IBM Business Continuity Solutions Seminar

Transform to an on demand business thru IBM Business Integration Solution
Company Challenges

### CEO
New technology alone won’t boost productivity. Productivity gains come from managerial innovation… Companies generate innovations, in fat years or lean, by deploying new technology along with improved processes and capabilities.

—McKinsey & Company

### CFO
Companies that linked business processes with trading partners show 70% higher profitability than those that do not.

— Business Advisor Zone

### CIO
42% of the almost 500 IT executives polled said their systems were more complex than necessary… and maintaining and managing that excess complexity cost them an average of 29% of their IT budgets.

— CIO Insight
Integration Market Drivers

**Economic volatility and globalization**
- Business responsiveness
- Business process reengineering
- Supply chain optimization

**Increasing consolidation across industries driven by:**
- Low interest rates
- Increasing valuations
- Improving economy

**Increasing regulations and industry standards**
- Sarbanes-Oxley, Basel II
- Global Data Sync, RosettaNet, SWIFT
- HIPAA, HL7/CCOW

“Retail industry could save $40B/year by eliminating supply chain information errors.”

A.T. Kearney
The eRed Zone

“According to a recent study by Gartner and the SIA, a staggering 42% of transactions are still paper based.”

Study Shows Industry Making Efforts Toward STO Implementation, Gartner G2

“In 2004, the top emerging areas in which organizations plan to invest are enterprise application integration and wireless technology…”

The IT Spending Report
AMR Research
Horizontal Integration is the New Challenge

Bridging the gap between business transformation and IT
Integration landscape
## Benefits of Integration

<table>
<thead>
<tr>
<th>Business challenges</th>
<th>Benefits of integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide customized and consistent business information</td>
<td><em>Improve customer service</em></td>
</tr>
<tr>
<td>Automate, integrate and coordinate operations end-to-end</td>
<td><em>Reduce cost and improve responsiveness</em></td>
</tr>
<tr>
<td>Integrate and optimize the use of people and their tools in processes</td>
<td><em>Enhance Productivity</em></td>
</tr>
<tr>
<td>Reduce the cost and time of building and integrating new and existing applications</td>
<td><em>Extend the value of applications</em></td>
</tr>
<tr>
<td>Streamline application upgrades</td>
<td><em>Minimize cycle-time and costs</em></td>
</tr>
<tr>
<td>Transform IT from inhibitor to enabler</td>
<td><em>Allow focus on core competencies</em></td>
</tr>
</tbody>
</table>
Scope of Integration

The efficient and flexible combination of resources to optimize operations across and beyond the enterprise
Integration Landscape

<table>
<thead>
<tr>
<th>People</th>
<th>Processes</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Wired and wireless devices</td>
<td>▪ Development and integration of application assets</td>
<td>▪ Distributed data environments</td>
</tr>
<tr>
<td>▪ Global 24x7 access and real-time collaboration needs</td>
<td>▪ Application silos (legacy and packaged applications)</td>
<td>▪ Heterogeneous data types and sources</td>
</tr>
<tr>
<td>▪ Unconsolidated and untailored information</td>
<td>▪ Heterogeneous internal and external systems</td>
<td>▪ Untransformed and inconsistent data</td>
</tr>
</tbody>
</table>

- 30% of people’s time is spent searching for relevant information
- 40% of IT budgets may be spent on integration
- 30-50% of design time is copy management
- 85% of information is unstructured
## Typical integration strategies are expensive

“About **35 percent of an enterprise’s software budget** is spent on maintaining the multitude of point-to-point application links already in place.”

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“Maintaining and managing point-to-point links is **costing business an average of 29% of their IT budgets.**”

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“The three most common inhibitors to achieving a strong ROI on EAI initiatives are:

1. Not having a shared-services model
2. Not having application-neutral interfaces
3. Not fostering a culture of reuse within one’s development teams.”
Pre-Built solutions improve Time-to-Value

“Firms spend millions of dollars every year to integrate applications and create connections to partners. Too much … is spent on one-off application-to-application connections, inflexible custom adapters … none of which are reusable.”

“Based on a function cost of $250,000, it will cost a company from seven to 10 times more to develop a particular functionality than it will to purchase an equal functionality.”

“…A best-in-class sell-side system will blend world class infrastructure, packaged processes, integration, and a toolset that can enable content integration that rapidly responds to the changing needs of a business. IBM has that vision.”
IBM Integration Capabilities and Qualities
**Business Integration Capabilities from IBM**

- **Model** business functions and processes
- **Transform** applications, processes and data
- **Integrate** islands of applications, processes and information
- **Interact** with resources anytime, anywhere with any device
- **Manage** performance against business objectives
- **Accelerate** the implementation of business processes
Business Integration Qualities from IBM

**Simple, integrated development**
- Common tools platform
- Re-use and unification of assets

**Secure and scalable deployment**
- Common and flexible deployment environment
- Flexible management and security infrastructure

**Standards leadership**
- Interoperability
- Investment protection
- Freedom of choice

**Proven experience**
- Augmented with best practices
- Improved time to value
- Risk mitigation

**Service Oriented Architecture (SOA) enablement**
eBay Establishes a Flexible Foundation

Challenge

Provide a scalable platform that responds dynamically to fluctuations in system resource demand, in order to deliver real-time responses to customers’ requests

Solution

New highly scalable, resilient architecture and application development environment

"By standardizing on WebSphere software, we have an open standards-based, J2EE technology platform capable of managing the highest volumes of transactions."

Chuck Geiger, Vice President, Product Development, eBay

Business benefits

- A solution that can grow with eBay
- Rapid deployment of new services
- Greater than 99.9% availability

Technology benefits

- Infrastructure upgrades transparent to eBay users
- Improved network performance and system scalability
- Greater flexibility in adding new website features
# Model and Simulate Business Processes

## Requirements
- Graphically design processes and quickly redesign across people, partners and applications
- “What-if” simulation of operations to optimize and project business benefits
- Fast start to deployment—generates code from model

## Benefits

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<th><strong>Business:</strong></th>
<th><strong>IT:</strong></th>
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<td>- Control of the business</td>
<td>- Sponsor requirements are clearly defined, simulated, and documented</td>
</tr>
<tr>
<td>- High-speed change implementation</td>
<td>- Improved communications between LOBs and IT</td>
</tr>
<tr>
<td>- Business level specs leading to IT deployment</td>
<td>- Encourage asset reuse through unified architecture</td>
</tr>
<tr>
<td>- Simplify the processes</td>
<td>- Easily restate documentation for technical consumption</td>
</tr>
<tr>
<td>- Provide projections of business benefits</td>
<td></td>
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# IBM Software Group

## Benefits

**Business:**
- Increase investment in creating strategic advantage
- Enable rapid change to meet new market opportunities
- Reduce cost by simplifying business processes
- Minimize risk of disrupting critical processes

**IT:**
- Accelerate predictable delivery of business value
- Improve user satisfaction
- Increase operational and development flexibility
- Reduce development, integration and maintenance cost

## Transform Applications, Processes and Data

### Requirements
- Create new business value from existing IT systems
- Maximize predictability, efficiency and quality of development, integration and operations

### Benefits

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**Integrate** Islands of Applications, Processes and Information

### Requirements
- Choreograph standalone applications into a composite business process
- Extend business processes to trading partners.
- Broker and optimize high speed communications between applications
- Provide a common view of diverse and distributed information

### Benefits

<table>
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<tr>
<td>Improve customer service and business agility</td>
<td>Create additional value from existing applications and information</td>
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<tr>
<td>Access real time business information accurately and rapidly</td>
<td>Quickly add best-of-breed applications</td>
</tr>
<tr>
<td>Accelerate mergers and acquisitions</td>
<td>Reduce TCO through a standards based service-oriented architecture (SOA)</td>
</tr>
<tr>
<td>Eliminate manual process errors</td>
<td>Quickly respond to changing value-chain requirements</td>
</tr>
<tr>
<td>Improve and automate value-chain management</td>
<td></td>
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**Interact** with Resources Anytime, Anywhere, with any Device

### Requirements
- Provide secure, single point of interaction to people, data, applications and processes accessed by any device, anywhere, anytime
- Customizable and flexible web portals based on business priorities
- Integrated collaboration and human interaction capabilities, easily managed and extended beyond organizational boundaries

### Benefits

#### Business:
- Improved employee efficiency
- Improved business decision making and customer service
- Real-time multi-modal communication outside and across the enterprise
- Real-time collaboration across the enterprise reducing expenses
- Empower mobility and access to global teams
- Tailor new breeds of devices to optimize business processes

#### IT:
- Secure, open, application platform that integrates processes inside and outside of the company
- Improved ROI of current infrastructure via legacy enablement
- Improve developer productivity
- Faster deployment of new applications
- Better management of complexity of multiple devices, users and networks
Manage Performance Against Business Objectives

**Requirements**

- Measure business performance against key objectives; Provide framework for improvement
- Dynamically change business processes to meet shifting business conditions and meet objectives
- Optimize resource reallocation

**Benefits**

**Business:**
- Business-tailored dashboards
- Closed-loop Business Process Management
- Continuous improvement
- Trends and comparative analyses
- Provides highest ROI

**IT:**
- Improved enterprise operations
- Provides justification of investments
- Provides lowest TCO
**Accelerate the Implementation of Intelligent Processes**

### Requirements
- Deploy pre-built intelligent processes
- Customize extendable business processes
- Leverage industry best practices definitions

### Benefits

#### Business:
- Accelerated implementation for rapid ROI
- Flexibility to meet unique and specific business needs
- Agility to respond to new needs and opportunities—more quickly and cost-effectively
- Extensibility for competitive differentiation

#### IT:
- Reduced deployment time, effort and costs
- Minimize risk through pre-built and pre-tested processes
- Improved and accelerated ability to meet new LOB requirements
- Lower Total Cost of Ownership
WebSphere Business Integration Server Express

Comprehensive, affordable integration package

Packaged to integrate business processes that span diverse systems and platforms, customers, partners and suppliers

Business process integration that includes rules driven transformation, back-end integration, message transformation and brokering

All-inclusive package that offers a suite of pre-packaged adapters and process templates

Provides a complete software solution, including limited licenses for IBM WebSphere® MQ Express, IBM WebSphere Application Server Express and IBM DB2® UDB Express
WBI Server Express Benefits

Out-of-the-Box solution that enables easily integration between application systems and automates business processes

Easy-to-use graphical tooling that maps business processes to underlying IT implementations with minimal skills

Improved business agility with rules-based business flows

Fast time-to-value with \textit{process templates} and easy connectivity to a wide range of applications using pre-packaged adapters

Easy for partners to customize and create repeatable solutions

Support for open standards including Web services

Runs on multiple platforms including Windows®, Linux and iSeries™
WebSphere Business Integration Server Express

- Non-intrusive infrastructure
- Easy-to-use tooling
- Pre-packaged Process templates
- Pre-packaged adapters
- Robust infrastructure with transactional and message integrity
- Powerful integrated Rules Engine
- Support for Web Services
What are our customer’s integration problems?

- Application don’t share information between them, but need to
- Information passed from one application to another has to be manually re-entered and manually recovered when errors occur
- Quick point-to-point integrations have been written over time that now are brittle and difficult to manage

Custom written application/process integration expensive to maintain

Manual entry of data error prone, time consuming

<ctrl>c  <ctrl >v
Scenario – Purchase Order Automation

1. Customer sends a Purchase Order

2. WBI Server Express automates Business Processes that involves business rules and flows spanning back-end systems

3. Leveraging the existing infrastructure without change

- Business flows drives integration
- Business rules modify behavior
- Existing assets are leveraged without modification
- Processes are built and deployed with little or no coding
- Easily adapted as business changes
The Integration Burden

Figure 12: Each new application increases the integration burden
Source: AMR Research, 2007
Common Business Object Model

- Advance knowledge of all participating applications not required
  - Normalized view provides consistency in data representation
  - Adding applications means creating one transformation, not many

- Reduces effort, reduces project times, simplifies integration work
# WebSphere Business Integration Adapters

## Application Adapters
- Ariba Buyer
- Centricity Gateway
- Clarify CRM
- eMatrix
- ESRI Spatial Database
- i2
- i2 Active Data Warehouse
- IndusConnect Framework
- JD Edwards OneWorld
- Manugistics
- Maximo MEA
- MetaSolv Applications
- mySAP.com
- Nightfire Applications
- Oracle Applications
- PeopleSoft
- Portal Infranet
- QAD MFG/PRO
- SAP Exchange Infrastructure
- Siebel e-business Applications
- Spirent Applications
- SunGard FRONT ARENA
- Telcordia Applications
- WebSphere Commerce

## Technology Adapters
- ACORD
- COM
- CORBA
- Data Handler for Complex Data
- Data Handler for EDI
- Data Handler for XML
- Enterprise JavaBean (EJB)
- e-mail
- FIX Protocol
- Healthcare Data Protocols
- HTTP Adapter
- iSeries
- JCA
- JDBC
- JMS
- JText
- Lotus Domino
- MS Exchange
- SWIFT
- TCP/IP
- Web Services
- WebSphere Message Broker
- WebSphere MQ
- WebSphere MQ Workflow

## Mainframe Adapters
- ADABAS
- CICS
- DB2 Databases
- IDMS Database
- IMS Database Manager
- IMS Transaction Manager
- Natural
- VSAM

## eBusiness Products
- iSoft Commerce Suite Advanced
- iSoft Commerce Suite Enterprise
- iSoft Commerce Suite Express
- TPI Solo
- TPI Trading Networks

http://www.ibm.com/software/integration/wbiadapters
Business Process Templates (Collaborations)

Features
- Application independent business processes
- Complement underlying applications
- UML flow diagrams require minimal coding

Benefits
- Reusable to facilitate application upgrades
- Amplifies application ROI through new cross-functional processes
- Rapid deployment, best business practices
- Customizable to meet your needs
Collaboration Capacity Pack available for WBI Server Express Plus

**Order Management V1.0**
- ATP to Sales Order
- Available To Promise
- Item Manager
- Price List Manager
- Sales Order Processing
- Order Billing Status
- Order Delivery Status
- Order Status
- Return Billing Status
- Return Delivery Status
- Return Status
- Contact Manager
- Customer Manager
- Trading Partner Order Management

**Customer Relationship Management V1.0**
- Contact Manager
- Contract Sync
- Customer Credit Manager
- Customer Manager
- Installed Product
- Billing Inquiry
- Vendor Manager

**Financials and Human Resources V1.0**
- AR Invoice Sync
- Department Manager
- Employee Manager
- GL Movement
- Invoice Generation

**Procurement V1.0**
- BOM Manager
- Inventory Level Manager
- Inventory Movement
- Purchasing
- Vendor Manager
Data Transformation

- Powerful Mapping Service
  - 1-1, 1-n, n-1, n-m
  - Content-based (polymorphic)
- Simple Tooling
  - Generates Java code
  - Stand-alone testing
  - Integrated debugger
  - Automatic & reverse mapping capabilities
- Called implicitly to/from Adapter
- Can be called directly from Process Logic
Relationship Management

- Leverages the generic layer to relate shared features between business objects
  - Cross-referencing
  - Static (lookup)
- 1-1, 1-n, n-1, n-m
- Callable in multiple contexts
- Generates database schema & stored procedure code
Business Rules

- Wizard-driven Rule creation
  - Simple interface for creating and editing rules
  - Role-based access control
- Form-based Business Rule editor
  - Rules execute based on individual events, sequence of events, event patterns, time/date, elapsed time, etc.
- Customizable actions
  - Rules can dynamically modify Collaboration properties, execute a Collaboration, log an event, send an email or fail an event
Summary

- Business Integration is key to improve productivity and save cost

- WebSphere Business Integration Server Express
  - Pre-Built integration solution improve Time-to-Value
  - Cost effective and high performance
  - Proven with lots of re-useable business process templates.
  - Built-in Business Rule Engine for business users
  - More than 60 application integration adapters available
Questions ?

धन्यवाद

한국어

Thank You

Много спасибо

多謝

Danke

الشكرا

Thank You

Gracias

Obrigado

Merci

Thank You

多謝

日本語

감사합니다

Simplified Chinese

Traditional Chinese

Thai