Facilitating innovation through accelerated process improvement

Business Process Management Enabled by SOA

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CEO's cite Innovation as top priority for business

*Business Model Innovation delivers the greatest returns*

Results of 765 CEO interviews worldwide:

- Out Performers place 2X emphasis on **Business Model innovation** than under performers

  - CEOs are under intense pressure to innovate
  - Corporate culture is critical to sustained innovation
  - Business model innovation is the new strategic differentiator

- 65% will make fundamental changes to their business over next 2 years

- Over half have found it difficult to manage change in the past

Source: IBM 2006 Global CEO Study

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Most businesses are a long way from the goal
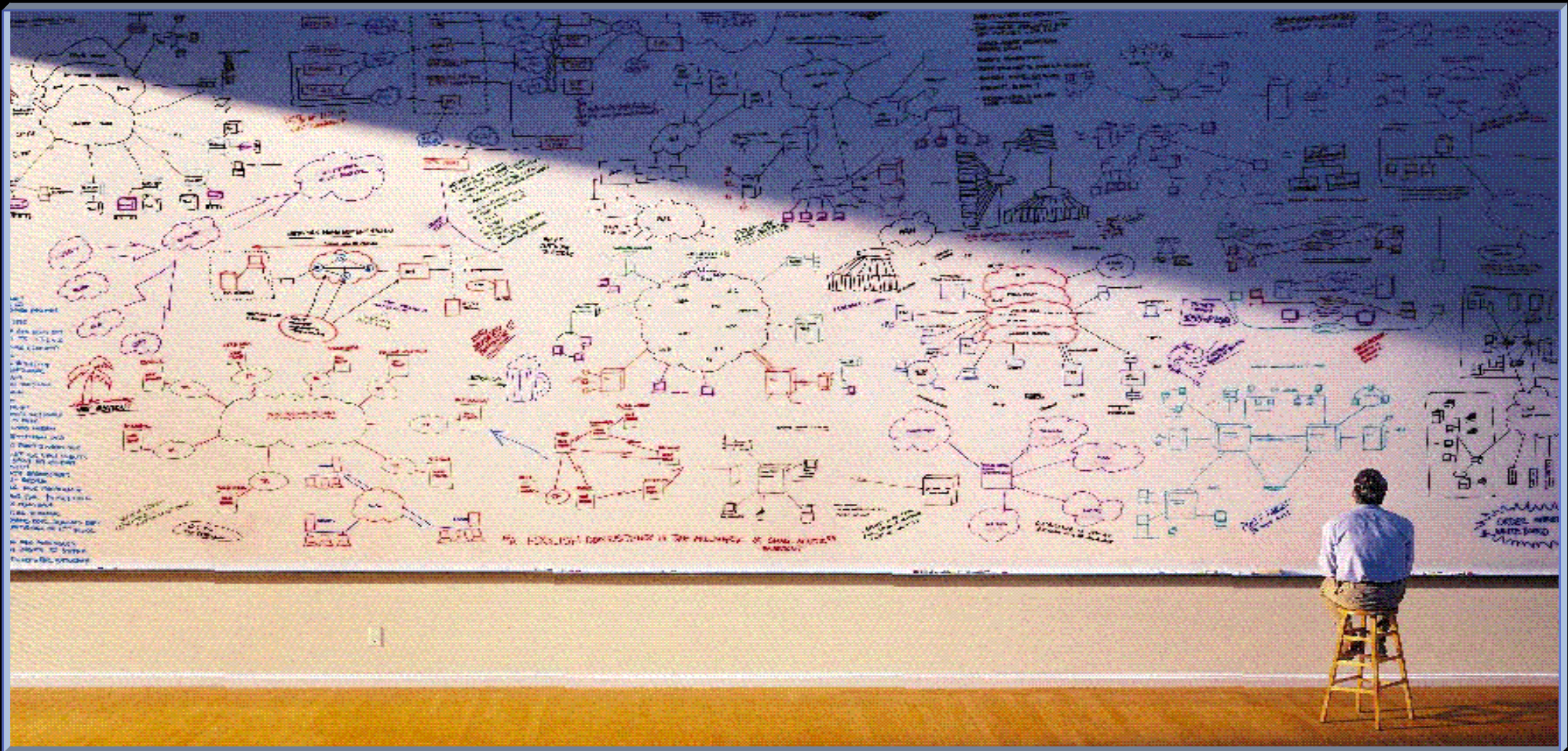
Business knows what it wants…and what's preventing progress

Business Drivers…   ..and Barriers

Manage change
Modify operational processes…and change them again and again and again

➡ …processes are inflexible and...

Respond Quickly
Based on market conditions to adapt processes

➡ …integration challenges prevent timely implementation

Ensure Compliance
Identify problems before they get out of control

➡ …long lag-times and inadequate mechanisms prevent insight and...

Enhance Business Efficiency
Analyse activity to ensure processes meet objectives

➡ …lack of consensus on the right process to improve paralyses progress

Companies Want Change At The Speed Of Business
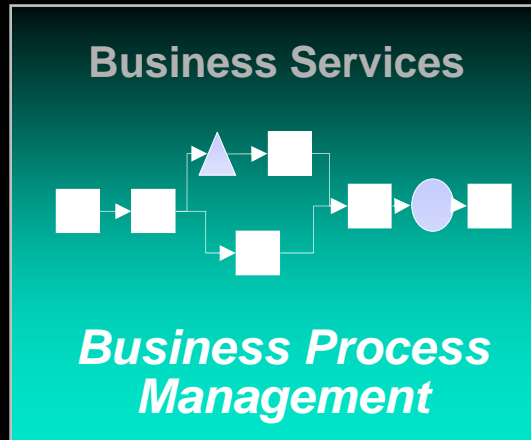
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Business Process Management Enabled by SOA
Differentiated value through a combination of software and expertise

What is….

Business Process Management?

....A discipline combining software capabilities and business expertise to accelerate process improvement

Business Services

Business Process Management

…Business Process Management Enabled by SOA?

...A discipline enhanced by a flexible IT architecture to simplify the creation and decomposition of services to facilitate business innovation

Expertise that Delivers BPM
- Process Knowledge
- Industry Methods and Models
- Business consulting expertise

Software that Enables BPM
- Business Services
- Tools, Rules, Servers, Repositories
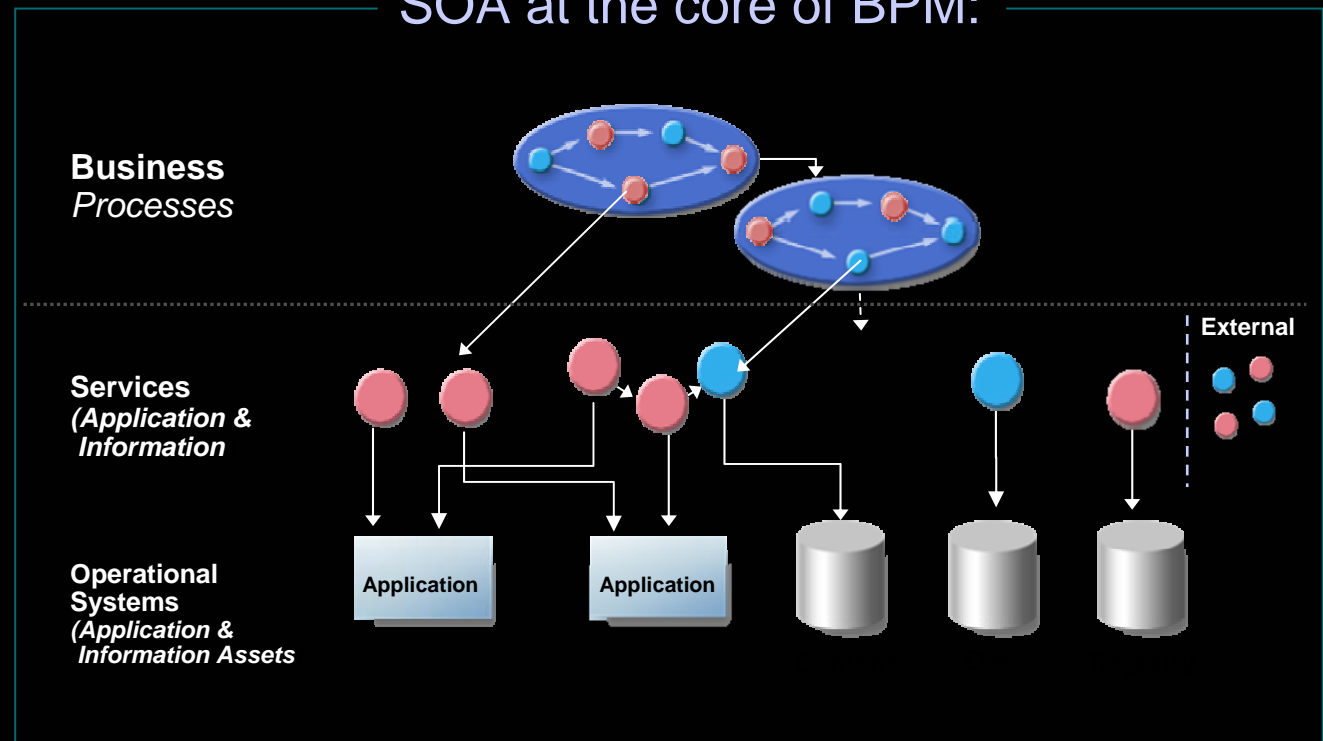- Business Dashboards, Forms

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Business Process Management is Better with SOA

Services are the "building blocks" for business processes
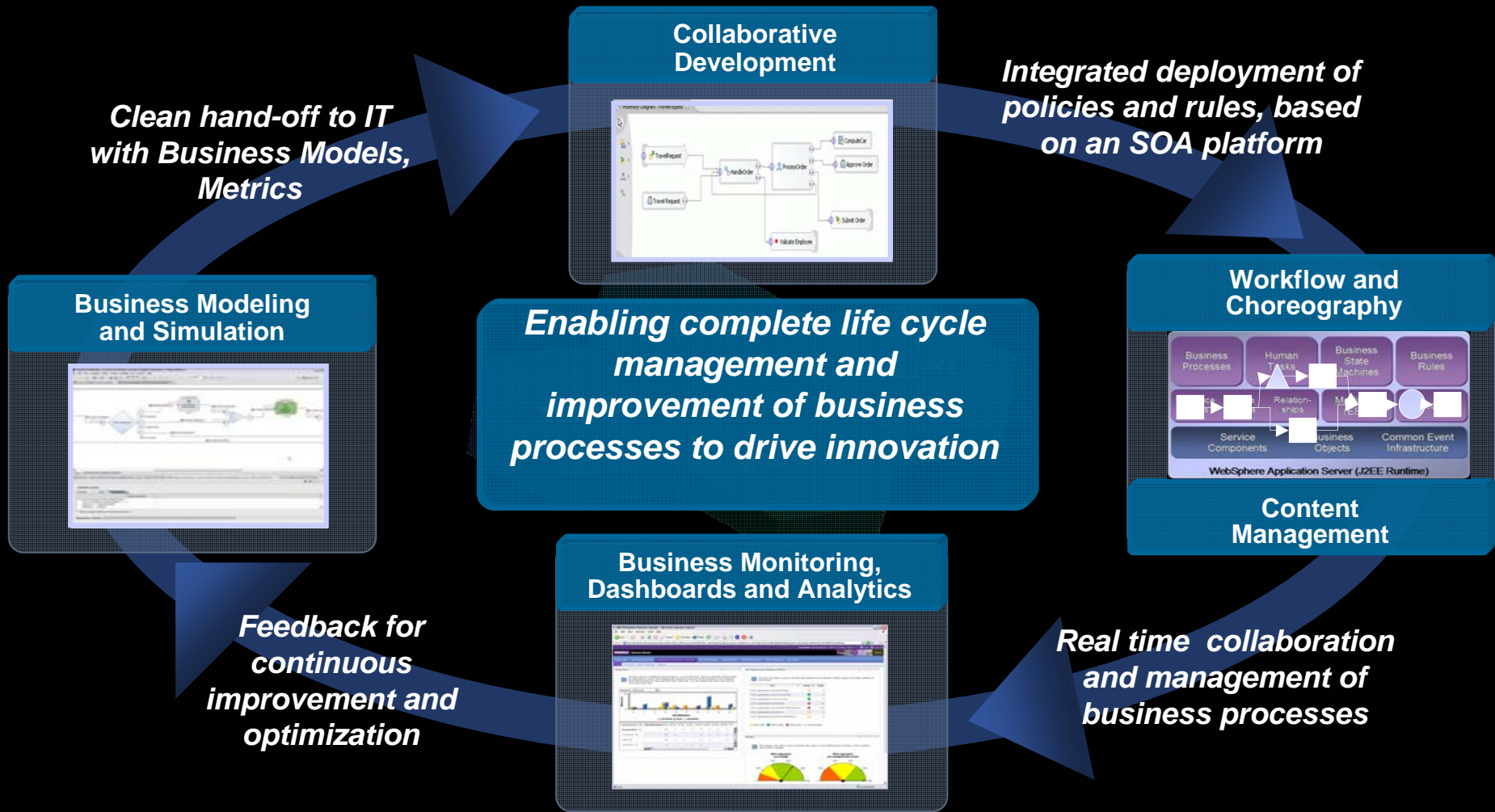
SOA improves how you design, manage, and optimise your business processes by enabling:

- Solution Building Efficiency
- Reuse of existing assets
- Flexibility in change

SOA at the core of BPM:

Business *Processes*

Services *(Application & Information*

External

Operational Systems *(Application & Information Assets*

Application   Application

Only IBM delivers the full set of integrated BPM capabilities in a SOA
Designed to Start Anywhere in the Cycle, Use Only What You Need

Collaborative Development

Clean hand-off to IT with Business Models, Metrics

Integrated deployment of policies and rules, based on an SOA platform

Business Modeling and Simulation

Enabling complete life cycle management and improvement of business processes to drive innovation

Workflow and Choreography

Content Management

Business Monitoring, Dashboards and Analytics

Feedback for continuous improvement and optimization

Real time collaboration and management of business processes

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IBM Leads in Business Process Management with SOA
Analyst Magic Quadrants and Waves deliver the proof

- **Forrester Human-Centric BPMS Wave** (Insurance, Sep, '06)

  - Marc Cecere, Craig Le Clair, and Colin Teubner

  - "…Pega, Fiserv, and **IBM lead the pack**"

  - Establishes IBM as the vendor with leading capabilities across the full spectrum of BPM engagements (human, system, document)

- **Forrester Integration-Centric Wave** (3Q '05)

  - Marc Cecere, Craig Le Clair, and Colin Teubner

IBM a **leader**

  - Next rev targeted for Dec, 2006 (renamed to "BPM")

- **Gartner BPMS Magic Quadrant** (June, '06)

  - Identified as 'visionary' within this evolving market
  - **Best positioned of all "major" vendors**

BPM Enabled by SOA Delivers Real Customer Value

Manage Change
by modeling and analysing existing or new processes.

Respond Quickly
with processes based on a flexible infrastructure.

Ensure Compliance
by identifying problems before they get out of control.

Enhance Business Efficiency
by analysing activity to ensure processes meet objectives.

IBM's customer order and analysis process *reduced time and cost of new process improvement releases by 25%*

Danske bank realised *$2M savings* in the first year through company wide increase in productivity

Telefonica to *triple its clients in two years* by being able to ensure changes made were executing correctly

Principal Financial reduced paper-intensive mortgage process time by *53%, achieved 34% gains in efficiency and estimated annual savings of $4M*

W&W AG

Leading financial services provider in Germany

Challenge

- Delayed and inconsistent loan processing inhibits growth and impacts customer service
- Route of problem: Critical loan information delivery took too long

Solution

- Paperless financial document distribution to speed transaction processing
- WebSphere Business Modeler to design optimised documentation workflow
- WebSphere Process Server with DB2 Content Manager to provide deployed process automation and integration
- Built on an SOA for service re-use

Wüstenrot & Württembergische

Benefits

- *70% faster document delivery* ensured aggressive service level agreements were met
- *Repeatable workflow best practices* for other back-office tasks, resulting in:
  - Improved workloads and
  - Simplified employee management processes
- *Stakeholders working together* rather than in corporate trenches

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The Top Lessons Learned

1 **Right Process, Right Team**

2 **Flexible Infrastructure Enables Process Change**

**3** **Manage for Continuous Improvement**

Lessons derived from:

- Over 8 years of customer engagement experience with early BPM technologies

- Last two years with hundreds of customers designing and implementing BPM Enabled by SOA solutions

- Customer Advisory Council

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1 Right Process, Right Team
Lesson Learned

Customer Challenges:

- Visibility into how the business processes run today
- Understanding the impact of business process changes
- Lack of communication of the intended process and process changes
- Where to start?
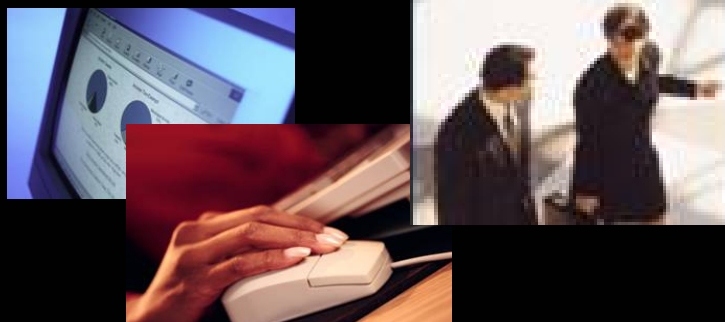
Observation: **90% of process projects failed** when business and IT were not equal partners

- **Gain Sr. Management sponsorship to:**
  - Create cross-organisational (LOB and IT) process improvement teams
  - Commit long-term involvement
- **Find the process that will differentiate the business**
  - Match scope and visibility with your level of maturity
  - Start with painful and visible process that will yield the greatest return with the most allowable risk
- **Through simulation, identify the tasks that impact your process performance the most**

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1

How do you do BPM? BPM Methodology
Open IBM approach for BPM engagements based on best practices
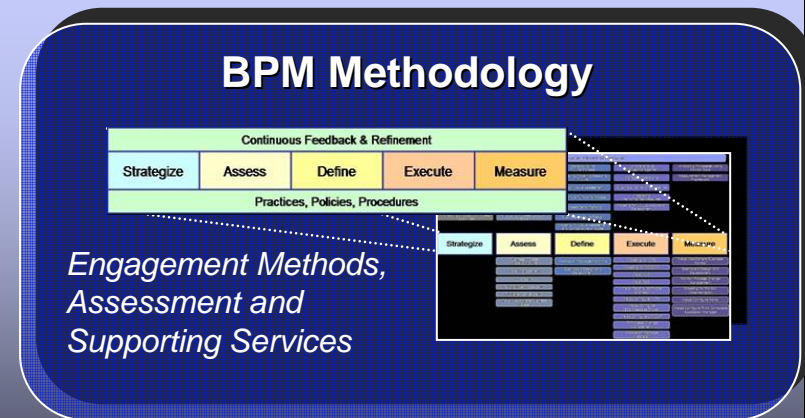
New!

Facilitates roll-out of BPM project to prioritise focus and incorporate appropriate software. Methodology includes:

1. **BPM Advanced Assessment**
   - Determines level of adoption, starting points, appropriate software and next steps

2. **BPM Expertise**
   - BPM service components **based on best practices** mapped to adoption level
     - *E.g., Process Documentation Techniques, Process Benchmarking, Dashboard Design, and Process Change Management.*
   - Incorporates interchangeable market-leading SOA based software

BPM Methodology

Continuous Feedback & Refinement				
Strategize	Assess	Define	Execute	Measure
Practices, Policies, Procedures				

Engagement Methods, Assessment and Supporting Services

Open Methodology!
Ingredients provided to market by IBM accelerate BPM adoption

Flexible:
Customizable to precisely fit client needs

Holistic:
Incorporates historic methodologies such as Six Sigma, Lean, Rummler Brache, & Kaizen

Integrated:
Industry leading methodologies combined with best-in-class technology

Value-driven:
Designed to assure timely delivery of quantifiable business benefits.

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IBM

1 Right Process, Right Team
Use a tool to define business tasks that are critical to your success

WebSphere Business Modeler

Business Analyst tool to:

- Define and optimise processes through simulation
  - Assess risk mitigation
  - Make investment decisions
  - Calculate value of improvements
- Justify process changes through ROI calculations
- Understand impact of process changes to the business

Current State – Times & Costs
Case Analysis with Unlimited Resources

Probability	Average Process Time (min:sec)	Average Cost			Probability	Average Process Time (min:sec)	Average Cost
32.91%	10:11	$5.40	1	Direct mail, Complex	35.57%	8:16	$4.38
32.10%	3:11	$1.67	2	Direct Mail, Simple	33.03%	1:51	$0.96
15.01%	14:11	$7.56	3	Telemarketing	13.51%	7:51	$4.16
15.20%	3:21	$1.77	4	Email, Complex	14.50%	1:54	$0.96
4.78%	11:11	$5.93	5	Email, Simple	2.39%	8:16	$4.38

Future State – Times & Costs
Case Analysis with Unlimited Resources

Enhanced! **WebSphere Business Modeler V6.02** Now Has:

- **Simplified business format for developing KPIs and metrics**
- **Better business integration from Modeler into other tools (ie MS PowerPoint, MS Visio)**
- Enhanced collaboration - Increased process visibility with swimlane models

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1 Right Process, Right Team
Physician's Mutual Targeted Six Top Processes for Improvement

Challenge

- Need new products and new ways of distributing these products

- Increase agility and flexibility to respond to changes in the market

- Reduction in operating costs

Solution

- New corporate strategies and business model innovation by targeting key processes to meet goals

- Architected and simulated business processes using IAA Industry Model and WebSphere Business Modeler to improve customer services

- BPM Enabled by SOA was centre to making new strategy happen

Physicians Mutual

Benefits:

- Increased agility and flexibility

- Accelerated creation of best practices through process models

- Rapid deployment

- Reduced operating costs

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2 Flexible Infrastructure Enables Process Change
Lessons Learned

SOA can **reduce** integration project development and maintenance **costs by 30%** or more

Customer Challenges

- Reacting to changes is slow and often times not fast enough
- Integration in and outside of the enterprise is difficult and costly to implement
- Need to have a faster time to market

- **BPM can be achieved without SOA but….**
  - Change is difficult and achieving higher value BPM is hindered
- **SOA dramatically reduces process time, maintenance, and deployment costs**
  - Manage and leverage existing and new services
- **Deploy processes on a dynamic, flexible BPM process engine**
  - Choreography and Integration of the processes ensures enterprise wide reach & connectivity

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Flexible Infrastructure Enables Process Change

2 WebSphere Business Services Fabric

New!

## *Technology platform to build and run business services*

- Facilitates reuse within your existing environment
- Based on pre-built, customisable SOA assets, semantic models and policies
- Supporting a wide range of industry and semantic standards
  - (e.g. ACORD, HIPAA, HL7, etc.)
- Used by both IBM and Business Partners as a foundation for industry-focused business services
- 8+ Business Partners leveraging
- Based on:
  - Webify acquisition assets & other industry assets
    - (eg. IAA Information Models)
  - WebSphere Process Server
  - WebSphere Integration Developer
  - WebSphere Services Registry and Repository

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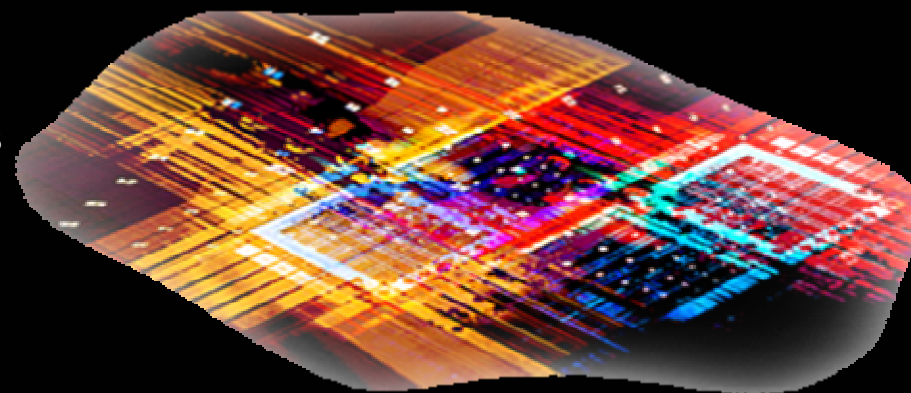
Flexible Infrastructure Enables Process Change

2 *IBM SOA Business Catalog delivers ready made models and assets*

IBM SOA Business Catalog
Recipe for reuse
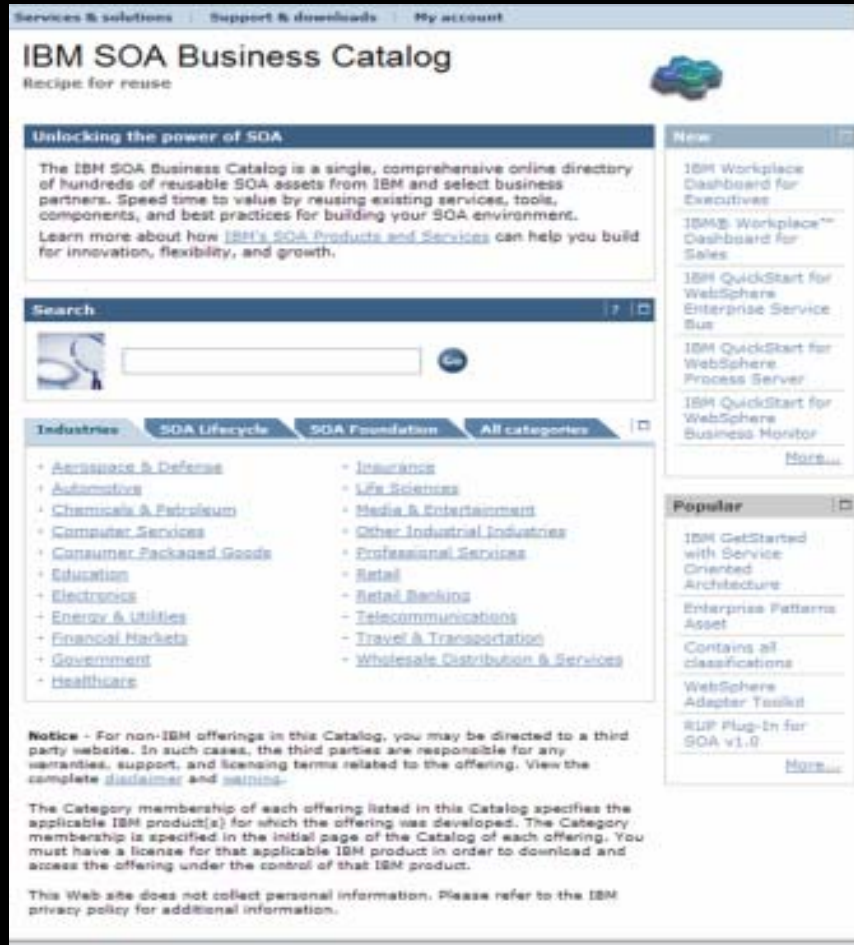
ibm.com/soa/soabusinesscatalog

3110+ IBM & Partner Assets

Banking

- 300+ Business Processes
- 1600 Activities

Enhanced!

Insurance

- 200+ Business Processes
- 700 Activities

Enhanced!

Financial Markets

- 200+ Business Processes
- 300 Activities

New!

Cross Industry

- Over 100 WebSphere Adapters and Pack
- Over 50 IBM Portlets
- Rational Patterns and Plug-ins
- SWG, GTS, and GBS SOA Services

Enhanced!

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2 Flexible Infrastructure Enables Process Change
Process Change Requires Management of Assets

Customer Challenges:

- How do I optimise service interactions to be better aligned with business process?

- How do I help services interact efficiently and dynamically with each other?

- How do I govern services as part of my SOA?

- How do I eliminate "rogue services" and ensure control of my SOA?

Solution:

New! WebSphere Service Registry and Repository

Publish *Find* *Enrich* *Manage* *Govern*

- **Encourage Reuse**
  - Find and reuse services for building blocks for new composite applications.

- **Enhance Connectivity**
  - Enable dynamic and efficient interactions between services at runtime

- **Help optimise service performance**
  - Enable enforcement of policies. Impact analysis

- **Enable Governance**
  - Govern services throughout the service lifecycle

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2 Flexible Infrastructure Enables Process Change
Deploy on a dynamic, flexible BPM with SOA process engine

Enhanced!

Execute mission critical processes

- Securely, consistently, with transactional integrity

SOA infrastructure orchestrates assets into:

- Highly optimised and effective processes
- Service changes do not impact process
- Process changes re-use services as needed

WebSphere Process Server V6.02 Now has:

Process Automation and Choreography

- World class support for Information and Content Management capabilities
- Governance of services
- Faster authoring of BPM solutions with easier integration to external services

Human-centric support:

- Rich admin for managing ad-hoc staff tasks
- Rich tracking and observation of processes plus detailed query processing
- Staff workload balancing and Server fed task flows

Easy to use, comprehensive

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## 2 *Human-based Web services for standard WS-BPEL processes*

- **Many business processes involve people**
  - Human-centric processes automate interactions between people, and supporting applications.
  - Integration-centric processes automate interactions between applications; humans handle exceptions.
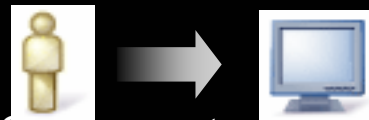
- **Machine to Human**
  - Component creates a work item for Human interaction (e.g. WS-BPEL)
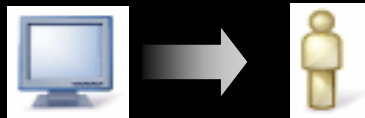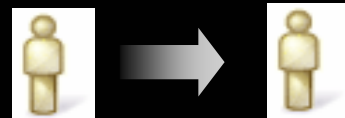
- **Human to Machine**
  - Human interaction invokes a Component (e.g. WS-BPEL)

- **Human to Human**
  - Human interaction invokes a Component which creates a work item for another Human

✓ Stand-alone Human Task Manager Component
✓ Defined as a service
✓ Participates in standard WS-BPEL processes

New Human Task

Human Task: Select Kind
Human Task exist in various kinds. Select the appropriate kind for your task template.

- ⦿ Participating Task
- ○ Originating Task
- ○ A pure Human Task

Originator		Receiver
Computer	Interface	Human

A Participating Task is a Human Interaction that is invoked from another Service Component, i.e. a BPEL Business Process.

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2 Wachovia: Optimise Business Processes with SOA
Integrating multiple systems to deliver a single interface

Business Challenge

- **A leading global financial institution needed to re-engineer trust services processes and integrate an array of systems and applications in support of the processes**

- **Needed to accommodate growing channels and integrate IT platforms from acquired businesses**

Action Taken

- **Transform existing infrastructure to SOA**

- **BPM solution to deliver information to several channels from a single interface**

WACHOVIA

Benefits

- **$6 Million Initial Savings**

- **Process activities reduced from 300 to 120, 31 of which were automated**

- **Fee Income collection increased 10X**

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3 Manage for Continuous Improvement
Lessons Learned

69% of CFOs say that Measuring and monitoring business process and performance is their top priority
IBM Global Business Service. IBM Global CFO Study Dec. 2005

Customer Challenges:

Complex, siloed processes and infrastructure make it difficult for business leaders to respond

- They can't see what is currently happening
- They can't put what's happening into context
- They can't make changes quickly

- Achieve real-time visibility into processes
  - An ongoing, iterative loop of improvement and optimisation
- View performance of processes based on Key Performance Indicators
  - Track cost, time and resources
- Learn from your data

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3

Manage for Continuous Improvement
View Performance through KPI's

- Determine what metrics are important for you to monitor (i.e. time, resources, cost)
- Use best practices and process experts for KPI Definition
- IBM's BPM Competency Center will help

New!

- Created from across IBM leveraging field and lab process expertise for BPM and SOA

- Skilled in pre-sales, BPM Consulting, process design, implementation and post-sales engagements

- Serve as experts to customers in overall "Business Process Management Concepts"

BPM Competence Center

Over 1000 engagements!

"The BPM Competency Center provided unique expertise in overall Business Process Management concepts and provided the deepest technical knowledge…In particular the high response time supporting me on specific challenges during the implementation was tremendous…an unequaled experience."

Thies Frahm, COO, businessMart AG, Germany

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IBM

3 Manage for Continuous Improvement
Achieve real-time visibility into processes

New and Enhanced!

Monitor the applications that are critical to your business

WebSphere Business Monitor V6.02 Now has:

- Business Activity Monitoring capability
  - Increased scope of activities and applications that can be monitored
- Monitoring Extensibility
  - Improved business insight and flexibility
  - Ability to define monitoring models that have input from various sources
- Improved administration and testing environment
  - Guided administration

Workplace Dashboard Framework

- Real-time collaboration
- Flexible SOA Information Services

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Yulon Group
Using SOA to sense and respond to Events

3

Yulon Group

Challenge

- Enhance customer convenience in automobile repair and maintenance

Solution

- Spot trends, trap anomalies, and trigger alerts with ESB-based events processing
- Execute business state machines and rules to drive responses

Benefits

- Flexible response system monitors market trends for better customer service
- Greater operational efficiency

| RFID-triggered event | *Sense* Invoke Service | Business Rules & Policies | *Respond* Invoke Service | Action ALERT! |

- 200+ IBM software and hardware products act as Common Base Event (CBE) emitters
- IBM drives standards leadership in Events

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3 Manage for Continuous Improvement
Learn from your data

Customer Challenges:

- Cannot mitigate risks effectively because there is no relevant real-time data

- Modifications to business processes are made on "best guess" of processes performance

Solution

- *WebSphere Business Modeler* and *WebSphere Business Monitor* used TOGETHER

### *Modeler and Monitor Together:*

- Feed your real data back into your modeling tool for real life simulations

- Using real business facts as the basis for analysis
  - Develop a better understanding of your business
  - Adjust business operations for continuous improvement
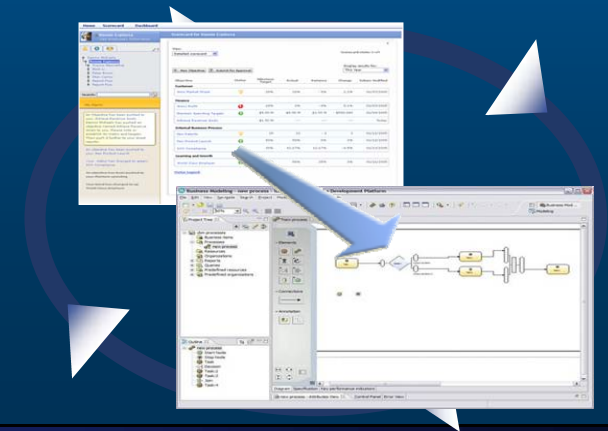
Why Select BPM enabled by SOA from IBM?

- **Leader in Gartner Magic Quadrant for Process Analysis Tools** *by Michael J Blechar, Jim Sinur (Feb 2006)*

- **Leader in Forrester Waves:**

    - **Human-Centric BPMS** (Insurance)
      by Marc Cecere, Craig Le Clair, and Colin Teubner (Sep, 2006)

    - **Integration-Suites**
      by Ken Vollmer and Henry Peyret (Sep, 2005)

- **Process Knowledge leader through BPM Methodology**

- **Most expertise to deliver BPM with more than 400 customers using IBM Industry Models to accelerate the deployment of strategic business initiatives**

- **BPM Software that spans every BPM capability**

- **Over 5 years of continuous market share growth**

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New News! BPM Enabled by SOA - Announcement Highlights
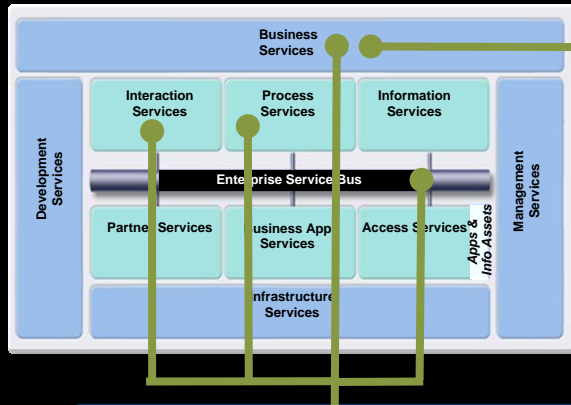
Process methods, models, and knowledge
- BPM Methodology: Open Engagement Framework based on IBM Best Practices
- Process models for Financial Markets and Telecom
- BPM Competency Center: Briefing center and client facing team

New!

Content-Centric BPM

New!

- Intent to acquire FileNet

Business Activity Monitoring and Management
- WebSphere Business Monitor

Enhanced!

Process Re-use and Governance
- WebSphere Service Registry and Repository

Platform for business services
- WebSphere Business Services Fabric

New!

Human Process Management
- WebSphere Process Server

Business User Tooling
- WebSphere Business Modeler

Enhanced!

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Getting Started with BPM Enabled by SOA

- **Whitepaper:** "*BPM with SOA: Better Together*"

- **Virtual Jam:** Oct 26 and 27, 2006
  - *http://ecommunity.groupintelligence.com/websphere/forums/forumdisplay.php?f=75*

- **Process Improvement Workshop:** Get started in your business process management project.

ibm.com/software/info/bpmsoa/