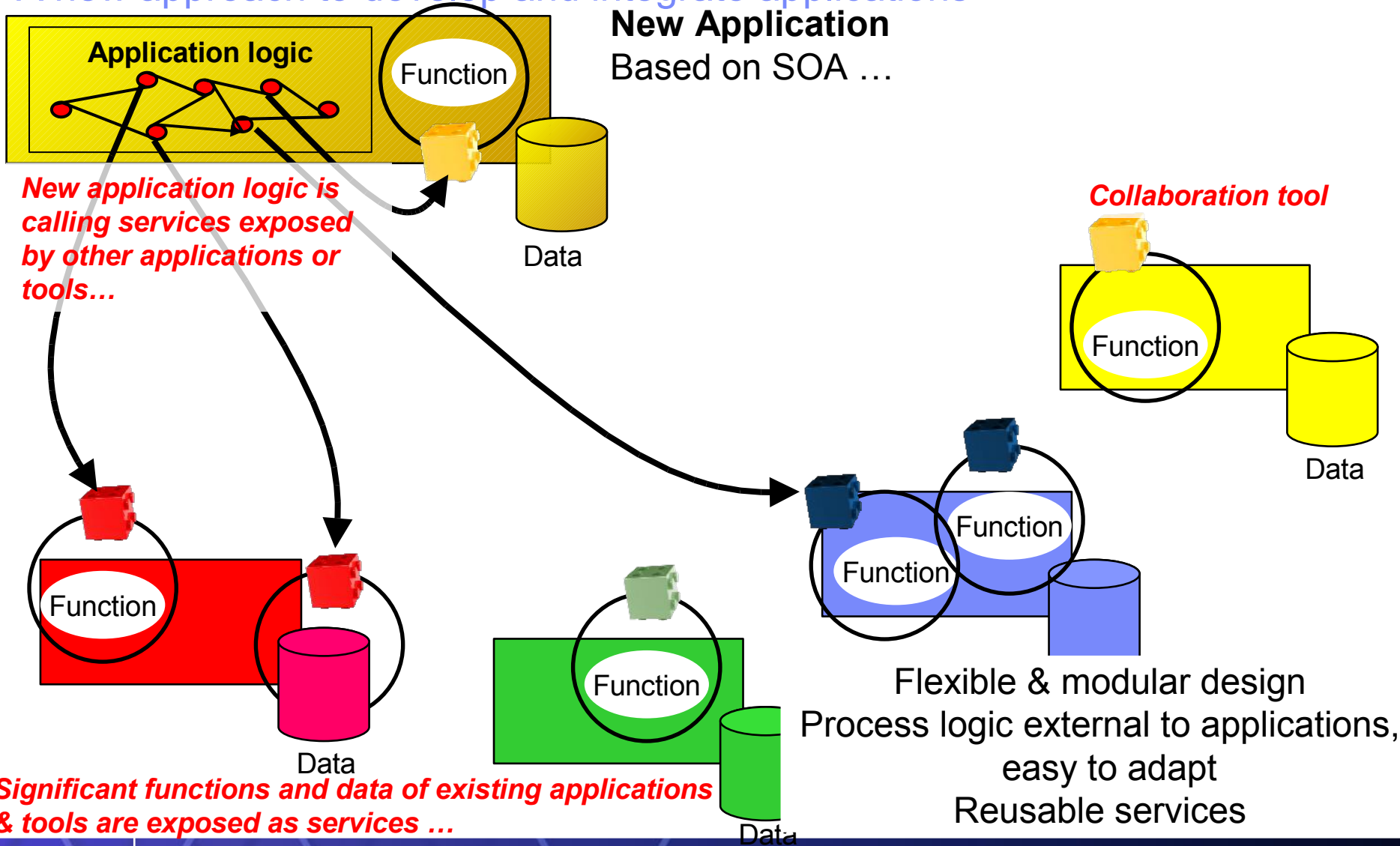
➔ SOA and User Experience

- Portal to deliver an Adaptive User Experience
- ... and to integrate with Processes
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- Leveraging Domino Collaboration Infrastructure

What is SOA about ?

A new approach to develop and integrate applications

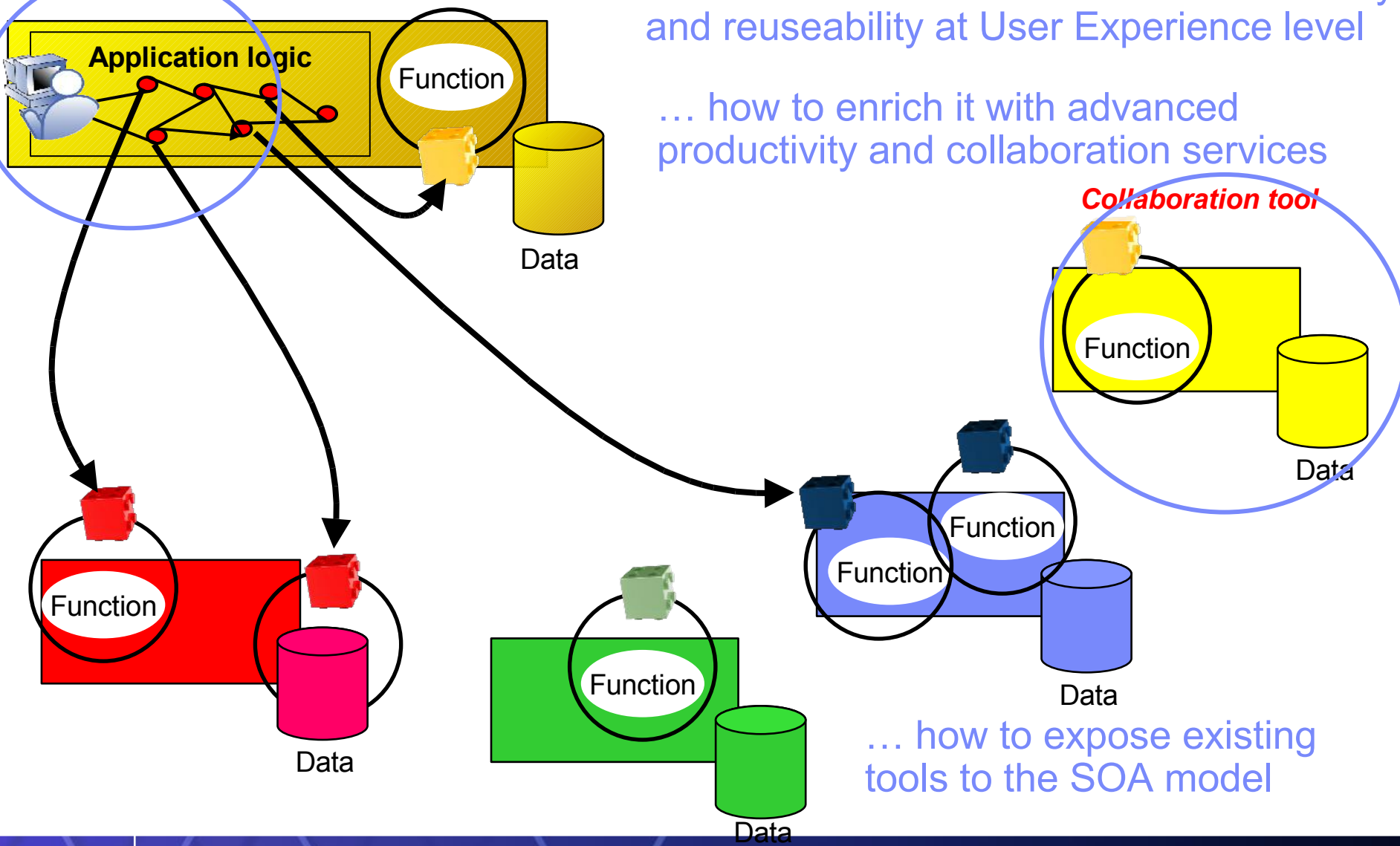
New Application Based on SOA ...



But ...

... how to reach the same level of flexibility and reuseability at User Experience level

... how to enrich it with advanced productivity and collaboration services

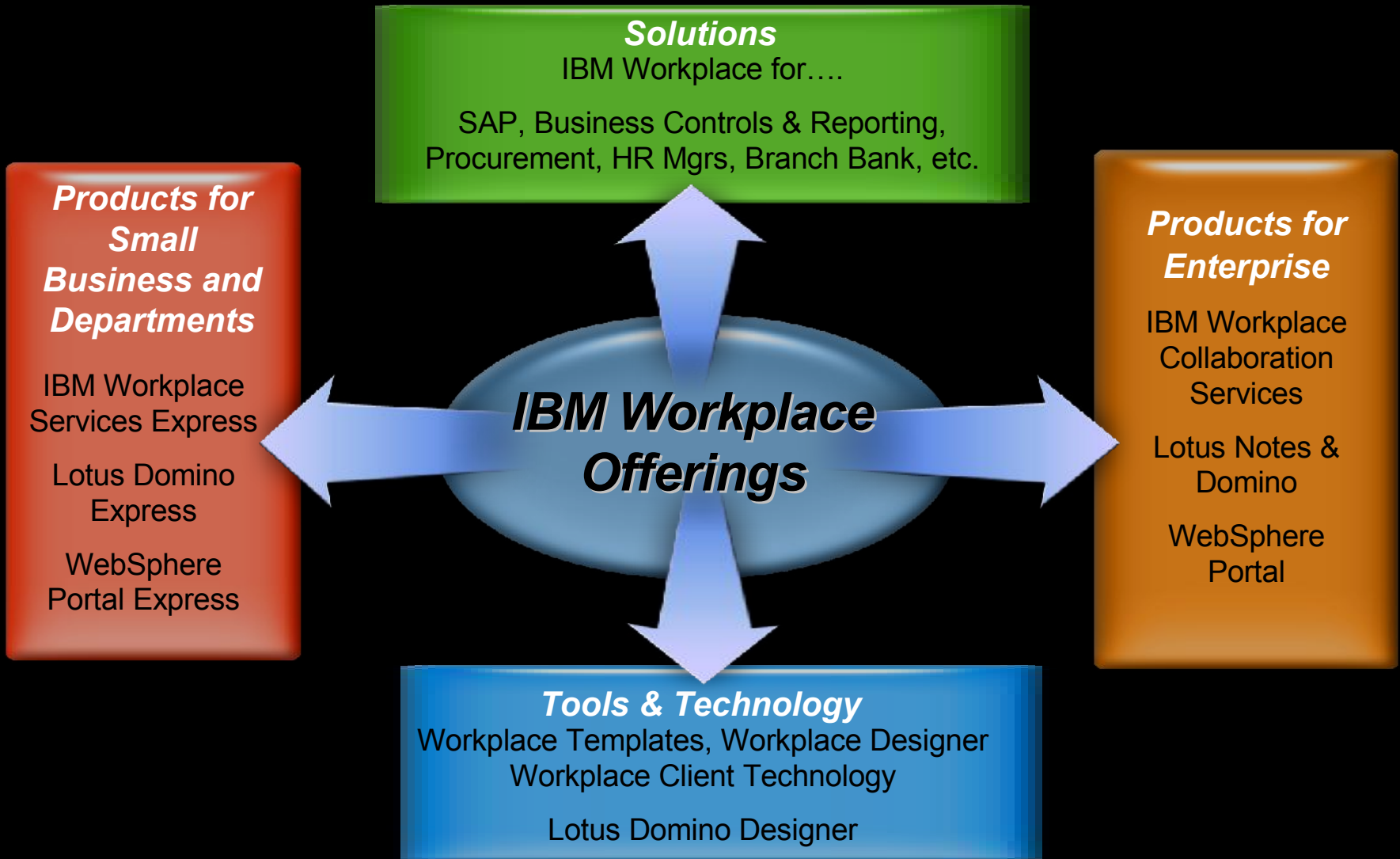


... how to expose existing tools to the SOA model

Agenda

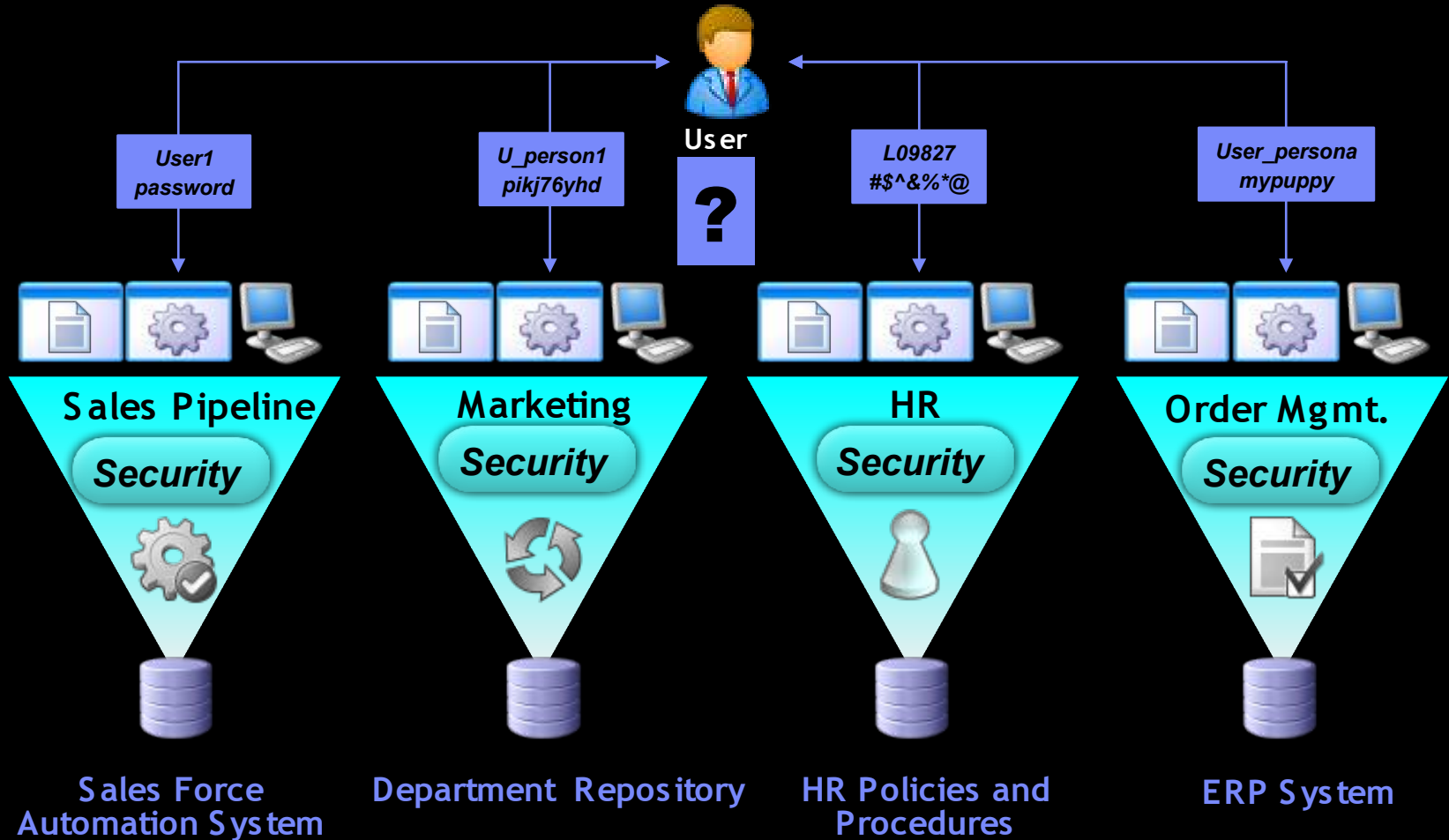
- SOA and User Experience
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IBM Workplace Offerings for an SOA

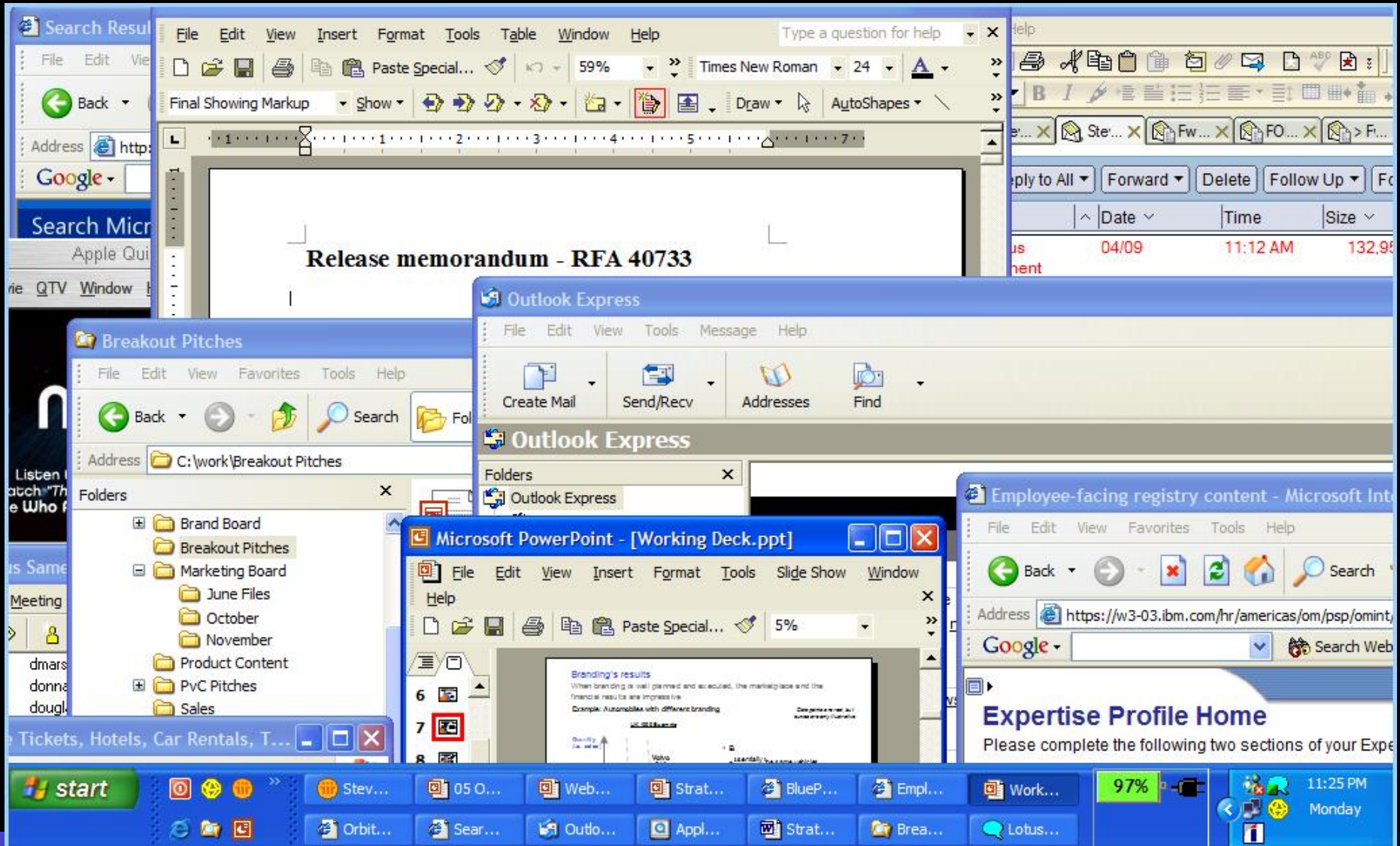


The Usability Challenge

Applications and information are delivered in silos

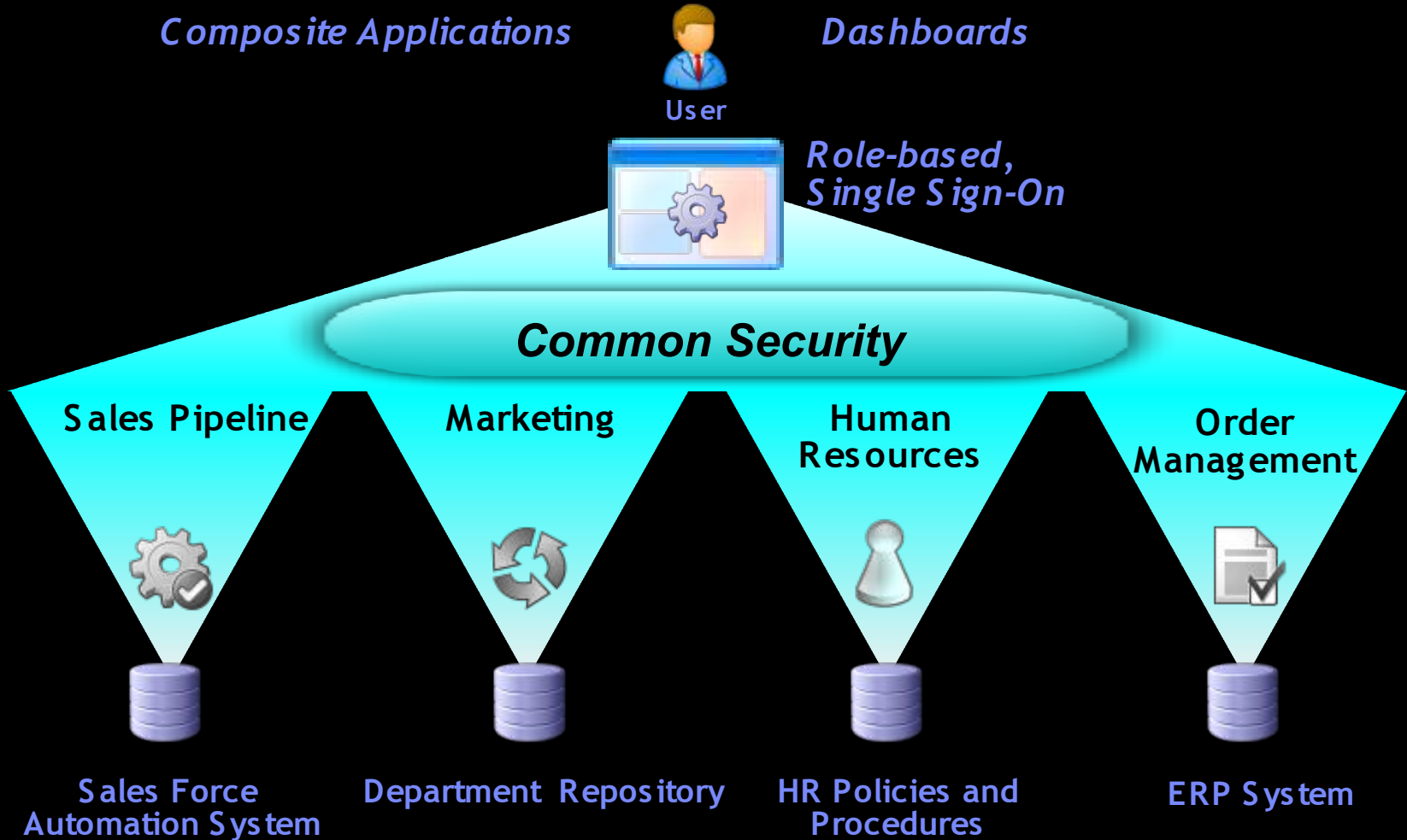


Today, many people work like this...



The Answer to the Problem

An environment that adapts to the needs of each user, in their role



IBM Workplace

My Work

My Work Templates Administration Edit my profile Actions Help Log out

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 know 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
Dark Blue	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
Purple	200202-2992-277-3553	180 day CD	\$63,090.78	7/8/2004

Relationship Mix

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

WebSphere Portal 6.0

The screenshot displays the IBM WebSphere Portal 6.0 user interface. At the top, there is a navigation bar with 'Home > Welcome >' and a search box containing 'All Sources'. Below this, a secondary navigation bar shows 'Welcome' and tabs for 'Getting Started' and 'Having Fun'. The main content area is divided into several sections:

- Product Links:** A central column of icons and text links for Administration, News, Documents, Messaging, Domino Integration, Personalization, Templates, Search, and Site Map.
- Portlets:** A vertical stack of portlets including 'Login', 'Welcome to WebSphere Portal', and 'Domino Integration'.
- Contacts:** A 'Quick Chat' window showing a list of users such as Alex Song, Amy Travis, and Charlie Hill.
- Help & Support:** A purple header with a search box and sections for 'Contextual Help' (Contents, Index) and 'Customize this page' (instructions on how to edit page content).
- Welcome Message:** A large blue banner on the left that reads 'Welcome to IBM WebSphere Portal Delivering power and flexibility... on demand!' and 'Build it better... faster!'.

What's New?

Other Links

Extend Portal to the Desktop

WebSphere Everyplace Deployment 6.1

- Runs connected or disconnected from WebSphere Portal 6.0

WebSphere Everyplace Deployment
File Application View Help Customers Teller

Bank Teller System

Customer Search

Enter Customer Lastname: Search

Enter Customer Firstname: Search

Enter Customer SSN: Search

Enter Account Number: Search

All Customers: Search

Customer Profile

John Carter 123-45-9876 ★★★★★

5687 Lakeside Apartments
Austin, TX-78758
USA
Phone 123-456-7890(Home)
213-456-7890(Work)
Email: abc@xyz.com

Customer Search Results

First Name	Last Name	SSN
Alfred	Garcia	469-57-8279
Alice	Sheen	123-45-6789
Jane	Doe	999-11-2839
Jane	Mary	999-11-2839
John	Smith	333-22-2323
John	William	123-45-6789
John	Carter	123-45-9876
John	Walker	687-43-6587

Account Search Results

Number	Type	Balance

Customer Profile

John Carter 123-45-9876 ★★★★★

5687 Lakeside Apartments
Austin, TX-78758
USA
Phone 123-456-7890(Home)
213-456-7890(Work)
Email: abc@xyz.com

Accounts

Account Number	Account Type	Available	Balance
294311310735	Savings	19000.0	20000.0

Account Details

Number: 294311310735 Type: Savings
Balance: 20000.0 Available: 19000.0

Customers

John Carter 123-45-9876

Recent Transactions

Date	Transaction Type	Amount	Balance
12/20/03	Deposit check 1122	1200.0	20000.0
8/15/03	Account create	18800.0	18800.0

Deposit

Account: 294311310735
Transit: 12345
Type: Savings
Balance: 20000.0
Available: 19000.0
Amount:
Deposit Type: Cash

Send Brochure

Name: John Carter
eMail: abc@xyz.com
Comments:
Dear John please find at

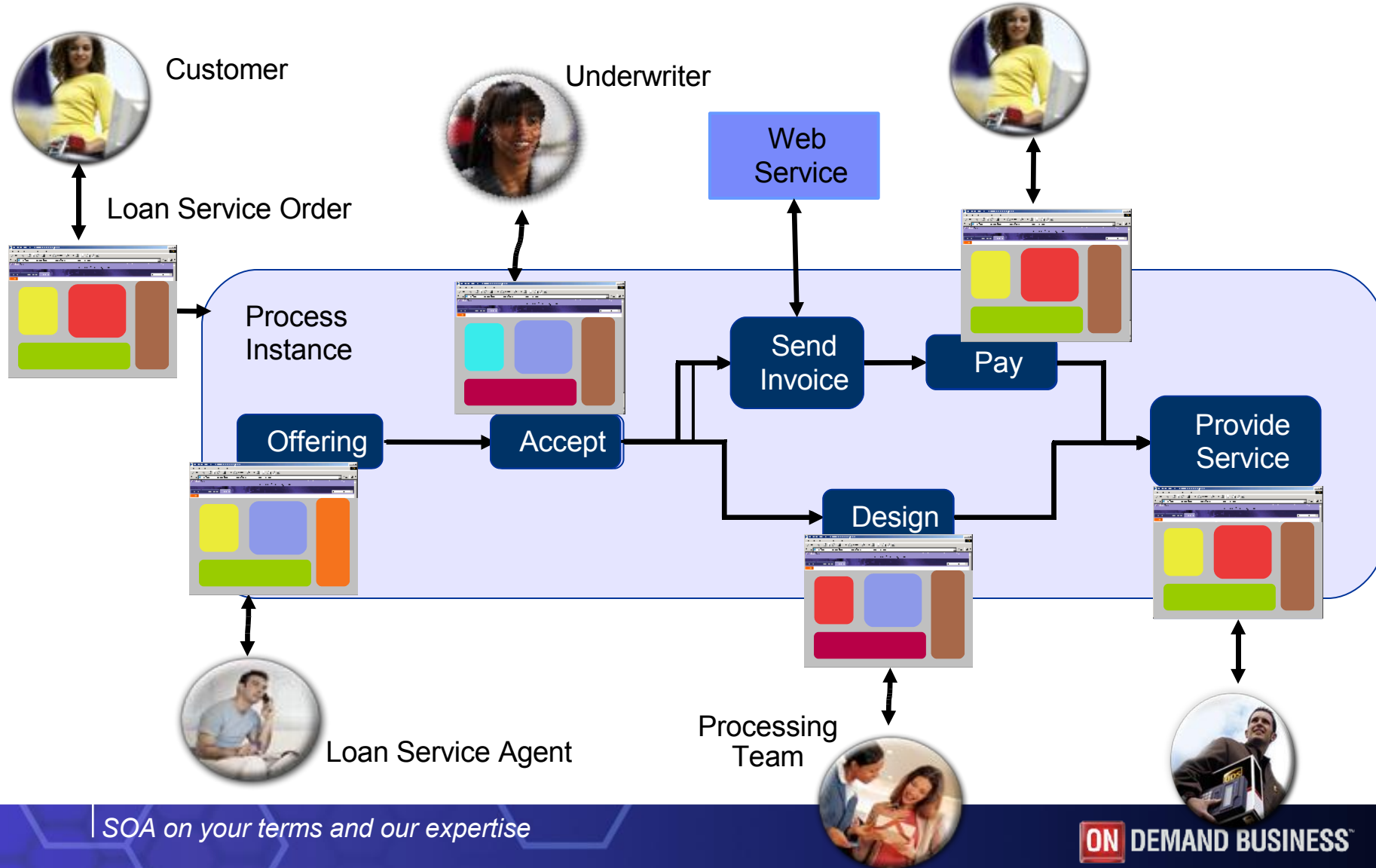
Brochures

Name
Online Savings inc ann/tr

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Portal and Human Interaction in an orchestrated workflow



WebSphere Portal Workflow Builder

- Business User tool for simple workflows
 - Many processes handled via email today
 - Automate best practices or infrequent tasks
 - Example: Bringing new employee on board
- Workflow definition
 - Roles
 - Tasks
 - Actions
- Workflow Binder includes all related documents for a given workflow
- Utilizes BPEL engine
- Integrated into Portal Composite Application template model
- Business Value
 - Reduction of errors
 - Consistently better decisions

The screenshot displays the 'Application Template Library' interface. At the top, there are navigation links for 'Welcome' and 'Template Library'. Below this, there are buttons for 'New...' and 'Import...'. The main area contains a table with columns for 'Name', 'Owner', 'Category', and 'Modified'. A context menu is open over the 'Bring on board template' row, listing actions such as 'Edit Workflow', 'Edit Template Properties', 'Edit Template Layout', 'Edit Template Parameters', 'Manage Roles', 'Export Template', 'Delete Template', and 'Assign Template Permissions'. The bottom of the screen shows a Windows taskbar with the 'start' button and several open applications, including 'C:\WINDOWS\system...', 'Welcome to MSN - Mi...', and 'IBM WebSphere Port...'.

Name	Owner	Category	Modified
Bring on board template	wpsadmin	None	20 March 2006 1
Customer Request Applic		None	16 March 2006 1
Portal Blank Template	found	None	7 March 2006 00
Portal Blank Template fo		None	19 March 2006 1

IBM Workplace Forms : an alternative to interact with processes

Mountain-Sure INVESTMENTS Brokerage Account Application

INVESTMENTS Check Writing Account? Yes No Portfolio Account? Yes No

Account Type Individual Estate* Partnership* Custodian for a Minor Collateral Additional Documents Required
 Joint Tenants Trust* Corporation* Charitable Organization* Investment Club

Applicant Information Required by NASD Rule 3-2(a)(3) and NASD Rule 2310

First Name: Richard Middle Initial: Last Name: Smith SSN: 999-99-9999 Date of Birth: 04-15-1964 Business Phone: () -
 Mailing Address: 123 Electric Form Ave City: Springfield State: MA ZIP Code: 01111
 Legal (Street) Address (Required in Addition to P.O. Box #): 123 Electric Form Ave City: Springfield State:
 Employer: PureEdge Solutions Occupation: Doctor City: Springfield State: MA
 Are you or joint applicant employed by a member firm of a stock exchange, a municipal securities dealer or other securities organization?
 Yes, Co. No, Co. No, Individual No, Principal

Signatures

```

</name>
</address>
</legalAddress>
</employer>
</applicant>
  
```

Bylaws of the American Institute of Organbuilders
 as amended October 10, 2001

Article I
 Name
 The name of this organization shall be: American Institute of Organbuilders (AIO).

Article II
 Objectives
 The objectives of this organization shall be: to advance the science and practice of research, experimentation and other means to disseminate knowledge regarding pipe of research, experimentation and exchange of information; to establish an organized training program; and to publish and disseminate publications and exchange of degree of proficiency.

STATE DEPARTMENT OF HEALTH
 CERTIFICATE OF LIVE BIRTH

Treating forms as XML objects allows us to:

- Maintain presentation and logic with data
- **Save** a form and *work offline*
- **Route** a form using any available transport mechanism (e.g. workflow, web, email, FTP, etc.)
- **Archive** a form into a database or content management system
- **Pre-fill** a form with data and extract data from a form
- **Sign** and make a form tamperproof
- **Integrate** a form with other technologies (Notes/Domino, Portal, workflow, EAI, document/content management, etc.)
- **Parse** the XML data at any appropriate time in the form's lifecycle

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Company	Last	Change	Chg%	Volume	Quote Detail	Chart	Profile	News
International Business Machi.	85.1	0.39	0.46%	3.30M				

CT Stock

Wednesday, August 25, 2004 04:00:56 PM EST
IBM - International Business Machi.(NYSE)

Day's Range	85.27 - 84.35
Volume	4.41M
Shares Outstanding	1.66B
Mkt Cap	142.51B
Bid/Ask	84.95 / 84.95
Open	85
Prev. Close	84.71
52 Week Range	100.43 - 81.27

Fundamentals

EPS	4.68
P/E	18.10

■ International Business Machi. 8/25/2004 Daily

1 day 3 mo 6 mo 1 yr

Data delayed at least 20 minutes.

My Stocks

Wednesday, August 25, 2004 4:02:00 PM EST

IBM	85.07	0.36	0.43%
COMPO	1,860.72	23.83	1.30%
DJI	10,181.74	82.11	0.82%
SPX	1,104.96	8.77	0.80%

Data delayed at least 20 minutes.

[Symbol Lookup](#)

Copyright 2004 Pinnacar Inc.

CT Chart

IBM
 ■ International Business Machi. Daily 8/25/2004

Indicators

Moving Averages: Period: --Days--

Other Indicators: --Indicator--
 Volume
 Relative Strength Index
 Price Rate of Change

Display

Comparison: Symbol: --Symbol--

Chart Resolution: Daily

Chart Type: Line

Extended Information: --Extended Info--
 Splits
 Dividends
 Earnings

only valid for this session.

CT Profile

Thursday, August 26, 2004 3:35:00 AM EST
 International Business Ma

One New Orchard Road
 Armonk, NY 10304
 Phone:(914) 499-1900

Industry information

Industry:	Computer Hardware
Sector:	Technology
Employees:	319,273
Market Cap (M):	142,508.41
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, revenue rose 9% to \$45.4B. Net income from cont. ops. rose 15% to \$3.59B. 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 5 Yrs	33.50	54.33	63.08
P/E Low - Last 5 Yrs	16.23	17.36	18.51

Officers & inquiries

Officers: Samuel J. Palmisano, Chmn./Pres./CEO, John R. Joyce, CFO/Sr. VP, Daniel E. O'Donnell, VP/Secy., Jesse J. Greene Jr., VP/Treas.

Transfer Agent: First Chicago Trust Company of NY. Company incorporated 1911 in NY. Direct inquiries for Stockholder Relations.

Competitors

- Sun Microsystems Inc.
- Hewlett-Packard Co.
- Dell Computer Corp.
- Oracle Corporation.
- Microsoft Corp.

ice)

Portal as platform for Composite Applications

Build and deploy composite applications using portal services

- New Concepts:
- Portlet Factory
- Templates
- Application Context
- Membership / Community
- Application Roles

The screenshot displays a financial portal interface with several sections:

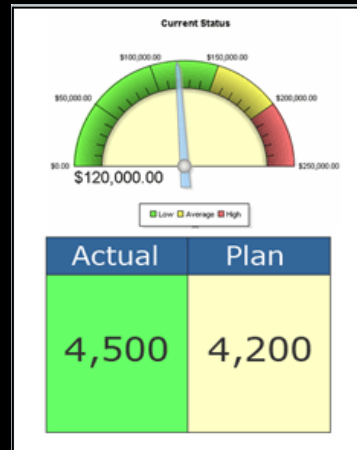
- Company Tracker:** A table showing stock prices for International Business Machi. The table includes columns for Last, Change, Chg%, Volume, and Quote. The last row shows a price of 85.07 with a change of 0.36.
- CT Stock:** A detailed view for IBM - International Business Machi (NYSE) as of Wednesday, August 25, 2004. It includes a line chart showing the stock price over time and various metrics like Day's Range, Volume, and Shares Outstanding.
- My Stocks:** A list of other stocks tracked, including IBM, SCOMPO, SOI, and SPSA, with their respective prices and changes.
- CT Chart:** A line chart for IBM stock price from September 2003 to August 2004.
- Indicators:** A section for selecting and displaying various indicators like Moving Averages and Relative Strength Index.
- CT Profile:** A company profile for International Business Machi, including contact information, industry details, and a business description.

Reusable Design Components

Reusable components (Builders) capture dashboard design patterns, speeding creation of custom portlets.

Status	Office	Office Manager	Actual	Plan	Difference	% of Plan
●	Miami	Marcus San Antonio	\$210,060	\$220,000	-\$9,940	95.48
●	Dallas	Jane Johannsen	\$269,522	\$354,000	-\$84,478	76.14
●	Atlanta	Helena Krack	\$133,773	\$177,000	-\$43,227	75.58
●	Houston	Robert Roland	\$211,039	\$429,000	-\$217,961	49.1

● = Excellent (Above 90.0%) ● = On Track (Between 70.0 - 90.0%) ● = Warning (Below 70.0%)



Opportunity	Amount	Stage	Committed	Days at Stage	Days Old
Boston Industries HR Connection	25,300	5	Y	29	162
Boston Industries HR Connection	28,434	5	Y	40	221
Corp Network Upgrades	30,000	5	N	49	149
Intech PR Project	28,434	5	Y	40	175
MachineTec Install	18,300	5	Y	39	158
MachineTec Upgrades	48,300	5	Y	39	158
P.A. Network Center	43,000	5	N	29	145
T&T Server Upgrades	13,500	5	Y	38	158
Williams and Company HR Pilot	38,434	5	Y	29	205
9 Opportunities	273,762		7 of 9	37	170

* Red = opportunities at stage over 30 days

Region: Southeast US
 Office: Houston
 Rep: Fred Carrier

Opportunity Name	Rep	Amount	Stage	Committed	Initiated	Forecast Date
T&T Support Contract	Fred Carrier	\$35,500	1	N	12/01/04	03/31/05
AlcaTec server Upgrades	Fred Carrier	\$25,500	2	N	09/01/04	03/31/05
AlcaTec.com Next Rev	Fred Carrier	\$25,000	1	N	10/01/04	05/31/05
AlcaTec services contract	Fred Carrier	\$19,000	3	N	10/01/04	03/31/05
T&T New Architecture	Fred Carrier	\$15,000	2	N	10/01/04	03/31/05
T&T Server Upgrades	Fred Carrier	\$13,500	5	Y	09/01/04	12/01/04

	2003	2004	Change
YTD Operating Profit	32,202	31,942	-0.81%
YTD ROE	24.94%	23.97%	-3.89%
YTD Sales	1,120,783	1,220,060	8.86%
YTD Gross Margin	258,927	282,078	8.94%
YTD Loss Absorption	14.10%	20.40%	44.68%
Average Company Size	2,700	2,870	6.30%

Workplace Forms Designer

- Workplace Forms provides the forms front end to SOA-based component applications
- Dynamic, data-driven forms viewer provides a customized user interface
- Role-based forms integrate with workflows by maintaining persistent data, business rules and information within the form

John Cook - PAGE 1

PE Insurance
Personal Life Insurance

PureAssure Life Insurance

APPLICATION FOR LIFE INSURANCE AND MEMBERSHIP

CTF NO:

1 PROPOSED INSURED PART I

First: John Middle: Cook Last: Cook Soc. Sec. #: 813-67-8346

Street Address (Residence of Proposed Insured):
948 Basem Road
City: Seattle State: WA Zip: 98133 County: United States

Mailing Address if Different from Residence (If Rural Route give Box #)

Sex: M Date of Birth: Mo 2 Day 20 Yr 1990 Age Now: 7 Rating Age: C Birth State: WA Phone# Day: (360) 667-2346 Eve: (360) 568-8889

2 ADULT APPLICANT

First: Peter Middle: Cook Last: Cook Soc. Sec. #: 513-04-0340

Street Address (Residence of Adult Applicant):
240 Basem Road
City: Seattle State: WA Zip: 98133 Occupation: Manager and Duties:

Date of Birth: Mo 3 Day 19 Yr 1990 Age: 39 Relationship to person in #1: father (If legal guardian, forward copies of guardianship papers) Phone# Day: (360) 667-2362 Eve: (360) 568-8889

3 LIFE INSURANCE

BASIC BENEFITS

Grandparent Gifting: Yes No

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Contextual Collaboration

Combine access to Application, Document and People

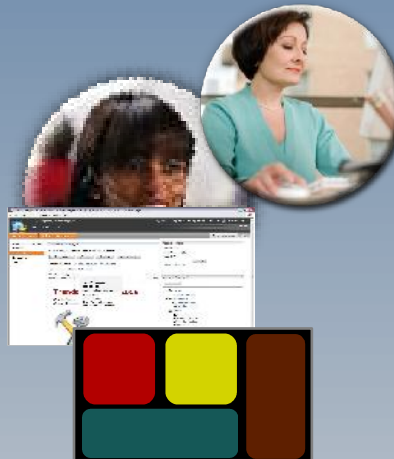
Scenario:

The interaction between Sue and Kate serves as the seed for a new product idea



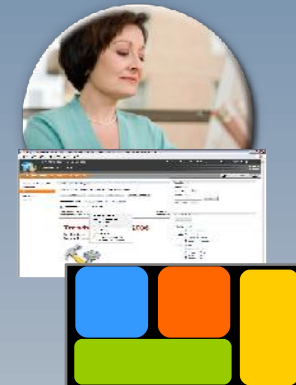
- *Web Based Interaction*
- *Responsiveness to customers*

Kate shares the idea with Maria – the Director of R&D



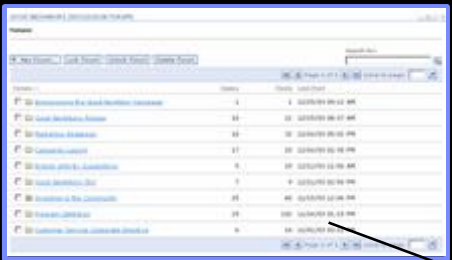
- *Change role – change interface*
- *Access applications and people in context*

Maria launches processes and interactions using her role-based environment

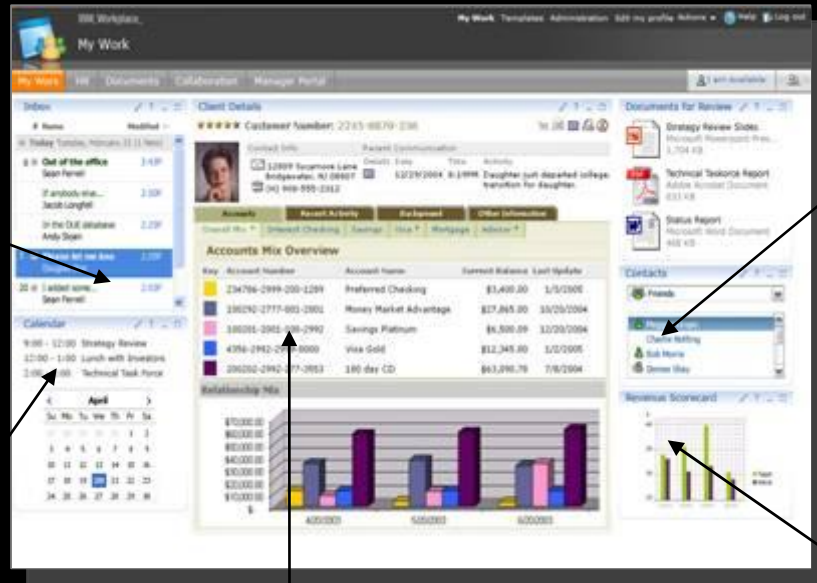


- *Initiate document-centric processes*
- *Collect and analyze information*
- *Use e-mail & call exploratory meetings*
- *Web conferences to share and communicate*
- *Access experts in real-time*

Collaboration Services



Discussion Component



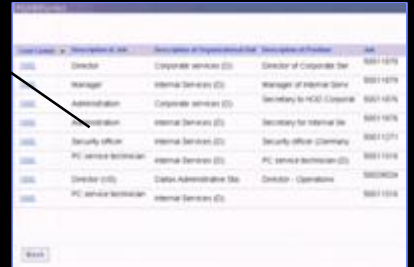
My Team



Lotus Domino app



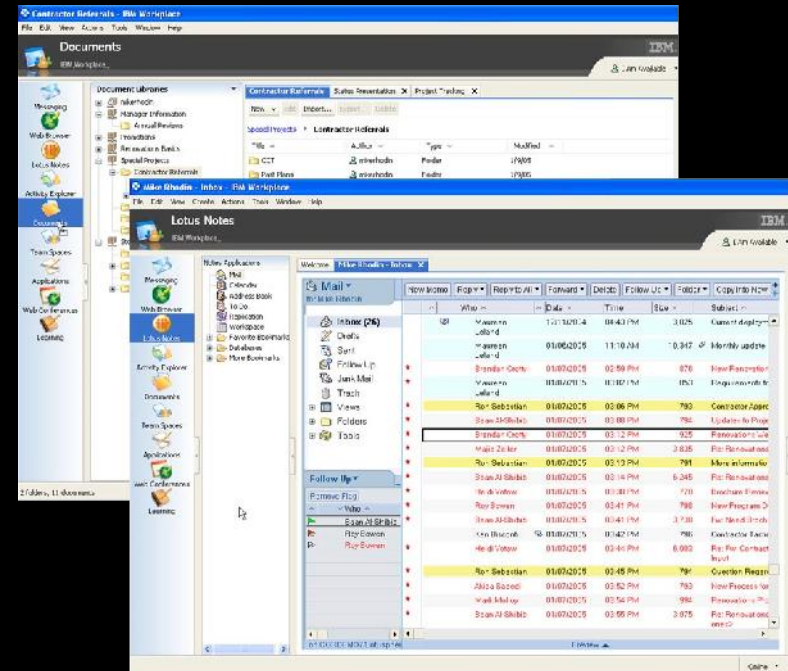
Custom forms, workflow



Enterprise Content

Workplace Collaboration Services 2.6

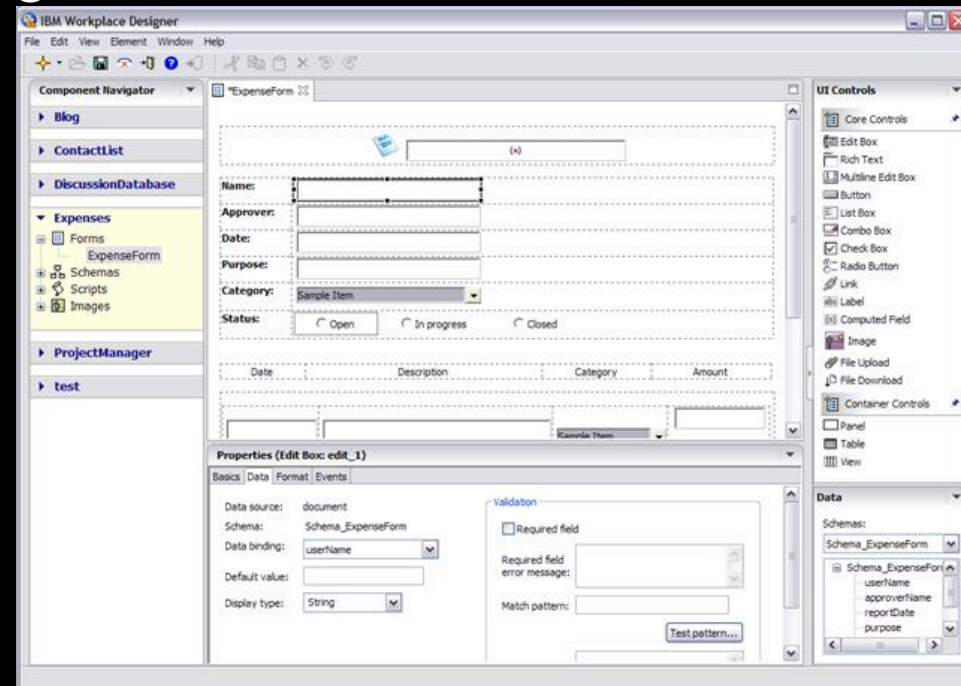
- Single, consistent, unified interface
- Activity centric experience, based on role
- Activity Explorer - New mode of collaboration
- Entirely managed at admin level
- Policy based provisioning
- Standards based



Workplace Designer

Building role-based composite views delivered for contextual collaboration

- Rapidly build, test and deploy open, security-rich components for IBM Workplace applications
- Provides platform flexibility using a service-oriented architecture with open standards, such as XML, J2EE and JavaScript
- Intuitive tool



Workplace Managed Client 2.6

Rich client-based portal experience

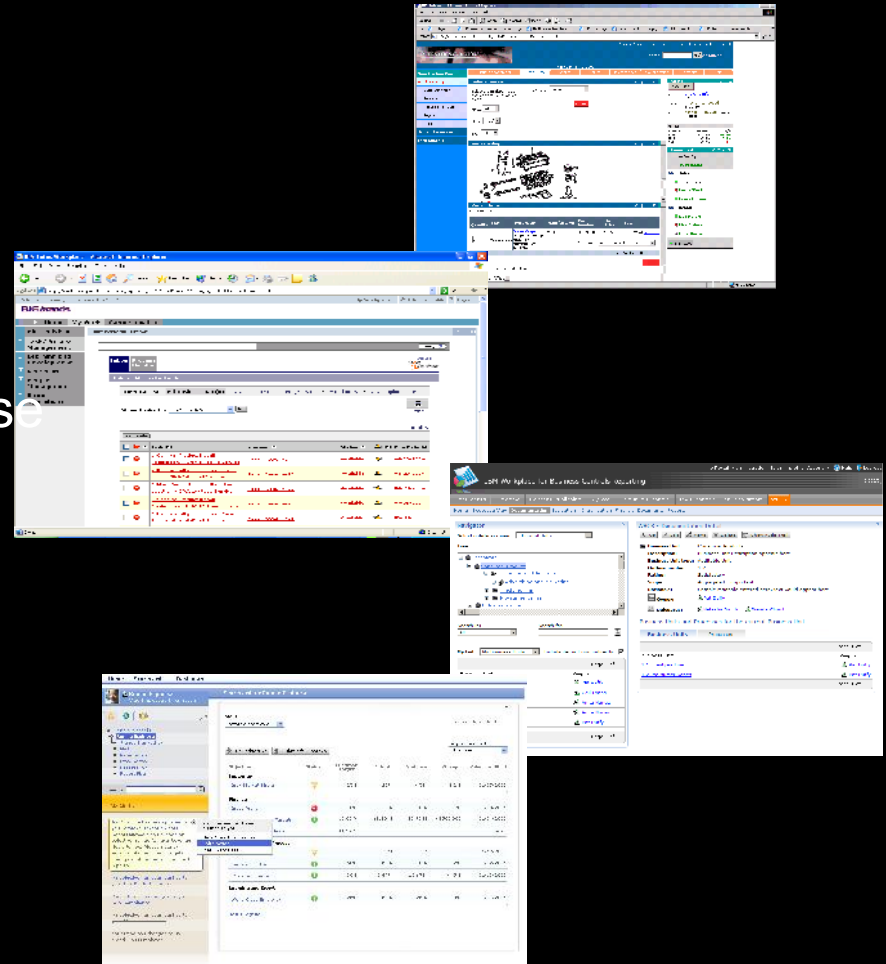
- Comprehensive, approachable interface
- Built in rich document management
- Rich set of embedded productivity tools
- Interoperable with Lotus Notes/Domino application
- Centralized deployment – no deskside visits
- Updates are automatic
- Entirely managed at admin level
- Policy based provisioning
- Standards based
- Choice of platforms and clients/devices



Workplace Solutions

Simply a better way to experience the benefits of role-based work environments

- Integrate collaboration into business process
- Maintain user focus
- Expand peripheral vision
- Leverage industry and process expertise
- Built on IBM Workplace products
- Integrated with system management portfolio & tools
- Leverage WebSphere Portal portlets available from Portal catalog and partners



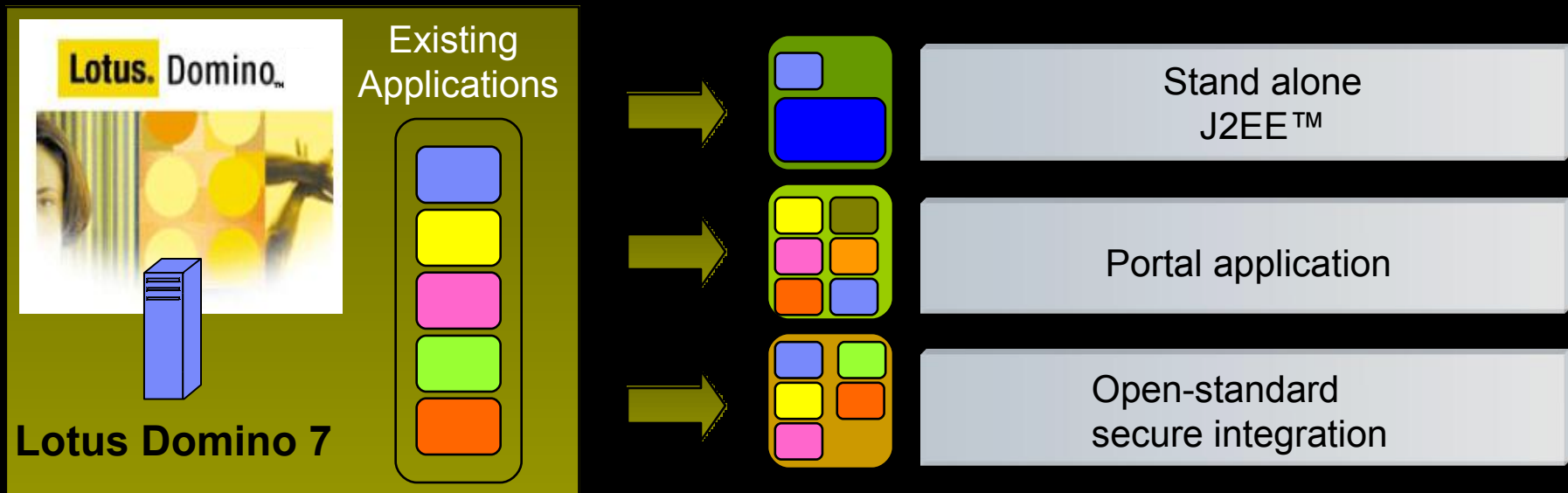
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Role and Value of Lotus Notes and Domino

Web Services hosting of Lotus Domino applications

- Web services extend the reach of Lotus Domino applications by providing a standards based interface for external applications
- Leverage IBM Lotus Notes/Domino applications and build innovative applications using existing skills
- Extend IBM Lotus Notes/Domino applications into **SOA** initiatives

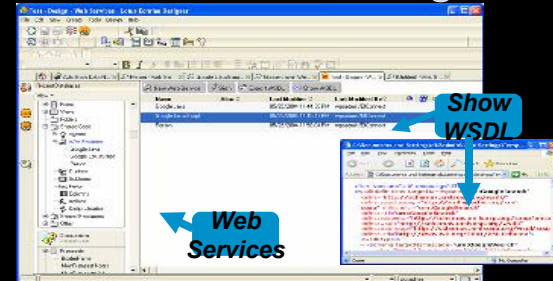


Role and Value of Lotus Notes and Domino

Lotus Domino Designer

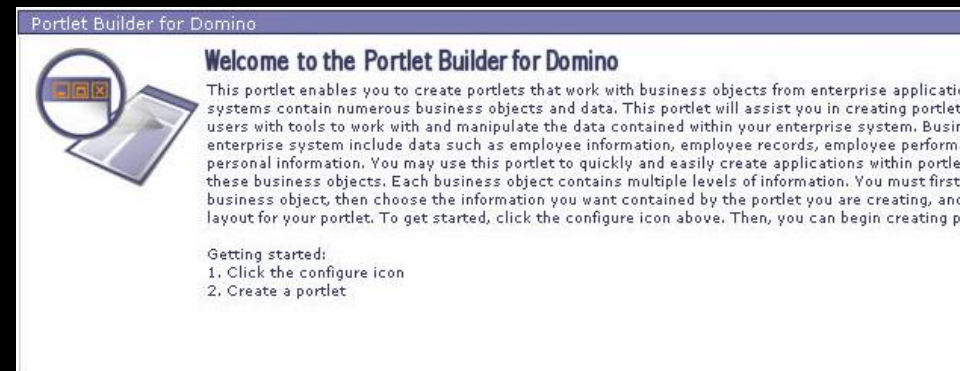
- **New NSF design element supports Web Service**
 - Extends Web Agent behavior
 - LotusScript or Java
 - WSDL Import & Export

Lotus Domino Designer



Portlet Builder for Lotus Domino

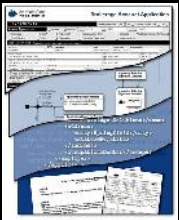
- **A porlet to build Lotus Domino porlets**
 - Simple Web interface to create portlets that access / manipulate data in Lotus Domino
 - No end user programming required
 - Views and documents
 - Basic create, edit, delete operations



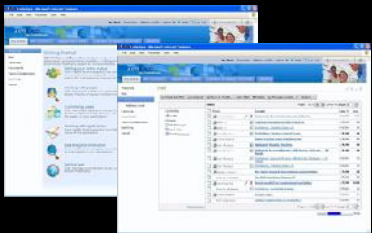
Bringing Together Key Elements to the Front-End



IBM Workplace Dashboards



IBM Workplace Forms



IBM Workplace Collaboration Services



IBM Workplace Composite Products



IBM Lotus Notes/Domino

IBM WebSphere® Portal:

