

# SOA Reuse Governance

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Take Credit Code: REGOV

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## Level Set – What is SOA?

- SOA is *architecture* – a set of best practices for the organization and use of IT
- Abstracts software functionality as loosely-coupled, business-oriented *Services*
- Services can be composed into *business processes* (which are also *Services*) in a declarative manner
- As fundamental a change as mainframe to client/server or client/server to the Internet



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## The Benefits of SOA...

- ✓ Reduced cost of integration
- ✓ Improved value from legacy applications
- ✓ Reuse leading to reduced redundancy
- ✓ Greater visibility for governance & compliance
- ✓ Increased reuse of software assets
- ✓ Business agility



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## SOA Challenges



***The primary challenges are  
human, not technical!***

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## Challenge: Inertia in the Organization



- Architecture doesn't have features and business executives pay for features!
- Moving to SOA means breaking down silos and sharing resources
- The technology change is easy – it's the human change that's the hard part!

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## Challenge: People, Change and Fear

- People are inherently resistant to change
- People consider job security, authority and responsibility when asked to share
- Fear is the strongest emotion of all!



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## Challenge: Reuse = Sharing



*We all learned to share in kindergarten...  
But by the time we get to the working world, we  
forget how!*

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## Challenge: Empowering Users

- Ideally, SOA puts greater power into the hands of business users
- IT management reluctant to cede control



*How to empower users while  
maintaining sufficient control?*

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## Flexibility, Empowerment & Control

- The old way: IT management maintains control, doles out limited capabilities to users
- The Service-Oriented way: IT empowers a wide range of business users to build and manage SOBAs
- Risk: business users will really muck things up!
- Solution: SOA governance – business user empowerment in the context of policy-based control



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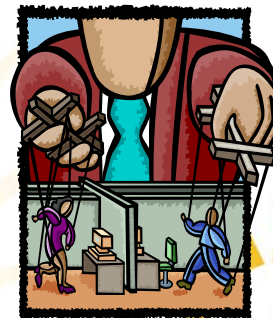
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## Challenge: SOA Governance

- Establishing and communicating the policies that employees must follow
- Giving employees the tools they need to be compliant with those policies
- Providing visibility into the levels of compliance in the organization
- Mitigating any deviations from established policy



***Not just governance of SOA...  
governance in the context of SOA***

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## How to Tackle Governance?

- Communication
- Training
- Human management
- Knowledge management
- Automation

***IT can at best only help with part  
of the governance process***

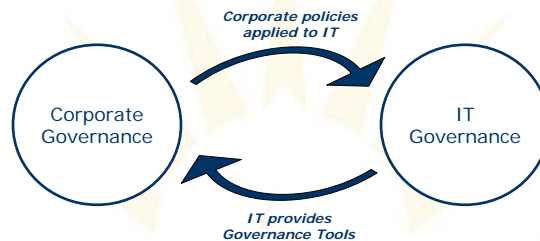
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## Governance Relationships (Part 1)



- IT serves dual governance role
  - Corporate policies must apply to IT
  - IT provides policy automation and knowledge management tooling to the corporation

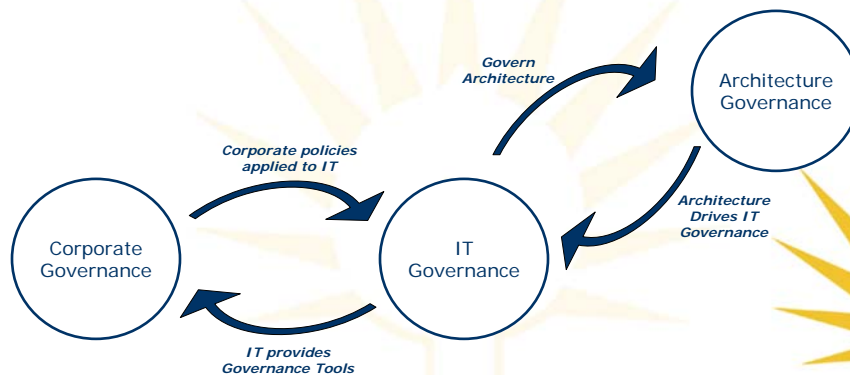
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## Governance Relationships Part 2



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## SOA Governance "in the Narrow"

- Governance of SOA initiative
- Design time governance
  - Are developers and other personnel following the policies that apply to Services?
- Runtime governance
  - Are running Services and SOBAs conforming to runtime policies?

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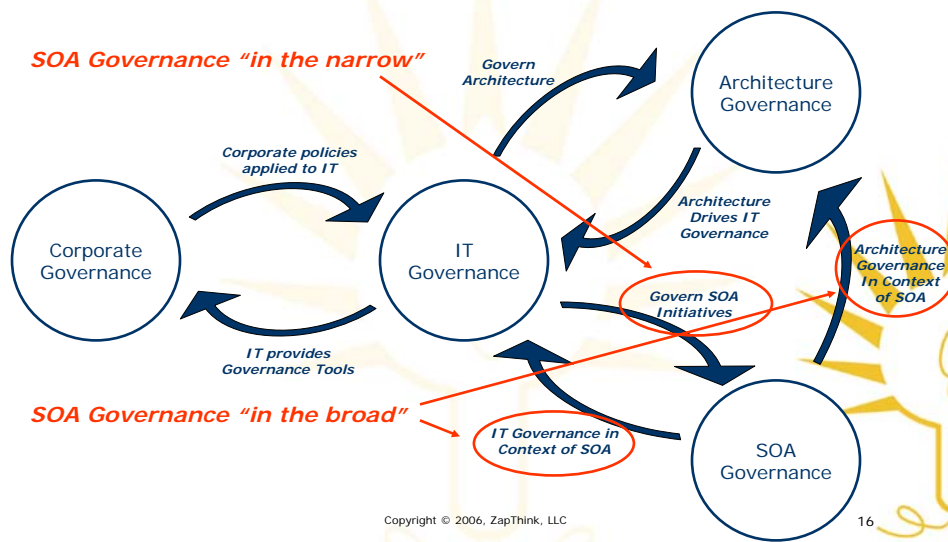
# SOA Governance "in the Broad"

- Policy management
  - SOA configured & controlled via metadata, including policy
- Visibility
  - Services abstract heterogeneous data sources, providing necessary business intelligence
- Flexibility
  - Ability to build Services that address compliance issues and adjust them as regulations or business needs change

**Not just governance of SOA...  
governance in the context of SOA**



# Governance Relationships





## Part 1: Policy Management



- *Who* is responsible for creating policies?
- *Which* policies are within scope?
- *How* will they create and communicate those policies?
- *How* will policies be represented?
- *How* will policies be discovered?
- *What* tools will people use to follow policies?
- *How* will management get visibility into policy compliance?
- *How* will mitigation issues be addressed?

## Part 2: Visibility



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## In Depth: Visibility

- Visibility into data
- Visibility into business processes
- Visibility into levels of compliance



***Does your executive management  
have the visibility they need today?***

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## Visibility, Risk & Control

- Effective managers must delegate responsibility, yet maintain control
- “Micromanagement” rarely effective, doesn’t scale
- IT both a curse and a blessing
- The emergence of the Chief Risk Officer (more senior than the CIO in many cases!)
- SOA → greater visibility → greater *control*



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## SOA Governance

### Part 3: Flexibility



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## SOA Reuse Governance

- Reuse only important in practice
- Planning for reuse pointless without actual reuse!
- Developers would prefer to build anew
- Application assembly a new pattern
- Reuse governance covers:
  - Finding Services
  - Understanding Services
  - Composing Services
  - Publishing the resulting compositions



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## Planning for Reuse

- Process decomposition → areas of redundancy
- Business requirements for visibility & efficiency → areas of data/functionality overlap
- Legacy modernization → refactoring of current functionality



**Governance of reuse should be in governance framework**

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## Code Reuse vs. Service Reuse

- Reuse the old way: code reuse
  - Reusable code libraries and subroutines date back to the earliest days of computing – the “Holy Grail” of programming
  - Every developer wants to make changes, branching the code base, reducing reusability
  - Hard to write reusable code, as requirements are never clear
- Reuse the new way: Service reuse
  - Reuse at runtime based upon contracted functionality
  - Loose coupling leads to flexible reuse
  - Appropriate governance essential!



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## Conclusions

- The greatest challenges with SOA are human, not technical
- SOA governance is critical – not just governance of your SOA initiative, but governance in the context of SOA
- Service reuse key benefit of SOA, but requires ongoing governance



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Thank You!



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Read our new book, *Service Orient or Be Doomed! How Service Orientation Will Change Your Business.*



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