

Smart Work for a Smarter Planet



WebSphere Portal을 이용한 SOA
구현 사례 및 방안

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IMPACT
Korea 2009



Agenda

- Background
- Enterprise Portal의 정의
- 도입 사례
 - HSBC
 - ING
 - Bombardier
 - Cisco
 - Audi
- Composite Application이란
- Back-end Application연계 방안
- Demo



Our world is changing and
the demand for progress is clear...

2 Billion

people will
be on the
web by 2011.*



4 Billion

mobile phone
subscribers worldwide
by the end of 2008.*



1 Trillion

connected
intelligent devices
in the world



\$650 Billion

in productivity is lost
because of unnecessary
business process
interruptions



85%

of computing
capacity sites
idle



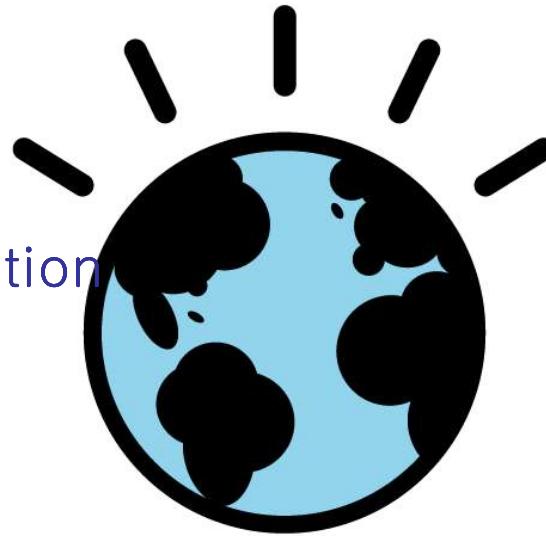
*Sam Palmisano speech, November 12, 2008



How can you capture new opportunities in this new world?

Imagine if…

- …you could **lower operational costs** by 50% and increase effectiveness
- …you could consistently **beat your competition** to market by a full year
- …you could **deliver your expertise** anywhere in the world without stepping on an airplane
- …you could **expand your company's brain power** by a factor of 5 without hiring a single new employee





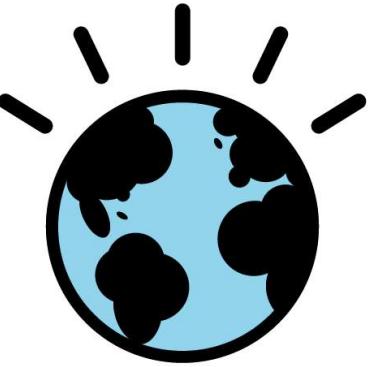
IBM is at the forefront of managing this innovative change through four interrelated

smarter planet imperatives...



NEW INTELLIGENCE

*Data exploding and in silos
I need insight.*



GREEN AND BEYOND

*Limited resources
I need efficiency.*



SMART WORK

*New business and process demands
★ I need to work smart.*



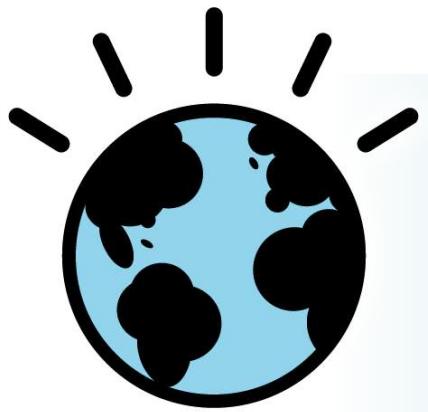
DYNAMIC INFRASTRUCTURE

*Costly and inflexible
infrastructure
I need to respond faster.*

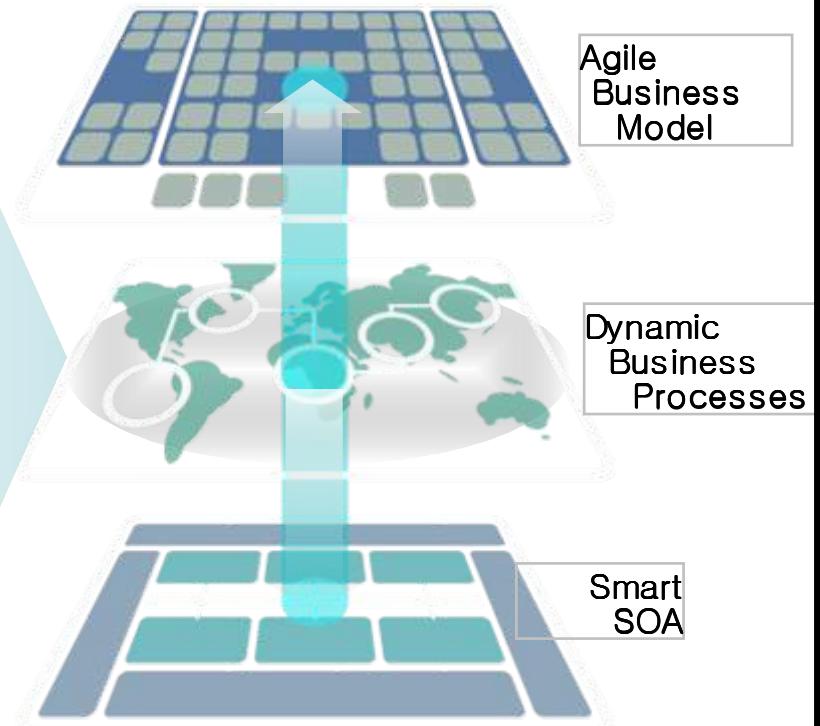


Smart Work is about creating agility across your organization, Smarter Collaboration

is one of the key components that will help



Smart Work





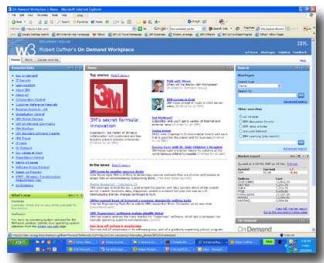
Enterprise Portal의 정의

Enterprise Portal은 기업 내/외에 존재하는 다양한 자원인 사람, 정보, 애플리케이션, 프로세스를 개인화된 단일 접점으로 제공하여 업무 생산성 및 효율성 제고시켜 궁극적으로 기업의 새로운 가치를 창출하기 위한 솔루션입니다

Enterprise Portal의 정의

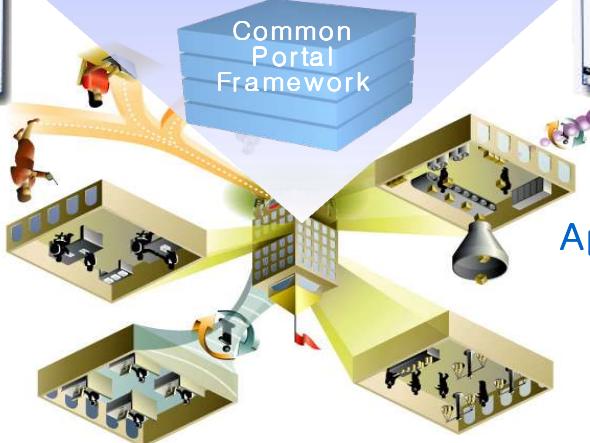
B2E Portals

직원들의 생산성 향상과 빠른 의사결정의 수단



B2C Portals
고객 충성도 상승과 Cross-sell 수익의 증대효과

Content



Applications

People

Processes

B2B Portals

비즈니스 프로세스와 연계를 통한 파트너 relationship 상승 효과



Portal Example: HSBC – Global Customer Service



- 50 Million Customers world-wide
- Personalized content based on account level and usage
- Regionalized content delivered to over 40 countries/languages
- Scalability to meet increased demand
 - > 50K concurrent user capacity at one site alone
- Portal supports lines of business:
 - Personal Financial Services
 - Corporate Banking
 - Payments
 - Insurance
 - Premier
 - Stock Trading

Under Pressure?

With your own Relationship Manager, sorting out your finances is fast and convenient. So you can make the most of your free time

[Learn more](#)



Mr Parsons, you're important to us:

so we'd like to offer you your own Relationship Manager

[Learn more about Premier](#)



if you upgrade to Premier

you'll benefit from the advice and insight of your own Relationship Manager

[Learn more about Premier](#)



as one of our best customers
are you making the most of the rewards available to you?

[Show me](#)



Mr Fray,
we're developing new online services exclusively for Premier customers, so we'd really appreciate your feedback

[Go](#)



<http://www.hsbc.com>



ING – Transforming Consumer Internet Banking Presence

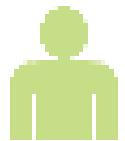


- In January 2009 "ING Bank Nederland" and "Postbank" merged into "ING Bank Nederland". Their internet banking environments will be converted into a new single B2C website in the Netherlands serving more than 8 million customers
- Postbank previously had encountered a lot of outages of their internet banking environment. IBM showed them that their problems could be solved with the highly scalable Websphere Portal
- Solution Components
 - Websphere Portal Extend
 - Workplace Web Content Management
 - Lotus Forms
- The goal of the Bank is to service 80% of their customers banking needs online

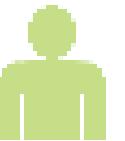




BOMBARDIER



Customer



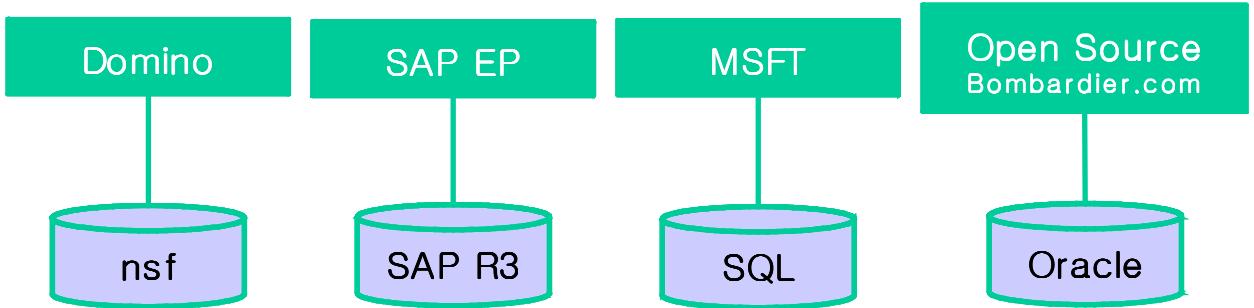
Supplier / Partners



Employees



Public / Investors / Media



Need for a Portal Strategy:

- Fragmented service offering
- External / internal facing platform coupled to data source & business applications
- High maintenance costs and diverse skill sets required
- Brittle and difficult to meet business integration needs



Cisco Systems

- Open Source is no longer an option
 - Industrial strength Portals are not yet a commodity
- WebSphere Portal
 - IBM is a trusted partner
 - Deep engagement with IBM lab leaders for technical needs
 - The most robust offering by a wide margin
- Integration
 - Comes with Web Content Management System out of the box but integrates with Cisco's chosen Enterprise Content Management system
 - Credential vault supports the multiple user identities that exist across enterprise applications
 - Best standards implementation (WSRP, JSR 286)
- Technical resources



Audi MyNet Portal

Audi MyNet Portal

- A central location for all production sites and international subsidiaries
 - Offers WW employees single-sign on, browser-based access to services and information
 - Personalized desktop spans more than 1,000 business applications
- A convenient tool for employees to manage and customize individual work processes
 - Role based procedures and processes delivered through portlets that provide information relevant to each user
 - A central platform lets work and business processes be handled without re-entering data or switching between tools
- Reduction of administrative processes
 - Reduced the number of HTML pages in the intranet from 240,000 to 40,000 with no loss of content
 - Decreased the number of applications by introducing standard content and document management solutions

The screenshot shows the Audi MyNet Portal homepage. At the top, there's a navigation bar with links like 'Inhalt', 'Kontakt', 'Hilfe', 'Telefonservice', 'Kontinentalkontingenzen', 'Abschied', and 'Anschrift: Anson Hermann Hamm'. The main content area has a banner with a car image. Below it, there are several news items and links:

- Audi heute:**
 - Fotovorlage der besonderen Art
 - Fotodrehbucher Karl Lagerfeld erhält den Audi R8 in spannenden Perspektiven ab. Im Audi Forum live wird er seinen Audi R8 im Audi-Zentrum Ingolstadt zeigen.
 - Foto vom DTM-Lauf in Zandvoort
 - Golf-Highlight im Norden startet mit Audi Shoot Out
- Alle Audi News im Headlineüberblick**
- Alle Audi Pressemeldungen des aktuellen Monats**
- Alle Pressemedien im Headlineüberblick**
- Audi Strategie 2015**
- Audi mynet TV! Grundlagen der Audi Strategie 2015**
- Audi Value Management: Aktuelle Infos und hilfreiche Unterlagen**
- Vertriebs-, Service und Handel auf dem Weg der "Route 15"**
- Aktuelles Wissen zu Audi und den Weltbewerbern**
- Hilfsarbeiter machen Pläne**
- Faszination Audi**

The right side of the page includes a search bar and a sidebar with various links and filters for navigating the portal.



WebSphere Portal의 서비스 레이어

WebSphere Portal은 4가지 서비스로 구성된 포탈을 위한 통합 프레임워크를 제공하여 안정되 면서도 유연성 있는 포탈 서비스를 통해 기업 내 향상된 협업 환경을 제공합니다.

통합 프레임워크 서비스 구성도

1. 프레임워크 서비스

- ◆ 프레임워크를 이용한 안정된 포탈 애플리케이션
- ◆ 개인화 및 커스터마이즈의 용이성
- ◆ 사용자 역할 별 맞춤형 서비스 제공

2. 통합 서비스

- ◆ 프로세스, 컨텐츠, 애플리케이션 접근의 용이성
- ◆ Wizard 방식의 개발 툴 및 Dashboard 툴 제공

3. 컨텐츠 서비스

- ◆ 컨텐츠와 자원의 생성, 관리, 검색의 용이성
- ◆ 컨텐츠 Dashboard 기능
- ◆ Office와의 연동으로 생산성 향상
- ◆ 문서관리(Documentum) 시스템 연계

4. 협업 서비스

- ◆ 역할기반의 포탈 기능 제공
- ◆ 협업기능을 위한 다양한 템플릿 구성
- ◆ 개방형 웹2.0 기반의 협업 인프라 제공
- ◆ Social Network를 위한 프레임워크 제공

사용자 별 맞춤 서비스

역할 별 가상포탈 제공
안정적 시스템 운영

프레임워크 서비스

- | | | | | |
|----|--------|-----|----|----|
| 포털 | 사용자 UI | 개인화 | 보안 | 관리 |
|----|--------|-----|----|----|

Legacy 시스템 통합 통합검색 Wizard방식 개발 툴



통합 서비스

- | | | | |
|-----------|-------|------|--------|
| 애플리케이션 통합 | 웹 서비스 | 개발 툴 | 컨텐츠 통합 |
|-----------|-------|------|--------|

컨텐츠 작성 툴 Wizard 방식 개발 툴 Office 연동 문서관리 시스템 연계



컨텐츠 서비스

- | | | | |
|---------|------|----------------------|-------------|
| 컨텐츠 저장소 | 개발 툴 | 생산성 도구
(Office연동) | 문서관리 시스템 연계 |
|---------|------|----------------------|-------------|

목적별 협업 기능 템플릿 구성 웹2.0 기반 기술 커뮤니티 활동



협업 서비스

- | | | | |
|---------------|---------|--------------------|-----------------------|
| 메일/일정/
문서함 | 템플릿 구성을 | AJAX/RSS/
Alert | 커뮤니티/
공지사항/
게시판 |
|---------------|---------|--------------------|-----------------------|



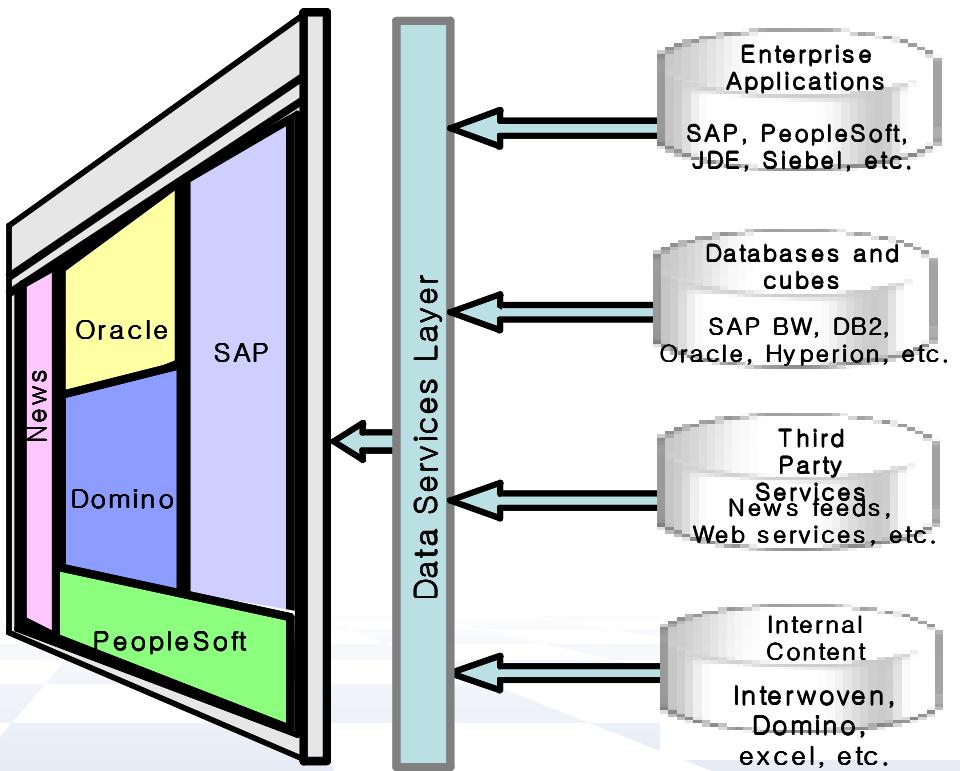
Composite Application이란

Composite Application이란 기업 내 존재하고 있는 여러 Application을 엮어 하나의 새로운 application을 만들어 주는 것을 의미합니다



주요 장점

- 존재하는 개발 자원에 대한 프로젝트별 재활용 가능
- Back end Connection에 대한 자동화
- 새로운 어플리케이션의 빠른 생성
- 어플리케이션 유연성 증가

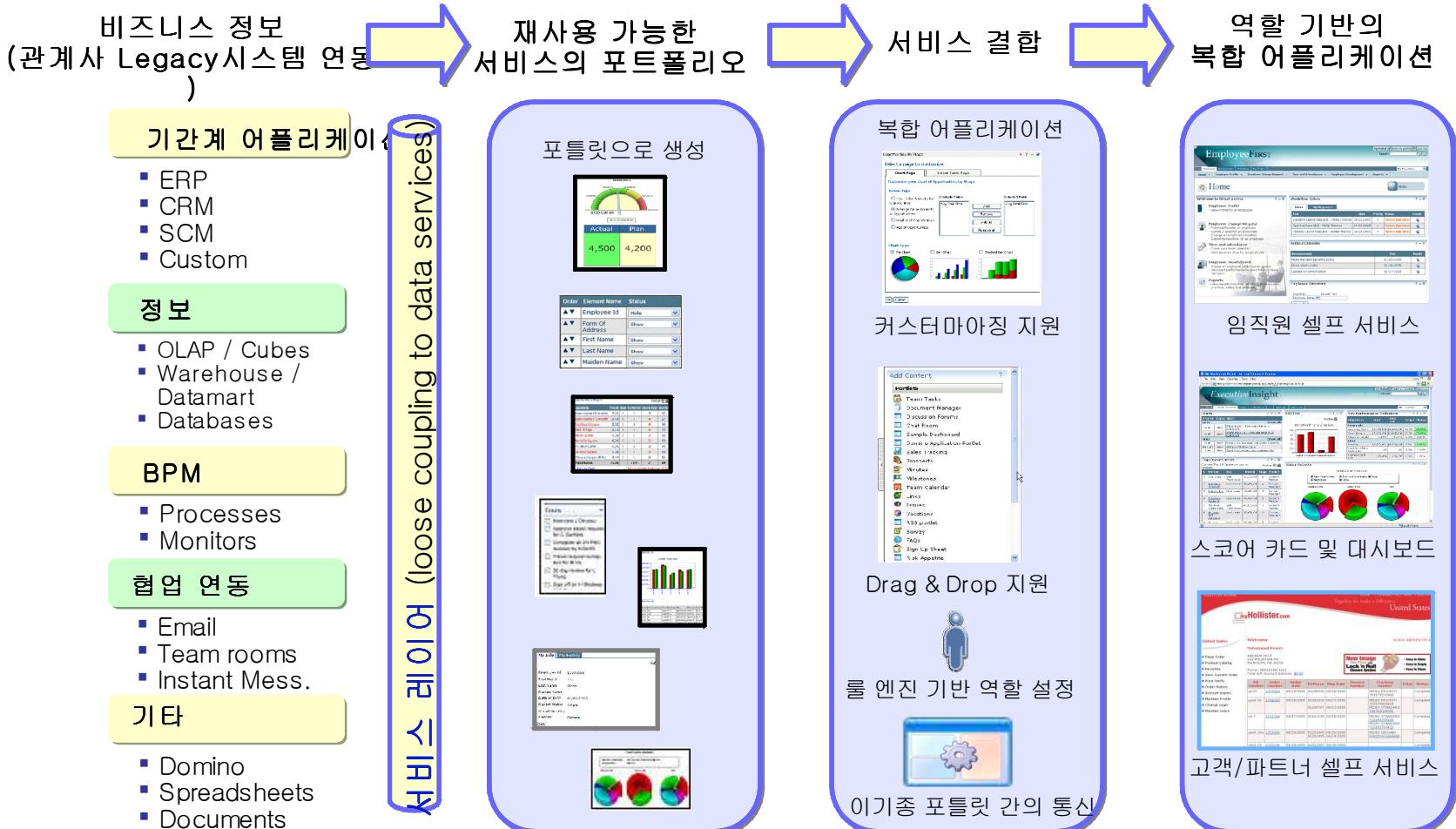


컴포넌트화된 기술 요소별, 솔루션 패키지별 Connector 제공
(JDBC, WebService, SAP, PeopleSoft, Hyperion, Siebel, Oracle EBS 등)



Composite Application이란

다양한 관계사 Legacy로 부터 생성된 Dashboard 포틀릿은 데이터 서비스에 대한 종속성을 제거함으로써 사용자 권한별, 직무별 재사용 가능한 서비스 포트폴리오로 사용될 수 있습니다. 각 Dashboard 포틀릿은 관계사별 공유 또는 특화된 정보로 결합되어 활용될 수 있습니다.

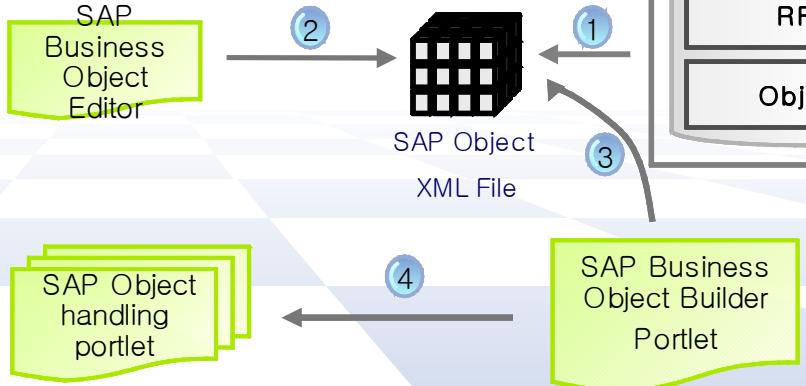
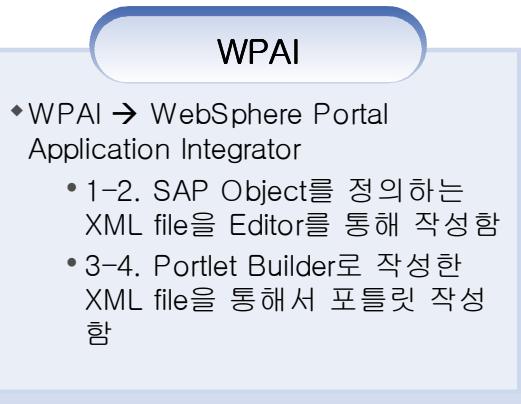
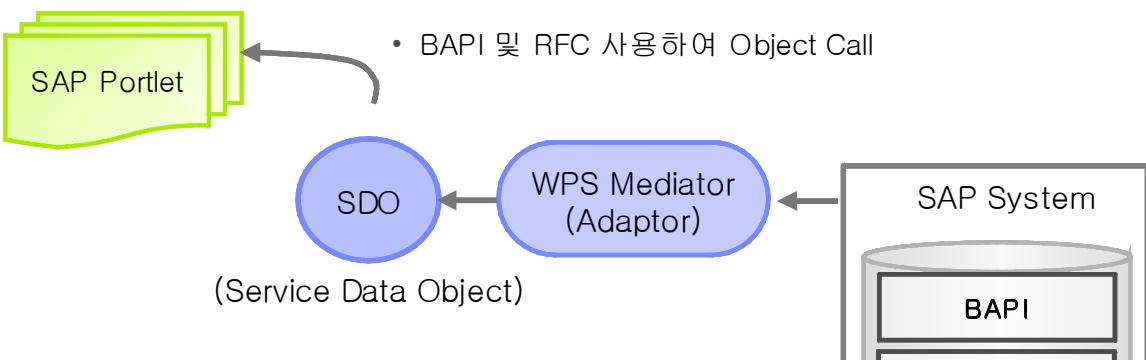




Backend System 연계 방안

IBM 그룹 Portal 솔루션은 SAP 시스템과의 협업 연동을 위해 다양한 방법을 제공합니다. 개발자가 SAP 포틀릿을 만들기 위한 개발환경 및 Mediator를 제공하며, 또한 Business 사용자가 쉽고 간단하게 SAP 포틀릿을 만들기 위한 WPAI를 제공합니다.

- 1. J2EE 표준언어
- 2. .NET 툴킷
- 3. Web Service
- 4. JMS/JCA
- 5. Domino
- 6. SAP





DEMO



WebSphere Portlet Factory 주요 개념

Builder

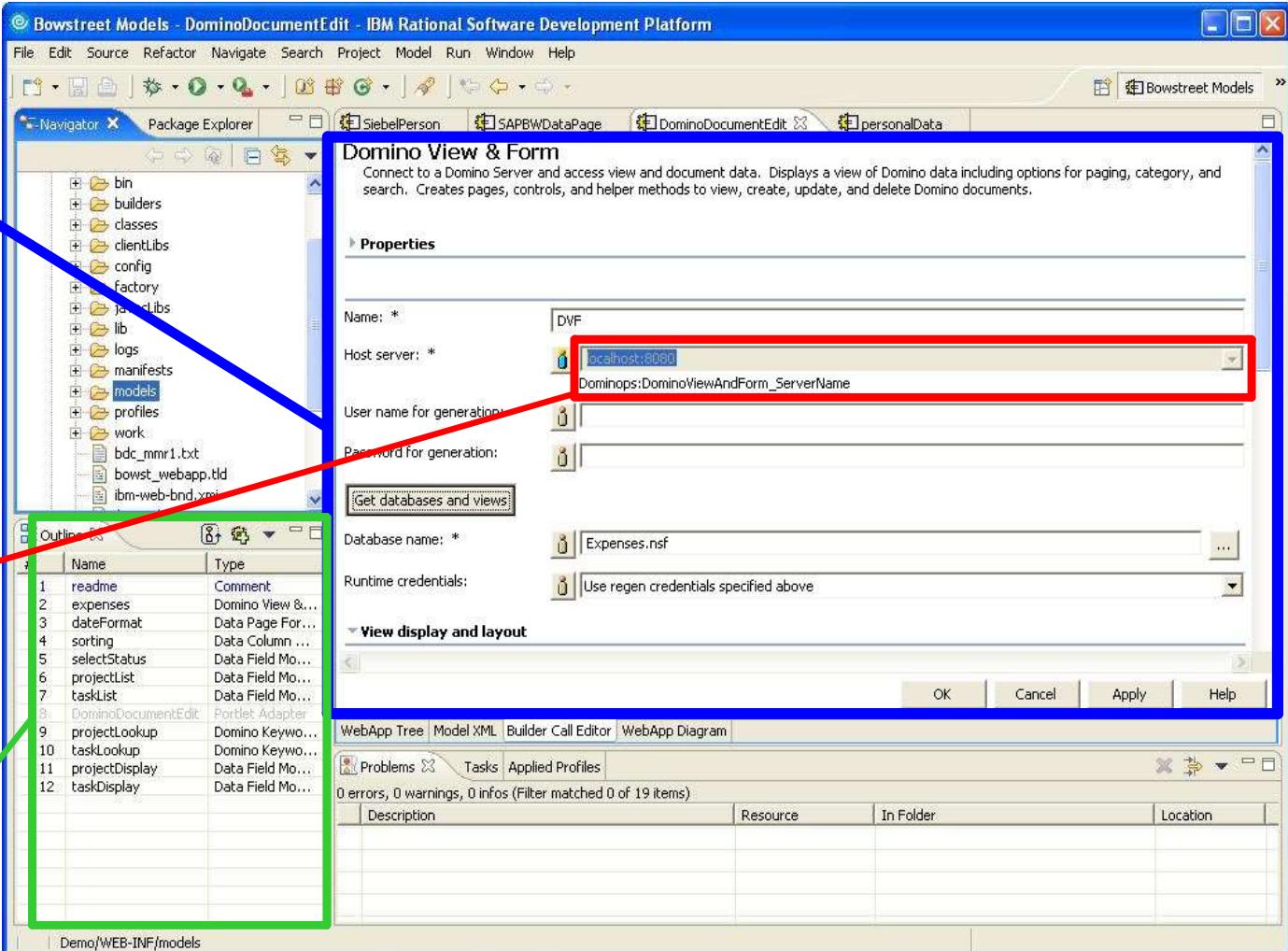
Portlet의 특화된 기능을 위해 Java, XML, JSP 등을 생성하는 재사용 가능한 컴포넌트

Profile

동적으로 unique한 Portlet을 제공하기 위한 파라미터 집합

Model

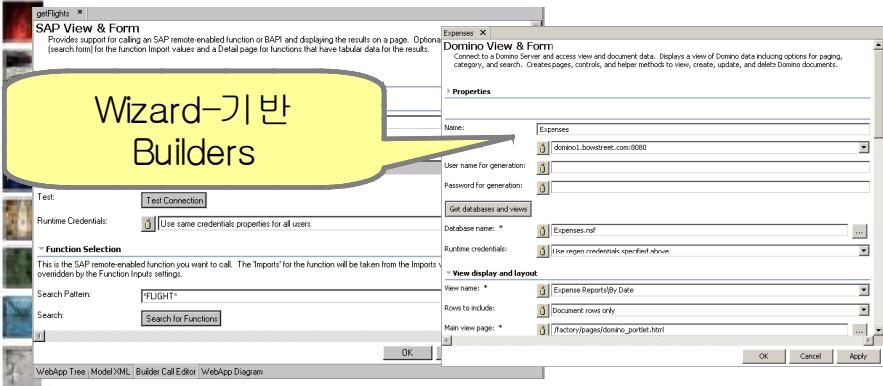
Builder들의 Container





코딩 없이 Multi-page, 복잡한 Portlet 개발

어떠한 Java Code 없이 모든 level의 개발자가 빠른 시간 안에 다양한 페이지의 복잡한 portlet(search, create, update, and delete)을 개발할 수 있습니다.



```
* Generated Method [_pageDispatcher]
* Generated by builder call [bc21]
*/
public void _pageDispatcher(WebAppAccess webAppAccess)
{
    com.bowstreet.webapp.JSPSupport.dispatch(webAppAccess);
}

/**
 * Generated Method [getFlight]
 * Generated by builder call [bc21]
*/
public String getFlight(
    position)
{
    PagingAssistant ass = new PagingAssistant();
    String img = button + position;
    if ((button.equals("First")) || button.equals("Prev")) && !last.hasPreviousPage())
        img = button + "Disabled";
    if ((button.equals("Next")) || button.equals("Last")) && !last.hasNextPage())
        img = button + "Disabled";
    return "getFlight.jsp?position=" + position + "&getFlightNo=" + getFlightNo_PagingButtonImages[img];
}
```

자동으로 생성되는 J2EE 호환 코드



Expenses				
Create new...				
Project	Approver	Status	Total	
		Submitted	188.5	
09/08/2004	Edgar Meyer	Bela Fleck	Submitted 2250	
09/08/2004	Jerry Douglas	Bela Fleck	Submitted 120	
09/08/2004	Jerry Douglas	Bela Fleck	Submitted 222.38	
				1 - 5 of 10

1 새로운 record 생성

2 결과 page 생성

Multi-page Portlet

drill down page 생성...																				
<p>Project: Project in Denver</p> <p>Created: 09/08/2004 Modified: 02/28/2005</p> <table border="1"> <thead> <tr> <th>Date</th> <th>Category</th> <th>Comment</th> <th>Billable</th> <th>Amount</th> </tr> </thead> <tbody> <tr> <td>05/23/1995</td> <td>Other/Other</td> <td>Instrument maintenance</td> <td>250</td> <td></td> </tr> <tr> <td>05/02/1995</td> <td>Airfare/Employee Paid</td> <td>Airfare to Denver</td> <td>339.45</td> <td></td> </tr> </tbody> </table> <p>Total: 589.45</p> <p>Back to View Delete Edit</p>						Date	Category	Comment	Billable	Amount	05/23/1995	Other/Other	Instrument maintenance	250		05/02/1995	Airfare/Employee Paid	Airfare to Denver	339.45	
Date	Category	Comment	Billable	Amount																
05/23/1995	Other/Other	Instrument maintenance	250																	
05/02/1995	Airfare/Employee Paid	Airfare to Denver	339.45																	

3 ...drill down page 생성...

4 ...삭제 및 편집 가능 기본 제공...

Expense Report 64MPWP for Jerry Douglas (Submitted)					
Submitter	Approver	Report ID	Status	Task	Modified
Jerry Douglas/Users/Wilmachek	Bela Fleck/Users/Wilmachek	64MPWP	Submitted		01/24/2005
Project: Live Art					
Created: 09/08/2004	Description: Sitting in on stage				
Date	Category	Comment	Billable	Amount	
05/23/1995	Other/Other	Instrument maintenance		222.9	
05/02/1995	Airfare/Employee Pa	Airfare to Denver		339.45	

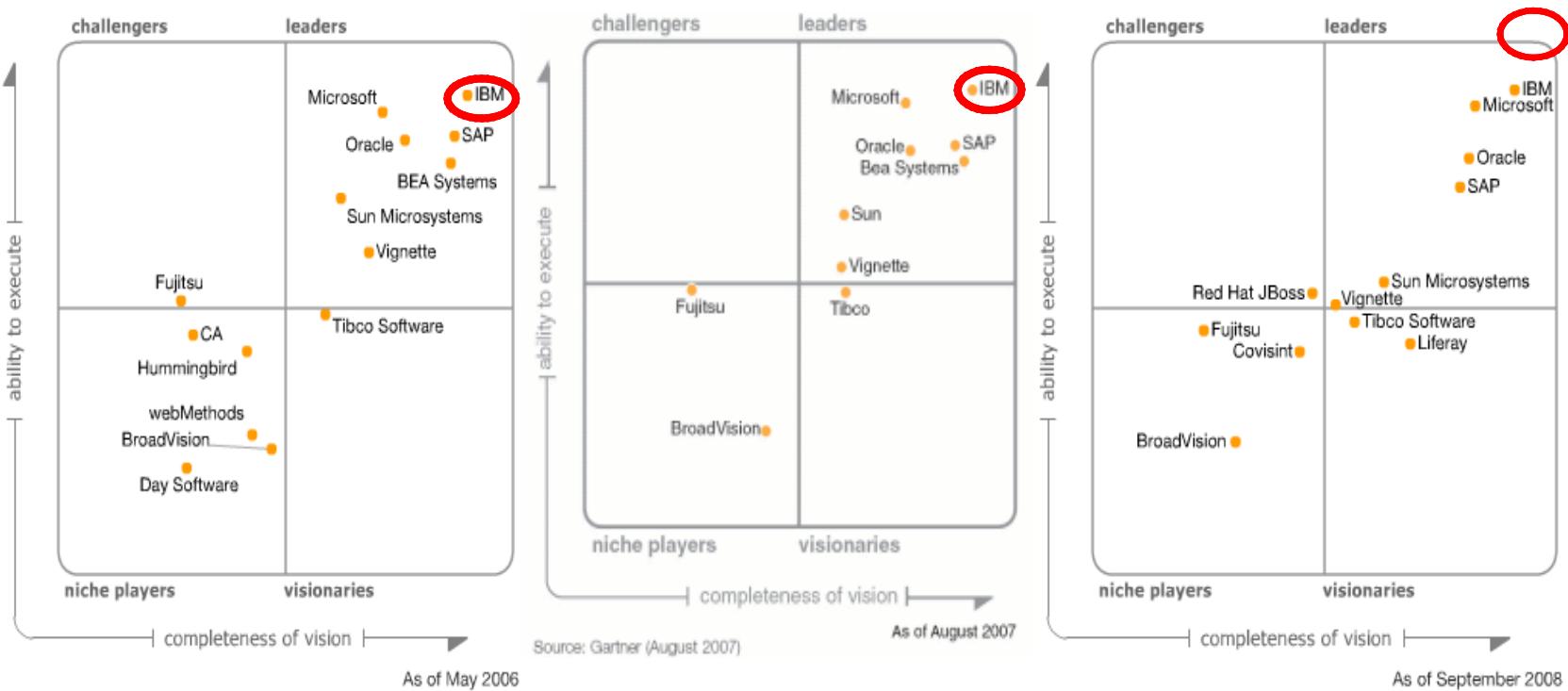
5 ...저장, 수정 또
는 취소 기능 제공

수정, 추가, 삭제 등 기본 builder를 사용하여 별도 코딩 없이 구현 가능



Enterprise Portal 리더 - IBM WebSphere Portal

포탈의 향후 비전을 가능해 볼 수 있는, 유명 조사 기관의 자료에서도 IBM이 제시하는 포탈 솔루션이 기업의 차세대 업무환경으로서 최상의 위치를 차지하고 있습니다. (비전 완성도와 실행 능력 대비 최상위에 위치함)



연도 별 Portal Vendor 조사자료, 가트너 그룹(2006,2007,2008) : Magic Quadrant for Horizontal Portal Products



WebSphere Portal: 5100+ 고객 보유

Financial Services



IMPACT
Korea 2009

Communications



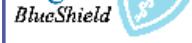
The Walt Disney Company



Industrial



Public Sector



Distribution

