Respond Quickly To Changing Business Needs – Business Process Management (BPM)
We need a process to resolve our credit card business’s billing disputes, but we can’t wait for IT to build it.

You can discover and build your processes simply and quickly, without involving IT.

VP Mortgage

IBM
How is Process Discovery done today?

- Lock your team in a conference room for days
- Use sticky notes
- Write on butcher paper
- Draw on a whiteboard
- Argue back and forth till you finally agree on your process
- Convert it to a diagram
- Re-draw it with a process design tool
Demo: Process Discovery with IBM BPM Blueprint (Lombardi Blueprint)
IBM BPM Blueprint Enables Collaborative Process Discovery and Design by Business Experts

- Easy for novices, rich enough for experts
  - Simple to layout processes
  - Analyze process costs and risks

- Built for process design
  - Gathers essential data for process discovery and analysis
  - PowerPoint and Word documents do not ensure the right data is captured or that it is depicted in a consistent manner
  - Exports into process-specific formats such as BPMN and XPDL

- Accessible by all process stakeholders
  - Browser-based, quickly can create access
  - Easy to share processes across a team in real time
  - No need to use PowerPoint and Word just because “everybody has them”
Lombardi Enables Complete BPM for Business Experts

**Business teams need integrated technology to process improvement that provides a concrete connection from plans to activities**

- Map your business
- Model your processes
- Prioritize efforts
- Deliver business plan

---

**IBM BPM Blueprint**

Setting Direction

- **HQ**
- **Corporate Strategy**

**WebSphere Lombardi Edition**

Controlling Processes & Work

- **IT**
- **Application Infrastructure**

- Build process applications
- Leverage existing infrastructure
- Enable work collaboration
- Optimize processes and teams
The Traditional Process Application Lifecycle – A Team Works, But Little Teamwork

How do these artifacts relate? Is everything in synch?
The WebSphere Lombardi Edition Difference – A Shared Process Model Improves Teamwork

- Single integrated platform – model, develop, monitor, optimize
- Single shared process model – assets are always in synch
- Lower technical effort – less development time, cost, risk
- Easy to change – make frequent process improvements

... the picture IS the process ...
Demo: WebSphere Lombardi Edition
Business Focused for Business Improvement
Provides a Simple but Powerful Iterative Process Development Environment

WebSphere Lombardi Edition:

- Model, develop, deploy, and monitor from a single tool
  - Import discovered process from IBM BPM Blueprint
  - Add user interfaces ("coaches"), services, rules
  - Deploy easily – just save the process design
  - Oracle and Microsoft need several tools to provide the same solution

- Retain business focus
  - Set Key Performance Indicators (KPIs) for monitoring process instances
  - Process improvement built in - optimize processes by using process data to identify bottlenecks
  - Oracle and Microsoft are more technical, and do not capture the business data needed to aid process optimization
Demo: Process Monitoring with WebSphere Lombardi Edition

- Create dashboards based on process data
- Create simple custom reports without programming
# The Value of Business Driven Change with Lombardi

<table>
<thead>
<tr>
<th>Efficiency</th>
<th>Effectiveness</th>
<th>Agility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aflac</strong></td>
<td><strong>Dell</strong></td>
<td><strong>National City</strong></td>
</tr>
<tr>
<td>Eliminating up to 80% of the “human touches” in Invoice Reconciliation</td>
<td>Built supplier onboarding system for 40% less than code based alternative in 66% of the time</td>
<td>Identify Issues in the lending process prior to having bottlenecks and identify areas of waste</td>
</tr>
<tr>
<td><strong>SIMON</strong></td>
<td><strong>Ford</strong></td>
<td><strong>Pfizer</strong></td>
</tr>
<tr>
<td>Standardize the Mall Branch office processes and make tasks easier for staff.</td>
<td>Saves $2M per quarter by resolving Distressed Shipment more effectively</td>
<td>Full Audit Trail for Compliance in their grants process – 1st major pharma to be compliant</td>
</tr>
<tr>
<td><strong>Midwest ISO</strong></td>
<td></td>
<td><strong>WAL-MART</strong></td>
</tr>
<tr>
<td>Reduce the time to document and comply with NERC regulations</td>
<td>Cut “engineering” time of designers on car systems by 20% in one year.</td>
<td>End Cap Product Display Management delays identified months in advance</td>
</tr>
</tbody>
</table>
WebSphere Lombardi Edition & WebSphere Process Server Serve Different Needs

**WebSphere Lombardi Edition** for business-led process improvement

- Visual analysis and optimization
- KPI identification and monitoring
- Rapid change deployment

**WebSphere Process Server** for IT-led process automation

- Enterprise system orchestration
- Transactions and recovery
- Security and governance
A Smarter Business Process, Led by IT

VP Mortgage

We need to improve our business processes.

IBM

Watch how quickly we can make the changes.
Implementing Business Process Changes

- Developers use WebSphere Integration Developer (WID) tool to make the changes
- The WID tool supports a Service Component Architecture (SCA) philosophy
  - Developers quickly assemble existing SCA components
    - Wiring
    - Data maps
  - WID tool automatically generates some service components
    - Example: Human tasks
  - The tool supports development of new service components as well
- Benefits
  - Easy to make changes
Service Component Architecture

Change a service without changing the process design

1. Wire new service to existing process step
2. Re-deploy the process
The Loan Application process uses an application-neutral Generic Business Object (GBO) schema to represent its data structure.

Each service has its own Application Specific Business Objects (ASBO).

The web service component uses maps to transform data between the two formats (GBO and ASBO).
Demo: Change A Service Without Changing The Process Design

Automate the “Customer Notification” task by replacing the human task with a web service

1. Wire new service to existing process step
2. Re-deploy the process
Process Flex Points Are Built On Service Component Architecture

Service Components (code), or Service Proxy Components (no programming required)
Microsoft BizTalk Is Less Flexible

- BizTalk has no support for Service Component Architecture (SCA)
  - Calls to different types of endpoints are done differently. Web services, adapters, business rules, and CICS are not accessed in the same way
- No separation between process design and service wiring
  - Business logic is intermingled with service implementation details
- No generalized data representation
  - Data structures of the endpoints are embedded in the business logic of the calling application

- Result: changes to service implementation details are hard to make and require changes to the process logic
Demo: It’s More Difficult To Change A BizTalk Process

- Changing an endpoint from a human step to a web service requires changes to the process logic
- Change must be repeated for each use of the service
- Process logic is cluttered with implementation details, so the changes cause cascading problems
- No automatic detection of interface discrepancies – developer must handle manually
Oracle Is Less Flexible

- **Oracle BPEL Process Manager**
  - SCA supported in 11g release July 2009 – IBM has supported SCA for five years
  - 10g required services to be wired within the process

- **Oracle BPM**
  - Does not support SCA
  - Uses proprietary business objects
  - Can change a service’s URL, but any other change requires changing the invocation logic
Oracle Promotes Application Integration Architecture (AIA) For SOA Applications

- AIA is a product than runs on Oracle SOA Suite
- AIA is used to integrate applications - point to point
- AIA provides Process Integration Packs (PIPs) to integrate specific applications
WebSphere Is Simpler, More Flexible, And More Cost Effective Than Oracle AIA

- **WebSphere is simple to start, and easy to scale**
  - WebSphere requires no addition products, and is easy to install
  - Oracle AIA requires the installation of multiple product, with specific product dependencies

- **WebSphere is more flexible**
  - WebSphere is application and technology independent
  - WebSphere’s Dynamic Discovery addresses customer’s specific needs
  - Oracle AIA locks customers into Oracle middleware technologies
  - Oracle PIPs are sold as point-to-point Oracle application integrations

- **WebSphere is more cost effective**
  - WebSphere’s cost is not affected by the number of applications to integrate
  - Oracle AIA’s cost grows rapidly with the workload and number of applications
WebSphere Provides A Proven And Stable Environment
Oracle Fusion Middleware And AIA Does NOT

- AIA is immature and changing rapidly
- Current AIA does not support Fusion Middleware 11g
- AIA 3.0 will support 11g, promised later in 2010
- Oracle’s support of Fusion Middleware 11g may cause a complete re-architecture of AIA’s implementation and PIPs
  - AIA solutions must change to support SCA
  - AIA solutions must change to support the upcoming Oracle Service Bus 11g (promised for 2010)
A Benefit Of IBM’s Flexible Development – Faster Time To Solution

Total Build, Test and Deploy Time (hh:mm)

IBM Middleware
WebSphere Process Server
1:06

6:25

Oracle Fusion
BPEL Process Manager
3:17

16:00
2.5x longer!

Microsoft
BizTalk
2:42

10:21
1.6x longer!

SAP R/3

Source: Internal IBM Productivity Comparison Study
WebSphere Process Server Is The Runtime For The New Process

- One integrated framework for smart work
- Based on open standards
- Built on WebSphere Application Server

WebSphere Process Server

- WebSphere Process Server (BPEL)
- WebSphere Enterprise Service Bus
- WebSphere Business Events
- WebSphere Business Monitor
- WebSphere Portal
- WebSphere Service Registry Repository
- ILOG JRules
- Business Space

WebSphere Application Server

- EJB Container
  - EJB’s
- Web Containers
  - JSP
  - Servlets
  - HTTP Server
  - Web Services Engine

WebSphere Process Server

- WebSphere Business Monitor
- WebSphere Portal
- WebSphere Service Registry Repository
- ILOG JRules
- Business Space
WebSphere Process Server Accommodates A Changing Workforce

- Process tasks are associated with roles, not individuals
- Easily add employees and assign to roles
- Employees use their work list to claim outstanding task for completion
- Managers can re-assign tasks based on workload and staff availability
- Federate repositories to simplify the management of users and roles
Business Space Can Also Adapt Employee Dashboards

- **Business Space** provides one web entry point for all employees involved in the process
- Views built with mashup technology allow fast and easy customization for specific roles
- Widgets access runtime environment via REST
What Roles Can Be Supported By Business Space?

- Task-specific roles
  - Examples: Risk Assessor, Call Center Representative

- Process Administration
  - Examples: Enroll employees, re-assign tasks, monitor instances

- Business Process Owner
  - Examples: Monitor business metrics, receive and investigate alerts, change business rules

- Shared widgets support collaboration amongst the team and deliver supplemental information

- Easy to customize a dashboard for each role
Business Space Is A More Flexible User Interface Framework

- Business Space enables quick and easy creation of role specific user interfaces
  - Leverage the productivity of Web 2.0 technology
- More flexible than Microsoft BizTalk
  - Developers must write code to create customized user interfaces
  - No interfaces to the runtime environment are exposed
  - Difficult to incorporate collaborative support and supplemental information
- Oracle has two “strategic” BPM products and two user interface technologies
  - Oracle BPEL Process Manager
    - Requires an additional product (WebCenter)
  - Oracle BPM
    - No custom, feed, Google Gadget, URL or MS document widgets
    - No REST programming interfaces
Demo: Create A Customized Dashboard For The Risk Analyst

- Use Business Space to create the customized dashboard (mashup)
- Task list
- Customer credit score history
WebSphere Process Server: Most Resilient In The Industry

- WebSphere Process Server Provides Non-Stop Operation

- WebSphere's console allows an administrator to resume or restart a process that has failed, for example, due to an unavailable service

- Oracle's BPEL Process Manager requires the developer to create XML files to indicate that the process faults are recoverable

A Very Valuable Transaction Resilient Feature for WebSphere Process Server

No One Else Can Do This!

Mainframe service built into the heart of WebSphere Process Server
DEMO: IBM Business Process Manager With Network Failure – Unique Recovery

- Process flow with a single two phase commit transaction
- Operator is able to resume failed orders

1. Submit 100 orders
2. Disconnect network
3. Restart failed orders
   Inconsistent data not visible to other process instances due to locking
DEMO: IBM Business Process Manager With Network Failure – **Unique Recovery**

- Process flow with a single two phase commit transaction
- Operator is able to resume failed orders

1. Submit 100 orders
2. Disconnect network
3. Restart failed orders
Think About The Business Implications

- Can a business afford to lose orders?
- Would customers tolerate delayed orders?
- Can you afford to manually resume process instances?
- How are key databases reconciled that get out of sync?
- Can you have planned outages without ever shutting down your ability to process orders?

2 + 2 = 4

IBM
Summary: Flexible WebSphere Business Processes Reduce Time, Cost, And Risk

- IBM BPM Blueprint is more accessible and more business-focused than Oracle and Microsoft

- WebSphere Lombardi Edition is better integrated and has better process optimization than Oracle and Microsoft

- WebSphere Integration Developer can implement process changes more quickly than Oracle and Microsoft

- WebSphere Process Server outperforms Oracle and Microsoft

- Business Space delivers customized employee dashboards more quickly than Oracle and Microsoft