Changing the conversation from “The Cost of Enterprise Architecture” to “The Value Realisation of Enterprise Architecture”

Alvin L. Paules, Chief Technology Architect
SAP South Africa

June 4, 2008
Emperor’s Palace, Johannesburg
Slide 6: please replace graphic on right with edited version on slide 7.
Slide 9: please replace graphic on right with edited version on slide 10.
Slide 15: please replace graphic on right with edited version on slide 16.
Slide 18: please replace graphic on right with edited version on slide 19.
Slide 21: please replace graphic on right with edited version on slide 22.
Slide 23: please replace graphic on right with edited version on slide 24.

Jason, 20/03/2008
1. Situations & Typical Problems experienced with Justifying Enterprise Architecture
2. An Opinion on South Africa relative to Work being done around the world
3. Clarifying the Role of Enterprise Architecture in your Organisation
4. Integrating Enterprise Architecture with Business Strategy
   - Drivers & Levers
   - Models for Value Realisation from Enterprise Architecture
5. A Sample model
6. Summary
Agenda

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What’s the difference between EA and Enterprise SOA?

When an organization is considering Enterprise SOA, either there is already an EA in place or there is a need to develop one...

Enterprise Architecture

The description of the current and future state of an organization's business processes, technology platforms and information systems required to support the business strategy.

Enterprise SOA

An application pattern that provides new technology and business capability within the boundaries set out by Enterprise Architecture.
I have met The Enemy and IT IS US!

1. Where are we Going?
2. What is the Business model?
3. How will we get there?
4. What is the enabling Platform?
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Wisdom of the Crowd

21 Value concepts

148 documented projects

180+ central reviews

230+ decentral reviews

380+ pipeline

Across all Industries
Good Spread across all industries with a small accumulation in discrete and process industries

Across the Ecosystem
40+ System Integrators
30+ Partner solutions
80% use SAP and non SAP applications in concert

Across the globe
Deployment of enterprise SOA is happening across the globe with Europe leading

Across all Process
Customers innovate for competitive advantages in key processes.
Lessons Learned from Enterprise Architecture / SOA Showcases and References

4 Key Themes

Establish real-time business networks by leveraging the connectivity of Web services in self-services and cross-company composition.

Modernize their landscapes by applying new system consolidation strategies, transitioning to new technologies in a staged and future-proof way, and establishing their Internet of things.

Extreme simplification of the appearance of IT through UI and process individualization, provisioning of holistic data, self-services, and multimedia access to IT.

Apply individual adoption strategies ranging from establishing target architectures, automation, and event-driven processes to sequential innovation and avoidance of modification.
<table>
<thead>
<tr>
<th>IVN</th>
<th>Focus Areas</th>
<th>Partners</th>
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<tbody>
<tr>
<td>Chemicals</td>
<td>- Intellectual Property Management</td>
<td>- vendavo</td>
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<tr>
<td></td>
<td>- Process &amp; Asset Optimization</td>
<td>- pavilion</td>
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<td>- Price &amp; Performance Management</td>
<td>- IBM</td>
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<td>- Compliance Management</td>
<td>- SmartOps</td>
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<td>- <strong>Intellectual Property Management</strong></td>
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<td>- <strong>Supply Chain Planning &amp; Execution</strong></td>
<td>- OR Soft</td>
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<td>- Manufacturing Planning &amp; Execution</td>
<td>- accenture</td>
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<td>- Sales &amp; Marketing</td>
<td>- Wipro</td>
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<td>- Food &amp; Safety Compliance</td>
<td>- smartops</td>
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<tr>
<td></td>
<td>- <strong>Industry-specific Food &amp; Bev. Solutions</strong></td>
<td>- 35 members including banks, ISVs and SIs</td>
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<tr>
<td></td>
<td>- <strong>Manufacturing Planning &amp; Execution</strong></td>
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The Role of EA is based on Maturity i.e. Business & IT

- Business Silo’s
- Standardised Technology
- Optimized Core
- Business Modularity
Success of Semantics at a Customer with Mature EA & SOA

The maturity stages

- Initially characterized by roles: technical architects → business architects → community of architects
- Then deployment of a true semantics approach

Financial success at customer

- Measured through a metric approved by the CFO
- Savings grew over time from US$15 to $35 and to $50 million per annum
- Savings propelled to $140 million per annum through semantics

(Semantics = Common meaning – The principles that determine the truth values of the formulas in a logical system)
## Large High Tech Company (ASUG 2007 PPT)
### Enterprise Architecture Evolution

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>2003</td>
<td>Company EA efforts launched</td>
</tr>
<tr>
<td></td>
<td>Chief Architects assigned to data, applications, and technical domains</td>
</tr>
<tr>
<td></td>
<td>Application architecture broken out to include solution architecture</td>
</tr>
<tr>
<td></td>
<td>Centralize all Data</td>
</tr>
<tr>
<td></td>
<td>Analysts Tackled EA Data problem</td>
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<tr>
<td></td>
<td>EA Data model with Data quality</td>
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<tr>
<td></td>
<td>~$15M in reuse</td>
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<table>
<thead>
<tr>
<th>Year</th>
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<tbody>
<tr>
<td>2004</td>
<td>Chief Business Architect and Business architecture group added</td>
</tr>
<tr>
<td></td>
<td>Enterprise broken into 7 solution domains</td>
</tr>
<tr>
<td></td>
<td>Solution principles and project architecture compliance scorecards established</td>
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<td></td>
<td>Industry recognized for meta data solution</td>
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<td></td>
<td>Bluebook published</td>
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<td>~$35M in reuse</td>
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<tbody>
<tr>
<td>2005</td>
<td>Architecture discipline unified as EA Practice</td>
</tr>
<tr>
<td></td>
<td>Enterprise Architecture extends to IT (traditional)</td>
</tr>
<tr>
<td></td>
<td>EA training extended across IT</td>
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<tr>
<td></td>
<td>Business Modeling training</td>
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<tr>
<td></td>
<td>Domain reference architecture published</td>
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<tr>
<td></td>
<td>Business domain specific future state architectures developed</td>
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<tr>
<td></td>
<td>~$50M in reuse</td>
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<tr>
<td>2006</td>
<td>Enterprise Architecture Principles and policies published</td>
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<tr>
<td></td>
<td>Building codes published</td>
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<tr>
<td></td>
<td>Governance Process revamped</td>
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<td></td>
<td>Business and Data cross alignment and training</td>
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<td></td>
<td>Adopt a common Intel Architecture development methodology (IADM)</td>
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<tr>
<td></td>
<td>Combine innovation and research with the Enterprise Architecture practice</td>
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Strategic Drivers

- Growth
- Differentiation
- Efficiency
- Compliance
Strategic Drivers

- **Growth**
  - Organic Growth
  - Enter New markets
  - M & A

- **Differentiation**
  - Product Leadership
  - Price Leadership
  - Customer Intimacy
  - Business Model Transformation

- **Efficiency**
  - Cost Containment

- **Compliance**
Levers

- Standardisation
- Consolidation
- Product Innovation
- Process Innovation
- Channel Innovation
- Network Relationships
Driven by Tools such as Porter’s Five Force Analysis
A Company has a strategy based on Organic Growth via Product Leadership, Customer Intimacy, Process Innovation and Business Network Transformation

<table>
<thead>
<tr>
<th>Levers</th>
<th>Supplier</th>
<th>Customer</th>
<th>Competitor</th>
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<tbody>
<tr>
<td>Standardisation</td>
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<tr>
<td>Consolidation</td>
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<tr>
<td>Product Innovation</td>
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<tr>
<td>Process Innovation</td>
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<tr>
<td>Channel Innovation</td>
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</tr>
<tr>
<td>Network Relationships</td>
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<td>√</td>
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</table>
Real-Time Business Networks Help Outpace the Competition

Exploiting the connectivity of Web services

- Connectivity is available at low cost, even when accessing thousands of destinations and machines
- Connectivity is required in a nonproprietary and interoperable standard
- Support of security concepts is required when crossing firewalls

Customers compete through instant processes

- Change processes from data collection and redistribution to real-time access of decentralized IT (→ report-based, batch input, and so on)
- Foster collaboration by ensuring service levels while granting more process freedom

From Product Vendor to Solution Provider

Endress + Hauser (IM&C Industry)

Enterprise SOA enables extension of the value chain

Aftermarket Service Opportunity

- Increase customer loyalty
- New revenue streams
- Innovative solution offering

Enterprise SOA Value Delivered

- WM@M - Web-enabled asset management of E+H and 3rd party devices
- Keystone of E+H Strategy 2011+ to become a true solution provider
- <20% internal cost reduction for interface development through standardized architecture
- Flexible deployment options – out-tasked, customer portal, SAP composite application
From Product Vendor to Solution Provider
Endress + Hauser (IM&C Industry)

Change in IM&C
- Product commoditization
- IP and parts piracy threat
- Decreased customer loyalty in the industry

Aftermarket service opportunity
- Increase customer loyalty
- New revenue streams
- Innovative solution offering

Enterprise SOA enables extension of the value chain

Enterprise SOA value delivered
- W@M: Web-enabled asset management of E+H and third-party devices
- Keystone of E+H strategy 2011 and beyond: to become a true solution provider
- ~20% internal cost reduction for interface development through standardized architecture
- Flexible deployment options – out-tasked, customer portal, and composite applications from SAP
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Key Principle for EA & E-SOA Organisational Alignment & Readiness

- Account for Business Benefits
- Cumulative
- Your Business CFO Language
- Conversation about Realisation & Timing
- Value Modularity
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Summary

1. Situations & Typical Problems experienced with Justifying Enterprise Architecture
   We get too technical too soon – CFO demotes us to “Computer Mechanics”

2. Where are we in SA relative to the rest of the world?
   We have lots of work ahead of us – Within our organisations but also across our value-chains – Business Network Transformation

3. Clarifying the Role of Enterprise Architecture in your Organisation
   Alignment based on a jointly understood Maturity Model

4. Integrating Enterprise Architecture with Business Strategy
   - Drivers & Levers
   - Models for Value Realisation from Enterprise Architecture
   - Your unique Business-Architecture Value model
   - Follow the Money to get the quick wins

At the end of the day it comes down to “Relationships” & Conversations.
Questions

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