SAP Enterprise Modeling Applications (ARIS): The first step in your BPM strategy for SAP

Sarah White, SAP Quality and Risk Management Solution Engineer
Today’s Dynamic Business Environments
Demand a New Approach to Managing Business Processes

- Business changes more rapidly
  - Speed of change!
  - ...requiring processes that can easily be adapted

- Businesses forming global networks
  - Global Networks!
  - ...requiring processes to span across organizational and geographical boundaries

- Closer Business and IT alignment is imperative
  - Business & IT alignment!
  - ...requiring tools that foster the collaboration between LOB who defines processes and IT who implements processes
## CIO’s Prio 1: Business Process Improvement

According to 2010 Gartner Survey among 1,600 CIOs worldwide

<table>
<thead>
<tr>
<th>#</th>
<th>Business Priorities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Business process improvement</strong></td>
</tr>
<tr>
<td>2</td>
<td>Reducing <em>enterprise costs</em></td>
</tr>
<tr>
<td>3</td>
<td>Increasing the use of <em>information/analytics</em></td>
</tr>
<tr>
<td>4</td>
<td><strong>Improving enterprise workforce effectiveness</strong></td>
</tr>
<tr>
<td>5</td>
<td>Attracting and retaining <em>new customers</em></td>
</tr>
<tr>
<td>6</td>
<td>Managing <em>change</em> initiatives</td>
</tr>
<tr>
<td>7</td>
<td>Creating new products or services (<em>innovation</em>)</td>
</tr>
<tr>
<td>8</td>
<td>Targeting customers and markets more <em>effectively</em></td>
</tr>
<tr>
<td>9</td>
<td><strong>Consolidating</strong> business operations</td>
</tr>
<tr>
<td>10</td>
<td>Expanding current customer <em>relationships</em></td>
</tr>
</tbody>
</table>

*Source: Gartner EXP (January 2010)*
Obstacles to Change Existing Business Applications
Agile processes need more functionality

"Business Process Agility is becoming a standard requirement for IT and business." Gartner (G00138195)

Considering your existing enterprise app implementations, how important are the following business problems? (percent answering “important” or “very important”)

<table>
<thead>
<tr>
<th>Business Problem</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflexibility limits process changes</td>
<td>77 %</td>
</tr>
<tr>
<td>Lack of visibility into process results</td>
<td>77 %</td>
</tr>
<tr>
<td>Poor cross-functional processes</td>
<td>76 %</td>
</tr>
<tr>
<td>Business requirements vs. apps mismatch</td>
<td>76 %</td>
</tr>
<tr>
<td>Poor internal/external collaboration tools</td>
<td>65 %</td>
</tr>
<tr>
<td>Can’t extend processes to external partners</td>
<td>53 %</td>
</tr>
<tr>
<td>Poor industry-specific functionality</td>
<td>47 %</td>
</tr>
</tbody>
</table>

Source: Forrester Research, Inc. September 2007, Base: 75 Business and IT decision-makers
What is Business Process Management?

Business Process Management (BPM)

Business Process Management (BPM) refers to the integrated and continuous analysis, design, implementation, execution, measurement and monitoring of business processes in order to increase effectiveness and efficiency with respect to the corporate strategy.

BPM also covers the process-related environment, such as organizational structures, people, and technology. In particular it deals with cross-functional and inter-organizational business activities.

Process Management Lifecycle (PML)

PML is SAP’s BPM model. It covers the whole lifecycle of a business process and can therefore be used within process projects. PML can also be used during the execution and monitoring of existing business processes.
Why Customers Care?

It's a Matter of Survival: Use BPM to drive out costs

BPM gives companies visibility into processes that are key to cost management. BPM is a lifeline in this troubled economy. It helps companies find and avoid hidden costs — to keep companies in business.

- Discover expenses that can be avoided
- Bring visibility to hidden costs and take action
- Reduce costs and errors associated with compliance requirements

Source: Gartner, March 2009

Business expectations for IT focus on improving current operations and performance

<table>
<thead>
<tr>
<th>Business expectations</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improving business processes</td>
<td>1</td>
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<td>5</td>
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</table>

*Source: Gartner Executive Programs - Meeting the Challenge: The 2009 CIO Agenda

Companies in a broad range of industries are reporting measurable paybacks from BPM

- 30-45% reduction in process operating costs
- 50-75% reduction in end-to-end process completion time
- 60-90% reduction in time to change business requirements
- 75-90% reduction in manual operations errors

Source: Gartner

BPM Budgets Are Escaping the Axe

Between September and November 2008, Gartner BPM analysts interviewed more than 40 BPM customer references for the forthcoming 2009 BPMS Magic Quadrant report.

- None of these organizations reported budget cuts to BPM projects this year or anticipated them in 2009.
- Most indicated that investments in BPM would outpace other investments over the next 12 months.
- 30% of these organizations had used CSI resources for BPM projects in the past.

Quotes from BPM customers:

- “I don’t have to budget extra funding for BPM. BPM is a faster way to do what’s already in my budget and at 1/8 the cost.” — CIO Global Insurance Company
- “I’ve reduced my IT budget by 30% and tripled output to support the business, by using BPM.” — CIO Auto Manufacturer.
- “BPM is a very lean approach — no pun intended. BPM projects are escaping budget cuts because they offer rapid ROI that is visible and believable to the business.” — PLM Manager, Discrete Manufacturing.
The Value of BPM: The Link Between a Focus on Process Excellence & Higher Market Valuations

SCOR Index Comparison 2003-2009

<table>
<thead>
<tr>
<th>NAME</th>
<th>LAST TRADE</th>
<th>DAY CHANGE</th>
<th>2003-2009 GROWTH</th>
<th>TIME</th>
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<tbody>
<tr>
<td>SCOR Companies Index</td>
<td>(SCOR)</td>
<td>2265.4</td>
<td>8.3</td>
<td>63.32 %</td>
</tr>
<tr>
<td>Dow Jones Industrial Average Index</td>
<td>(DJI)</td>
<td>10444.14</td>
<td>47.38</td>
<td>21.41 %</td>
</tr>
<tr>
<td>Standard &amp; Poors 500 Index</td>
<td>(S&amp;P)</td>
<td>1122.97</td>
<td>4.18</td>
<td>23.59 %</td>
</tr>
</tbody>
</table>

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SAP Enterprise Business Process Management Life Cycle

**Analyze:**
SAP Business Process Optimization by IDS Scheer
- Identify process weak points and bottlenecks
- Determine utilization of resources
- Analyze KPIs to enable sound justification of suggested process improvements

**Design:**
SAP Enterprise Modeling by IDS Scheer
- Analyze and optimize existing processes
- Design processes on a conceptual level
- Achieve process governance and assign process ownership

**Monitor:**
SAP Process Performance Management by IDS Scheer
- Measure performance of existing processes
- Visualize, document and analyze the actual performed processes

**Implement:**
SAP Enterprise Modeling by IDS Scheer with integration to Solution Manager
- Accelerate Implementation via pre-prepared content
- Increase visibility via full integration of all Business Process and Enterprise Architecture components and advanced reporting

**Run:**
SAP NetWeaver BPM
SAP Enterprise Modeling Integration with SAP ESR
SAP Enterprise Business Process Management Life Cycle - Design

Design:

SAP Enterprise Modeling by IDS Scheer

- Analyze and optimize existing processes
- Design processes on a conceptual level
- Achieve process governance and assign process ownership
Business and IT Challenges

- How can I make my processes understandable and how do I visualize and communicate them in ONE common language?
- What potential saving does establishing best practices in my processes bring about?
- How can I improve adaptation of our IT to my business processes?
- Where do synergies occur in the IT environment and how can I avoid redundancies?
- What action do I need to take in the event of a system failure?

>> Company-wide, distributed design of business processes and IT architectures.
Enterprise Architecture Environment

Organization

Data
- Client Relationship Data
  - Client Master Data
    - Client Name
    - Client Address
- Product Data

Process
- Account Opening Form
- Account for new client opened
- Account for existing client opened
- Open new account
- Account product requested
- Relationship Manager
- Branch Manager
- Branch Front Office
- Branch Back Office
- Relationship Manager
- Service Specialist
- Account Management Application
- Retail Account

Application
- Bank Application Portfolio
- Account Management Application
- Card Management Application
- Lending Application
- Saving Application

Product/service
- Retail Lending
- Retail Saving
- Retail Cards
- Retail Payment
- Retail Account
- Bank Products & Services
Adapt SAP Enterprise Modeling to Your Needs...
... by creating your own model types and methods.
Modeling and Analysis: Roles and Tools Involve the Business Users

SAP Enterprise Modeling by IDS Scheer
- Process Manager
- Business Architects
- IT Architecture Manager
- IT Development Planner

SAP Business Designer by IDS Scheer
- Person who models the processes

SAP Business Publisher by IDS Scheer
- Readers = Technical departments / Staff in charge

SAP Business Process Optimization by IDS Scheer
- Person who analyzes the processes
**SAP Enterprise Modeling Applications by IDS Scheer**

<table>
<thead>
<tr>
<th>SAP Enterprise Modeling Application Product Bundles</th>
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<tbody>
<tr>
<td><strong>SAP Business Designer by IDS Scheer</strong></td>
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<tr>
<td><strong>SAP Enterprise Modeling by IDS Scheer</strong></td>
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<tr>
<td><strong>SAP Business Process Optimizer by IDS Scheer</strong></td>
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<td><strong>SAP Process Performance Management by IDS Scheer</strong></td>
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SAP Enterprise Business Process Management Life Cycle - Implementation

Implement:

SAP Enterprise Modeling by IDS Scheer with integration to Solution Manager
- Accelerate Implementation via pre-prepared content
- Increase visibility via full integration of all Business Process and Enterprise Architecture components and advanced reporting
Get There Faster.

Implementation... Key Building Blocks

Utilizing SAP’s Business Process Repository

SAP Solution Manager

Close the IT / Business Gap With Systematic alignment

To accelerate your Implementation

SAP Enterprise Modeling
Get There Faster.

Project

Scenario

Process

Process Step/Transaction

SAP Solution Manager

SAP Enterprise Modeling

Synchronize

SAP Solution Manager and SAP Enterprise Modeling Synchronization: Structure
SAP Solution Manager and SAP Enterprise Modeling Synchronization: The Models
SAP Solution Manager and SAP Enterprise Modeling Synchronization: Model Build Out Example

Original

Event Driven Process Chain (EPC)

- Create sales contract
- Select sales agreement
- Negotiate terms and conditions
- Maintain target and estimated values
- Maintain authorized partners
- Maintain cancellation details

Built Out Example

- Sales Agreement
  - Create sales contract
  - Sales Contract Request Approval
    - Online Sales Contract Information
      - Finance Analyst
        - Sales Contract
          - Prepare Standard Contract
            - Standard Contract
              - Program Standard Contract
                - Select sale agreement
                  - Negotiate terms and condition
Documentation and Training embedded in Business Process Architecture
SAP Solution Manager and SAP Enterprise Modeling Synchronization: Updating SAP Synchronized Objects

Original
EPC with SAP object added in SAP EM

Updates Solution Manager Blueprint Structure and Configuration

Define Sales Contract Information
Process Oriented Configuration from SAP Enterprise Modeling to Solution Manager

Solution Manager

ERP - IMG
SAP Enterprise Modeling Process and Project Accelerators

TO-BE Processes Blueprint Documentation

Business Processes in SAP Enterprise Modeling

Process Oriented Configuration

Process Oriented Testing

Process Oriented Training

Process Performance Monitoring

Use AS-IS Process Redocumentation (Solution Documentation Assistant, etc) for Upgrade Preparation
SAP Enterprise Business Process Management Life Cycle - Run

Run:
SAP NetWeaver BPM
SAP Enterprise Modeling Integration with SAP ESR
Enterprise Multilevel End to End Concept: Top-Down Approach in SAP Enterprise Modeling

- Process area
  - Level 1
- Main process
  - Level 2
- Process
  - Level 3
- Process Step
  - Level 4
- Transactions/Enterprise Services
  - Level 5

- Supply management
- Inventory management
- Goods receipt
- Send shipping notification
- Automatic email with PO confirmation
Automating non-standard processes can be challenging
Because traditional applications are often too inflexible to change

Out-of-the-box software is well-suited to manage standard processes
- Best practices provided by standard software such as SAP Business Suite applications, e.g.
  - Order processing
  - Sell tangible goods from stock
  - Procure to pay
  - …

But what if you want to automate non-standard processes?
- To create innovative, differentiating, company-specific processes, e.g.
  - Specific approval processes
  - New product introduction
  - Negotiate new purchasing contracts with suppliers
- Traditional applications are often too inflexible for fast-changing business processes
- Implementing new processes takes too much time and is too costly
Business Process Management covers both automated and manual perspective

- **Manual Activities**: Typically >80%
- **Automated Activities**: Typically <20%

End to End process spans manual and automated activities

- Processes that deliver competitive advantage and evolve regularly (SOA -Candidates)
- Processes that should be as cost effective as possible

Typically <20%

Of the 20% of Automated Activities

Typically >80%

Standard Activities
Business Process Excellence with SAP

SAP Enterprise Modeling applications by IDS Scheer complement the Business Process Management capabilities of SAP NetWeaver.
Enterprise Modeling
From Conceptual Planning to Technical Blueprints

Conceptually describe the business support implementation and gap analysis.

**SAP Enterprise Modeling Applications by IDS Scheer**

- Business Architecture
  - Value Chain Diagram
  - Organizational Structures
  - Event-driven Process Chain
  - Transactions
  - Services
- Information Architecture
- Enterprise Architecture

**SAP NetWeaver**

- SAP NetWeaver Composition Environment 7.1
- SAP NetWeaver Process Integration 7.1

- SAP Application Core Processes
- SAP Solution Manager
- B2B
- Non SAP

**Provide Enterprise SOA content**

*Consolidated view on application core for planning and gap analysis*
Enabling SOA Service Discovery Engineering & Architecture

SAP Enterprise Modeling by IDS Scheer

Enterprise Services Repository 7.1

Annotations of Business Models With Enterprise Services or other ES Repository modeling objects

Exclusive for ARIS

Seamless Integration of Business Process Architecture based on ARIS ES Repository Integration
Benefits of SAP Enterprise Modeling - Enterprise Services Repository Integration

SAP Enterprise Modeling by IDS Scheer with Enterprise Services Repository integration supports:

- Process-driven requirements analysis
- Alignment of business process requirements and SOA
- Link of business blueprints to service realization
- Reuse of existing interfaces and services
- Modeling and sharing of multiple planning scenarios in SAP Enterprise Modeling before implementation
- Requirements analysis can define the need for new services

This leads to a comprehensive overview of the business process landscape, starting from the top-level approach of conceptual business process modeling down to needed services stored in Enterprise Services Repository.

With this approach the existing integration of the SAP solutions on a transactional level (SAP Enterprise Modeling - SAP Solution Manager integration) is enhanced to a service-oriented environment.
Business Process Modeling Notation 2.0
Improve Collaboration Between Business and IT

Business-friendly process modeling perspective
(in SAP SAP Enterprise Modeling or NetWeaver BPM)

From modeling (no coding!) ...

Developer-friendly implementation perspective
(in SAP NetWeaver BPM)

to execution (no translation!)
Innovate New & Adapt Processes on Top of a Stable Core
Building composite processes on top of the SAP Business Suite

Process Innovation

Value Proposition
- Define a common business process layer
- BPM suite of choice for SAP customers
- Extend the reach of BPM technology to enable completely new process scenarios

Composite Business Processes
- Compose new business processes
- Extend core business processes
- Reuse service-enabled application core processes (2,800+ ready-to-run services)

Application Core Processes
- All SAP applications on SAP NetWeaver
- Non-SAP applications integrated with SAP NetWeaver

*SAP NetWeaver Composition Environment is a model driven development environment for processes, views and business logic
### Sweet Spots for BPM
Based on Beta Program and Design Partner Council customers

<table>
<thead>
<tr>
<th>Use Case</th>
<th>Composite Applications</th>
<th>Extended Processes</th>
<th>Business Process Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Build a new module or process not available from SAP using CE, BPM and BRM</td>
<td>Extend ERP approval process (e.g. procurement). Use BRM to implement rules (e.g. price calculation) in ERP</td>
<td>Implement BPM as part of business process re-engineering. NW &amp; ARIS deployed to support BPM Lifecycle</td>
</tr>
<tr>
<td>Primary Driver</td>
<td>Platform</td>
<td>Applications</td>
<td>Consulting</td>
</tr>
<tr>
<td>Beta Reference</td>
<td></td>
<td></td>
<td>wiki</td>
</tr>
</tbody>
</table>
SAP Enterprise Business Process Management Life Cycle - Monitor

Monitor: SAP Process Performance Management by IDS Scheer

- Measure performance of existing processes
- Visualize, document and analyze the actual performed processes
Continuous Improvement of Business Process Performance

- Transparent end-to-end processes
- Reveal cause & effect chains
- Recognize optimization potential

- Monitor Business Performance
  - Persistent, automated monitoring of performance indicators

- Analyze Business Performance
  - Dimensional Analysis of Process measures

- Analyze Structures of Processes and of Organization
  - Determine patterns in processes and organizational structures

- Establish Continuous Improvement
  - Who
  - How
  - Why
SAP Enterprise Business Process Management Life Cycle - Optimize

Optimize:
SAP Business Process Optimization by IDS Scheer

- Identify process weak points and bottlenecks
- Determine utilization of resources
- Analyze KPIs to enable sound justification of suggested process improvements
SAP Business Process Optimization by IDS Scheer

- Enhance SAP Enterprise Modeling for conceptual business process simulation and optimization
- Dynamically analyze business processes
- Use simulated KPIs to evaluate a range of alternatives
- Determine optimal procedures
SAP Enterprise Business Process Management Life Cycle

**Analyze:**

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**Run:**

SAP NetWeaver BPM
- SAP Enterprise Modeling Integration with SAP ESR
Why SAP?

**Comprehensive Solution**
- State of the art, standard based composition tool (no coding, no translation)
- Flexible and open technology foundation to effectively extend core business processes

**Lower TCO**
- Leverage best practices delivered by SAP Business Suite results in faster time to value
- Manage full process life cycle for continuous process improvement

**Lower risk**
- Standardized process notation fosters tighter alignment between business & IT
- Vibrant ecosystem of partners and community

**Proven Value**
- Customers and partners are successfully extending process automation of core business processes for fast evolving needs
- Holistic BPM approach accelerates & guides BPM adoption (methodology, certification, technology)
Thank you!

Sarah White, Solution Engineer
SAP Quality and Risk Management