Business Transformation, EA Deployment and Value Realization

Simon Carpenter
Director Strategic Initiatives
SAP South Africa (Pty) Ltd
Enterprise Architecture: Building Block Relationships
Last year, Processes were mentioned in passing as something that SOA could enable better, so why now look at them as a focal point?
Introduction – Change sets the agenda

Transforming IT

Building Business Processes

Summary
What’s happening to every facet of your enterprise?

CHANGE!!
Whatever it was that got you where you are today is not sufficient to keep you there.
<table>
<thead>
<tr>
<th>World view</th>
<th>Then</th>
<th>Now</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reach</td>
<td>Local – the warehouse</td>
<td>Global – the infinite shelf</td>
</tr>
<tr>
<td>Strategy bias</td>
<td>Growth or profits</td>
<td>Growth and profits</td>
</tr>
<tr>
<td>Pricing power</td>
<td>Business = Price Maker</td>
<td>Business = Price Takers</td>
</tr>
<tr>
<td>Business Model</td>
<td>Profit = Price - cost</td>
<td>Profit = Fixed Price - cost</td>
</tr>
<tr>
<td>Business Value</td>
<td>Physical Assets</td>
<td>I.P. &amp; Information</td>
</tr>
<tr>
<td>Customer view</td>
<td>Homogenous segments</td>
<td>Market of 1 – Mass customisation</td>
</tr>
<tr>
<td>Organisation</td>
<td>Functional</td>
<td>Process</td>
</tr>
<tr>
<td>Business climate</td>
<td>Laissez faire</td>
<td>Regulated, environmentalism</td>
</tr>
<tr>
<td>Constraints</td>
<td>Capacity &amp; equipment</td>
<td>People, change &amp; IT</td>
</tr>
<tr>
<td>Integration</td>
<td>Departments in company</td>
<td>Value chain Partners</td>
</tr>
<tr>
<td>Management</td>
<td>Hierarchical and slow</td>
<td>Collaborative, empowered fast</td>
</tr>
<tr>
<td>Management Style</td>
<td>Operational</td>
<td>Project-oriented</td>
</tr>
<tr>
<td>I.P. &amp; Knowledge</td>
<td>Corporates control content;</td>
<td>Peers co-create; “wiki &amp; blog”</td>
</tr>
<tr>
<td>Generational</td>
<td>Do the right thing &amp; wait</td>
<td>Do anything right now!</td>
</tr>
<tr>
<td>View of People</td>
<td>Employees as costs</td>
<td>Talent as assets</td>
</tr>
</tbody>
</table>
Outpacing the rate of change is all about Innovation
Innovation means the importance and “span” of processes is growing dramatically

AUTOMATION

Collaboration
Simplicity

Suppliers

Productivity

Insight and Action

Customers

Span of Processes

Traditional “ERP”

Traditional Services

Operations

Human Resources

Financials

TCO

Affordable

Rapid ROI

STANDARDIZATION
What do companies really want?

Profitable Differences

Profitable differences come from focusing on strategy, enhancing management and business practices and using technology as a tool.

Profitable differences require the ability to drive innovation & change throughout the organisation

- Business models
- Business processes
- People
- Management disciplines
- Structure & architecture
1. From “Vertical” Product-Oriented to “Horizontal” Customer-Oriented

Matrix organisation focuses on the “market of one”

Integration of the enterprise, multi-channel interaction
Business is now driving Technology architectures

2. From Enterprise to Eco-System

Collaboration for Accelerated Innovation

Automation for Agile Execution

Ecosystem

Organization

Customer
Business is now driving Technology architectures

3. From Transactional to Interaction-Based Work

Empowered Workforce
Collaboration for Accelerated Innovation
Automation for Agile Execution

Ecosystem
Organization
Customer
Business is now driving Technology architectures

4. From Industrial to Knowledge Society

- Ecosystem
  - Empowered Workforce
  - Collaboration for Accelerated Innovation
  - Automation for Agile Execution

- Organization
- Customer

Performance Management & GRC

© SAP AG 2007, OA EA Conf’, March ’07, S. Carpenter / 14
“Today organic growth is absolutely the biggest task. I want imagination breakthroughs….I want game changers….If we don’t hit our organic revenue targets people are not going to get paid. We are just a moment away from commodity hell”

Jeff Immelt, CEO. General Electric. 2004
Introduction – Change sets the agenda

Transforming IT

Building Business Processes

Summary
Rapid differentiation through new business processes is key, but …
Different jobs need to get done – IT needs to enable all of them

Business Customers do not really buy “Products” from vendors or their IT shops......
They Hire Them to Get a Job Done – to provide utility.

Business Owners

“We’ll manage your tools, so you can manage your business.”

- Turn industry change into opportunity
- Manage business complexity
  - Stay compliant
  - Reduce risk

End User

“Just buy the air you need.”

- Information the way I want it
  - Personalized access
  - Faster, better decision support

IT

- Lower cost of IT
- Change at the speed of business
- Build the platform for the future
Needed: An architectural approach and tools that enable proactive change of business processes

Emerging Business Process platforms will enable rapid (re)composition of services into new business models and processes while simultaneously reducing costs through standardisation and reuse.

Courtesy to G. Moore’s “Living on the fault line”
Service-Oriented Architectures (SOA) Deliver Required Flexibility

**IT Industry is pushing and enterprise customers are adopting service-oriented architecture (SOA) as a way to break through the “efficiency-flexibility barrier”**

- Superior **recomposition capabilities** and greater **flexibility** through extraction of business process logic from underlying applications
- Built on **open standards** (e.g., XML, WSDL)
- Widespread adoption driven by strong push from major vendors (e.g., IBM, Microsoft, SAP)
- Expected shift from data-centric to **process-centric enterprise computing**
Composition of Processes

**Speed:** Shorter time to volume

**Efficiency:** Systematic re-use across solutions

**Quality:** Unprecedented level of quality and scalability

69% of the parts are the same

>50% of the processes are the same
From Application Silos to a Business Process Platform
An SOA based Business Process Platform helps IT Create Value for its Customers...

Empowerment/
Real-Time Visibility  
+
Differentiation/
Business Innovation  
+
Productivity/
Business Integrity  
=  
Competitive Advantage
SOA: Provides the Blueprint for Business & IT Flexibility to ...

... compose Custom ...

... deploy Best-of Industry ...

Differentiation through Business Process Innovation

Productivity through Business Process Consolidation & Standardization
It's not just a technology issue; we must also recognise the soft issues...Innovators & Operators

Build

Custom development

People who are:
• Innovative
• Change oriented
• Entrepreneurial

Buy

Packaged applications

People who are:
• Operational
• Procedural
• Efficient
SOA; time to start reorganizing the IT shop to drive transformation

Break the Silos, Build New Horizontal Skills Centers

Enterprise Architects

“Disruptivators”

Composers (BPXs)

Repository Keepers

Platform Consolidators

Home Grown / ISV
SAP
Process Components
Subsidiary
Bus Partner

© SAP AG 2007, OA EA Conf, March ‘07, S. Carpenter / 26
Personas in Business Process Management

**IN THE PAST**
Bottleneck between business and IT is a barrier to business agility

**TODAY**
Enterprise Architect *enables* FLEXIBILITY with adoption of Enterprise SOA

**IMPORTANT GROWING ROLE**
Business Process eXpert increases THROUGHPUT for greater business agility
Introduction – Change sets the agenda

Transforming IT

Building Business Processes

Summary
How do we promote business process innovation while getting the most out of the business applications and technology our customers already own?

The Answer...

Composition with Services enabled software
How do we use Services to promote Business Innovation?

Create composite applications.

Combine the right parts of existing applications to initiate new business processes & practices without having to start from scratch.
Composite Applications

Definition
Highly **dynamic and adaptable** applications, that automate **business scenarios** and/or **user specific processes spanning multiple functional areas**, and are **assembled** using **reusable services** from existing packaged and custom built applications.

Technical Characteristics
- Model-driven Architecture
- Web-services as building blocks content
- ESA Content lifecycle (contracts)
- Loosely coupled with backend systems allowing independent evolution of composed services
- Backend independency
- Not a system of record for any business data
- Assembly through modeling versus coding intensive
- Easy to adopt & configure
Collaborative Procedural Model for Enterprise Architects and Business Process Experts

Discover
- Produce business segment Matrix
- Determine key success factors
- Produce IT practice matrix
- Determine key success factors
- Determine end-to-end scenarios
- Perform Enterprise Analysis
- Perform IT Architecture Analysis
- Define Business Case

Evaluate
- Execute as-is (requirement) analysis
- Determine to-be processes
- Design to-be processes
- Determine meta data concept
- Determine system infrastructure concept
- Determine Data warehouse concept
- Perform Test And Validation
- Go Live Management
- Model
- Configure
- Deploy
- Plan System Infrastructure
- Implement System Scenarios
- Model
- Configure
- Deploy

Implement
- Perform Enterprise Analysis
- Determine to-be processes
- Design to-be processes
- Plan System Infrastructure
- Implement System Scenarios
- Go Live Management
- Business Case
- Blueprint
- Live Platform
- Improvement Strategy

Operate
- Monitor business performance
- Monitor solution performance
- Monitor organizational performance
- Monitor service-level agreements
- Monitor business events & efficiency
- Verify cost benefit calculation
- Trigger corrective actions
- Business Case
- Blueprint
- Live Platform
- Improvement Strategy

BPX TASKS
What is needed
Process Composition on Top of a BPP

Process Engineer (the BPX)
- Processes: capture high-level processes in graphical process models
- Map information access steps to services
- ‘Implement’ user interaction steps as views

Services Developer
- Model or implement service/ data adaptation
- Orchestrate Services
- Filtering of Events
- Event binding to services
A typical Composition Environment: Service Provisioning, Composition, and User Productivity

User

Various experiences & rendering technologies

Business Process eXpert

Guided procedures
Work Center

Model
UI Composites

Orchestrate
Process Composites
Business Process Models

Visual Composer (CAF)

Construct
Information Composites
BI reports, analytics, MDM
Adobe forms, CM, text search

Developer/ Programmer

Reuse
Process Components

Service Creation & Composition
Composite Application Framework (CAF)

Enterprise Services Repository

Create
Software Components
Programs (Code)
.NET, ABAP, Java

SAP
Other Sources

SAP AG 2007, OA EA Conf', March '07, S. Carpenter / 34
Process Composition; Putting Services to Work

Services – Encapsulating Business & IT Semantics

Order Entry | Validation | Batch Mgmt | Warehouse Mgmt | Invoice | Manage A/R | Reporting

- Order Management
- Validation Check
- Order Processing
- Transportation & Delivery Services
- Invoice
- Financial Supply Chain Mgmt Service
- Controlling

Order-to-Cash Process

B2B Clearing

3rd Party

ERP | CRM | CRM Legacy | Global Trade System | Barcode Labelling System | External Credit Validation | Warehouse mgmt. | Financial Perf. Mgmt. | Spreadsheets | Applications

Business Process Platform
Introduction – Change sets the agenda

Transforming IT

Building Business Processes

Summary
Want to find out more, interact with your peers?

A Community for Business Process Experts

~50,000 BPX members
By 2010, widespread industry trends will transform many of today’s hard-wired value chains into flexible, adaptive business networks.

Industry Trends:

- Continued Globalization
- Consolidation and Specialization
- Business Model Innovation

Corporate governance effectiveness becoming key brand differentiator
Retaining and empowering employees an increasing challenge

Source: Economist Intelligence Unit survey – Business in 2010
Services, Business Process Platform & Composition enable Innovation

Turn your IT into an enabler of business flexibility

- Custom built or composed
- “Next practice” processes
- Business innovation
- Business integrity
- “Best practice” processes
- Packaged solutions

© SAP AG 2007, OA EA Conf’ March ’07, S. Carpenter / 39
At last you will be able to spend less on “keeping the lights on” and more on getting new things done.
Thank you

Business Transformation, EA Deployment and Value Realization

Simon Carpenter
Director Strategic Initiatives
SAP South Africa (Pty) Ltd