SOA Governance und wie ein SOA Registry/Repository Ordnung bringt

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Drivers for SOA adoption

- **Business Goals for SOA Projects**
  - Increase business agility
  - Regulatory compliance

- **IT Goals for SOA Projects**
  - Re-use of applications and legacy systems
  - Reduction in the cost of integration

- Adaptive Enterprises need flexible processes
- Agile IT is key to achieve flexibility and adaptability
- IT needs to leverage the existing infrastructure
SOA Implementation challenges

1. Expose legacy apps as services
2. Provide appropriate security
3. Complexity of integrating services
4. Modelling business requirements
5. Manage services metadata

Source: IDC presentation 2006 by Rob Hailstone: “Service Oriented Architecture Status & perceptions - & the questions they raise”
The SOA concept

Order Management → Manage Claims → Make to Stock → Loan Approval → Make to Order

Customer Data  CRM  ERP  Orders  Logistics
The SOA concept

Composite Apps
Business Processes

Retrieve Data  Verify Details
Order Entry  Order Review
Approve Order  Initiate Shipment

Order Management

Customer Data  CRM  ERP  Orders  Logistics

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The SOA concept

Composite Apps

Business Processes

Order Management

Business Service Orchestration

Customer Information

Order Management

Order Compensation

Legacy Integration

Customer Data

Customer Interaction

Order History

Order Policy

Shipment

Customer Data

CRM

ERP

Orders

Logistics

Retrieve Data

Verify Details

Order Entry

Order Review

Approve Order

Initiate Shipment

The SOA concept
SOA Management and Governance

Retrieve Data > Verify Details
Order Entry > Order Review
Approve Order > Initiate Shipment

Customer Information
Order Management
Order Compensation

Customer Data
Customer Interaction
Order History
Order Policy
Shipment

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Translating Legacy Systems into Services is fine ...

- Packaged Applications are componentized
- Complex systems are broken into service pieces
- Modules are being connected according to business needs
BUT ... There exists Problems

Where is my Application?

Unmanaged SOA is too complex!
SOA Management and Governance

- Describe SOA components
- Define Service Level Agreements
- Run reports on the usage of services
- Analyse the impact of change
- Find and retrieve all SOA assets
- Reuse existing functionality
- Create new business processes and composite application
Looking at Yellow Pages as a Services Registry?

Looking for a Service?

People often don’t use Yellow Pages unless

They don’t have any friends

They are desperate

Find it in here?
SOA Management and Governance – is more ...

- Trust
- Transparency
- Control
- Analysis
- Statistics
Service Management in a Registry / Repository

What services exist?
Provisioning and billing?
Most used services?
Unused services?
Who is using them?
How do I access them?
Who owns them?
What about quality?
Service Management

What services exist?

Who is using them?

How do I access them?

Who owns them?

What about quality?

Unused services?

Most used services?

Provisioning and billing?

1. Establish a central services repository
2. Assess existing services
3. Categorize services
4. Integrate usage of a service repository into IT practices
Service Management

What services exist?

Who is using them?

How do I access them?

Who owns them?

What about quality?

Unused services?

Most used services?

Provisioning and billing?

1. Detect service consumers at run-time
2. Enforce contracts between consumers and providers
3. Define relationships in a repository
4. Integrate repository with the development tools
5. **Visualize service consumers, providers and relationships**
Service Management

What services exist?
Who is using them?
How do I access them?
Who owns them?
What about quality?
Unused services?
Most used services?
Provisioning and billing?

1. Define policies for security, QoS
2. Utilize addressing description to decouple transport
3. Establish a multi-protocol service bus
4. Document the access patterns in a repository
Service Management

What services exist?
Who is using them?
How do I access them?
Who owns them?
What about quality?
Unused services?
Most used services?
Provisioning and billing?

1. Define technical owner
2. Define business owner
3. Define relationships in a repository
4. Enhance information of owners to increase trust
Service Management

What services exist?
Who is using them?
How do I access them?
Who owns them?

What about quality?
Unused services?
Most used services?
Provisioning and billing?

1. Design course granular services using a domain model
2. Measure design time usage
3. Measure run time usage
4. Combine metrics and visualize them
## Service Management

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
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<tbody>
<tr>
<td>What services exist?</td>
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</tbody>
</table>

### Unused services?

1. Use design-time and run-time information to find unused services
2. Establish a life-cycle process to deprecate and delete services
3. Validate impact of deprecation and deletion
4. **Remove unused services**
Service Management

1. Use design-time and run-time information to find most used services
2. Review the most used services
3. Establish best-practices learned from most used services
4. Increase your visibility by promoting most used services

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Service Management

What services exist?
Who is using them?
How do I access them?
Who owns them?
What about quality?
Unused services?
Most used services?

Provisioning and billing

1. Analyze the run-time usage of services
2. Establish contract based service billing
3. Optimize the service cost based on statistical data
4. Promote the value of your services
Closing the gap between IT and business

Business Analysts and Developers work together on
- a common standards-based foundation
- models to share requirements
- artifacts of the right granularity to understand each other
- incremental development
SOA with crossvision success integrated

Operation Flow:
- Retrieve
- Verify
- Order
- Order
- Approve
- Initiate Shipment

Key Features:
- Customer Data
- Customer Interaction
- Order History
- Order Policy
- Shipment

Data Sources:
- Customer Data
- CRM
- ERP
- Orders
- Logistics

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