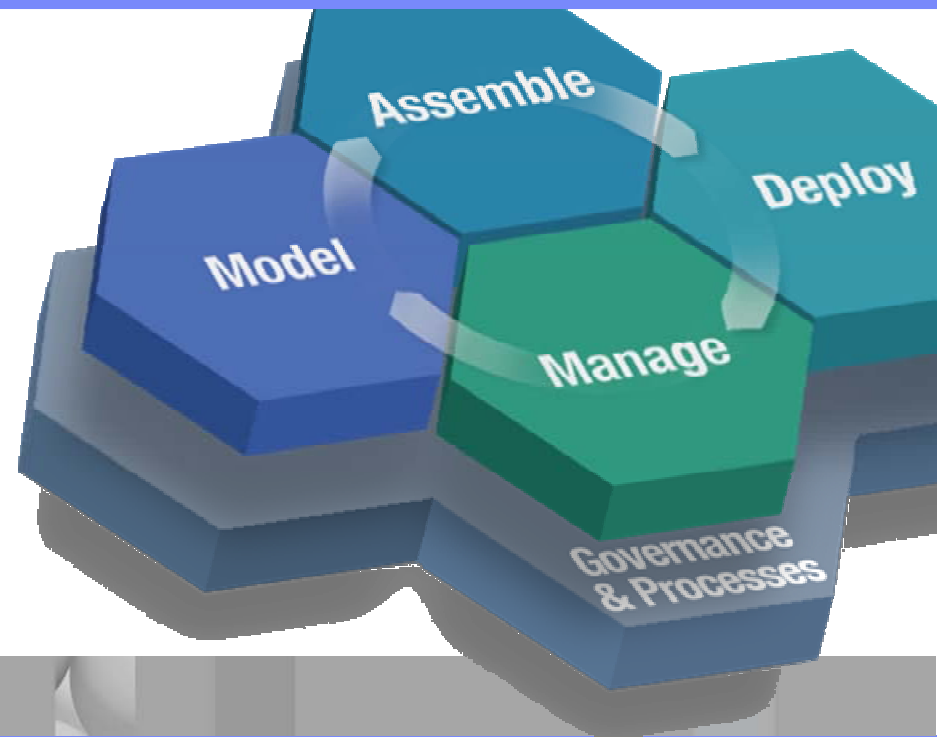




IBM Software Group

# Effective SOA Governance

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## Topics to be Covered

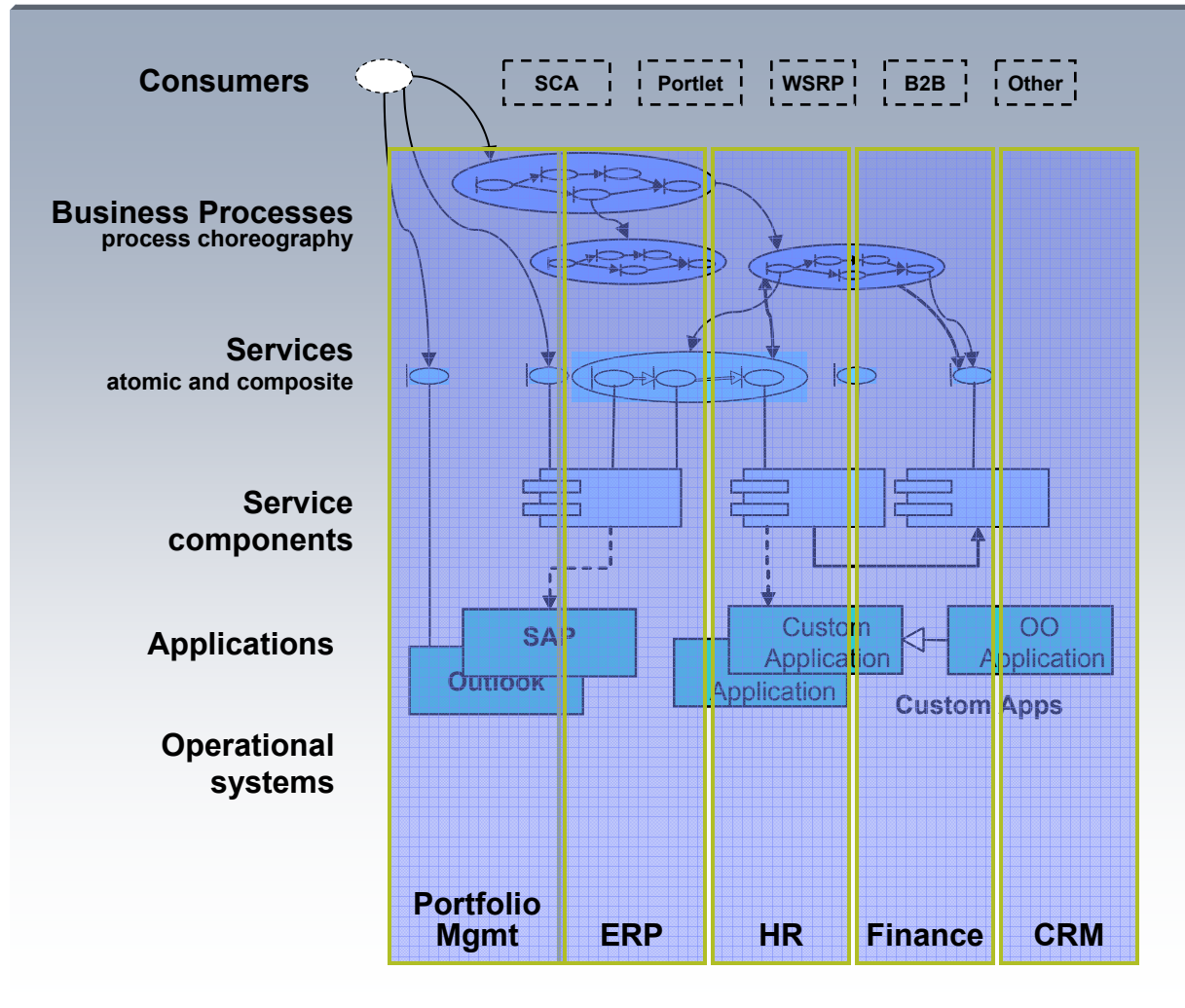
- 1: SOA and SOA Governance Value Proposition
- 2: SOA Governance Definition
- 3: IBM SOA Governance and Management Method
- 4: Service Lifecycle Governance
- 5: Open Group SOA Governance Activities



# Topic 1: SOA and SOA Governance Value Proposition



# Why SOA Governance Matters



- SOA characteristics of loose-coupling, reuse and extensibility are the basis for creating an agile business environment for competitive advantage.
- This agility can only be attained when each line of business maintains their service entities and is reasonably assured that other lines of business are doing the same with the services under their purview.
- This assurance can only be realized through SOA Governance.

## What Analysts Are Saying about SOA Governance Value

***“Half of all companies and 77% of large enterprises reported that they are or will be using SOA by the end of 2005. Why? Evidence is mounting that SOA provides real benefits for business integration and flexibility.”***

*Real-World SOA: SOA Platform Case Studies, Forrester Research, Inc., September 2005*

**CIOs continue to struggle to align business and IT in meaningful, measurable ways. More effective IT governance processes and tools are becoming top priorities among business-savvy CIOs.**

*Five Ways the Rise of IT Governance Will Change How Enterprises Buy IT, Summit Strategies, December 2005*

**In 2006, lack of working governance mechanisms in midsize-to-large (greater than 50 services) post-pilot SOA projects will be the most common reason for project failure (0.8 probability).**

*Management Update: Predicts 2006: The Strategic Impact of SOA Broadens, Gartner, Inc., Jess Thompson, Yefim V. Natis, Massimo Pezzini, Paolo Malinverno, November 23, 2005*

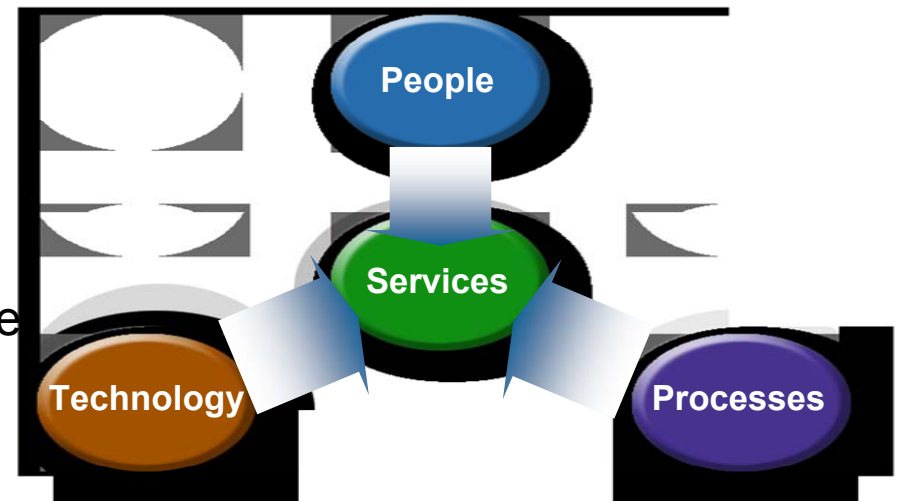
**With the widespread adoption of SOA, the challenges associated with SOA projects are emerging. SOA governance isn't optional — it's imperative. Without it, return on investment will be low and every SOA project out of pilot phase will be at risk.**

*Service-Oriented Architecture Craves Governance, Gartner, Inc., Paolo Malinverno, January 20, 2006*



# Principles for SOA Success

- **Organizing business functionality into shareable services** that meet the needs of the business
- **Breaking down silos and unlocking the value of legacy systems** while making software less brittle.
- Cross functional nature of SOA requires improving the **alignment between business and IT**
- Enabling organizations to achieve the desired goals and promises of SOA requires an interlock between **People, Process and Technology**.
- SOA governance is a means to facilitate the dialog and interactions between business and IT



## SOA Governance – Success criteria

- Effectively, governance is “*the set of rules, practices, roles, responsibilities and agreements – whether formal or informal – that organize how we do work*”
  
- Good governance is all about *transparency*
  
- SOA requires additional governance over standard IT governance because of:
  - ▶ **Change:** SOA introduces new technologies, roles and responsibilities
  - ▶ **More Change:** SOA requires new patterns of thought – taking an organization-wide viewpoint rather than an application, line of business (LOB) or project viewpoint for example
  
- SOA governance is the mechanism by which we first create the SOA vision and then control the implementation of that vision.
  
- SOA governance should work for both holistic IT decisions and one service at a time



## Topic 2: SOA Governance Definition





# What is Governance?

Governance is the establishment of:

**Chains of responsibility** to empower people

- **Measurement** to gauge effectiveness
- **Policies** to guide the organization to meet their goals
- **Control mechanisms** to ensure compliance
- **Communication** to keep all required parties informed

Governance components are established by:

- Assessing the need for them within an organization
- Defining them so they are embraced and accepted
- Implementing and enabling them with the help of tools
- Measuring them to metrics that reinforce initial goals



# What is SOA Governance?

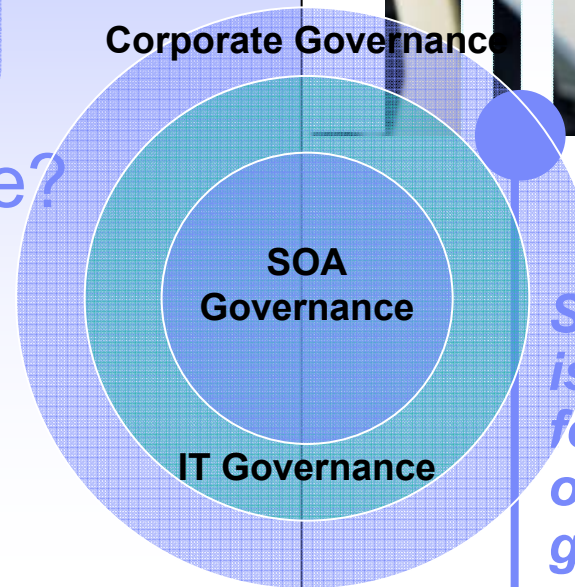
It's all part of Corporate Governance

## What is IT governance?

IT Governance includes the decision rights, accountability framework and processes, to encourage desirable behavior in the use of IT.

## What is SOA governance?

Focus on governing the **service lifecycle**, supporting service infrastructure and compliance with the service oriented architecture of the organization



*SOA Governance is a catalyst for improving overall IT governance*



## Open Group SOA Governance definition

- SOA Governance is the application of Enterprise Architecture, IT & Corporate Governance to Service Oriented Architecture
  - ▶ SOA Governance processes focus on governing the service lifecycle, supporting service infrastructure and compliance with the service oriented architecture of the organization
  
- Architecture governance is the practice and orientation by which enterprise architectures and other architectures are managed and controlled at an enterprise-wide level.
  - Source: (TOGAF 8.1.1)
- IT Governance includes the decision rights, accountability framework and processes, to encourage desirable behavior in the use of IT.
  - Source: (based on CobiT4.0)
- Corporate Governance is the set of processes, customs, policies, laws and institutions affecting the way a corporation is directed, administered or controlled.
  - Source: (WikiPedia based on OECD Principles of Corporate Governance)



# SOA Governance Landscape

## Corporate Governance

(example: OECD Corporate Governance Principles)

## IT Governance

(example: CobiT)

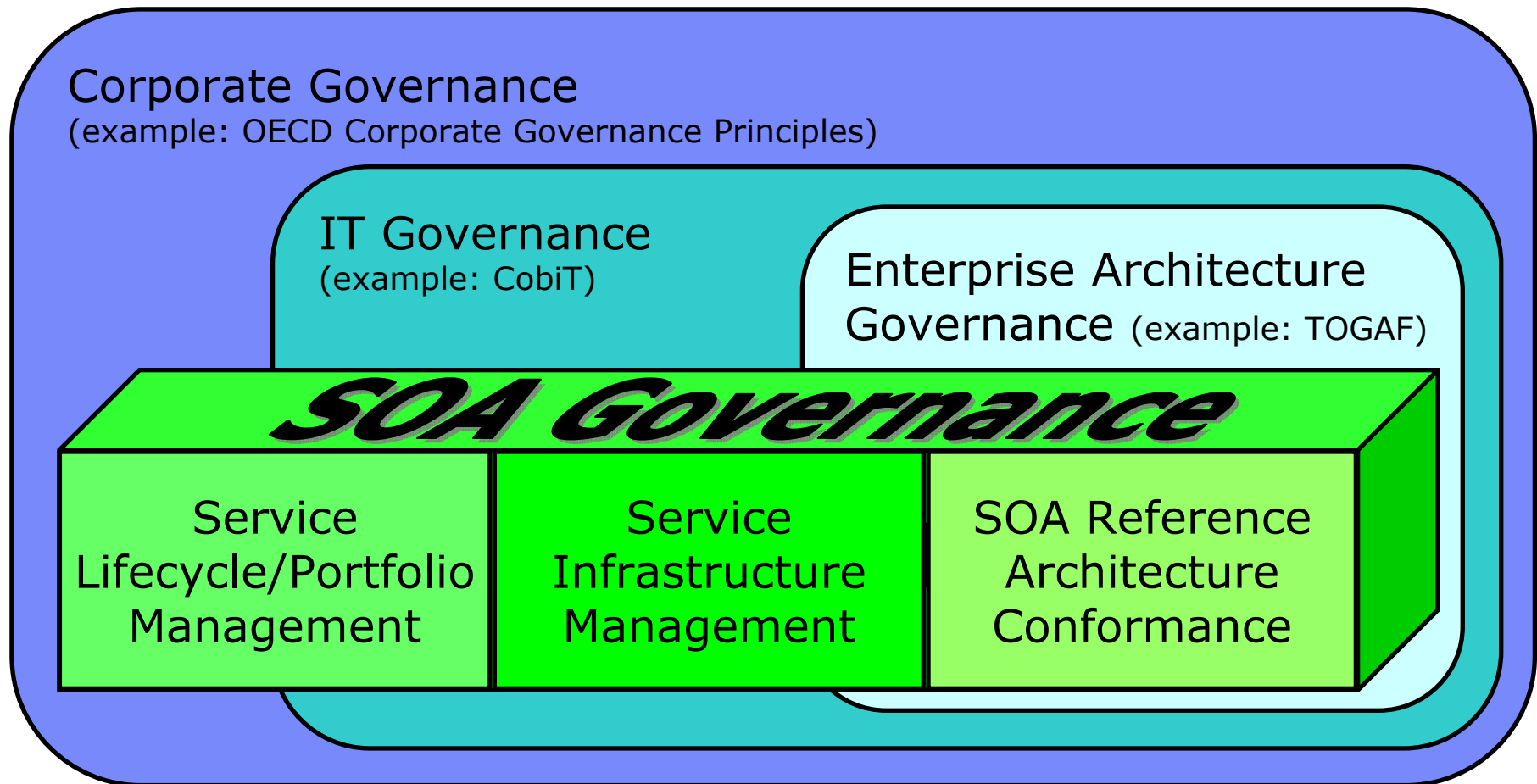
## Enterprise Architecture

Governance (example: TOGAF)

# SOA Governance



# SOA Governance Landscape



## Mr. Speaker, I'm an Enterprise Architect, why do I care about SOA Governance?

- You are working on Enterprise Architecture Governance
- You are already providing oversight on solution design
- You are probably the connection point between business and IT
- You are a technical leader in your organization
  
- You will be the one answering questions about SOA



## Topic 3: The IBM SOA Governance and Management Method



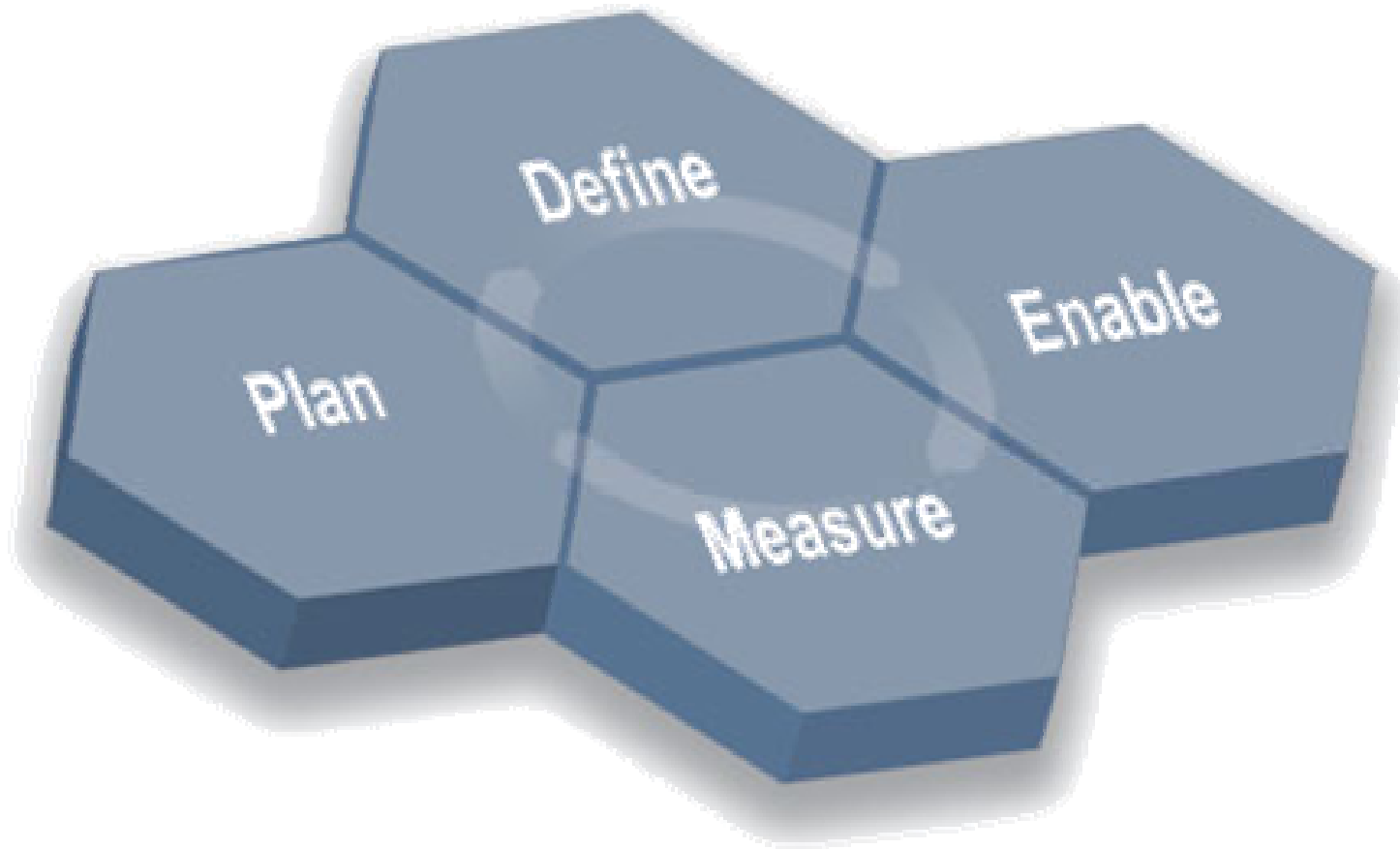
## SOA Governance Pre-Requisites

- Engagement and Active Participation from Business Stakeholders
- Alignment of the SOA Value Proposition with Business Goals and Objectives
- Commitment to and Realization that Governance is Essential to Realizing the SOA's Value
- Understand Existing IT Governance and Decision Making Framework
- Support and Commitment from Executive Management

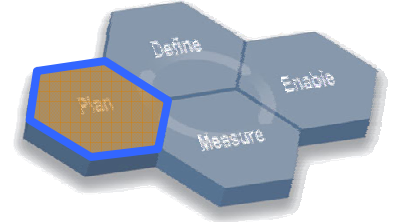




# IBM SOA Governance and Management Method



# SOA Governance - Plan



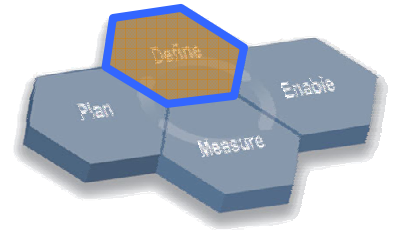
## Objective:

- Create a common vision for an organization's adoption of SOA by making key decisions about service funding ownership and SOA adoption rate. Review current capabilities for architecture and governance in the organization.

## When to perform?

- At the start of SOA adoption, or whenever there is a significant change in the organization's SOA maturity

# SOA Governance - Define



## Objective:

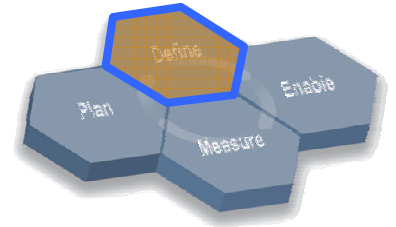
- Introduce the **Service Lifecycle** – a formal SOA methodology that covers the entire analysis, specification, design development & deployment of services and automated business processes.
- If needed, create, train & mentor a Center of Excellence team to operate to this Service Lifecycle

## When to perform?

- At the start of SOA adoption. There should be regular reviews every 6 months or so to determine if there are any potential improvements to the process and decide if the CoE is still necessary. Once the SOA approach becomes the norm, the CoE may be disbanded, and the skilled resources returned to their original operating units

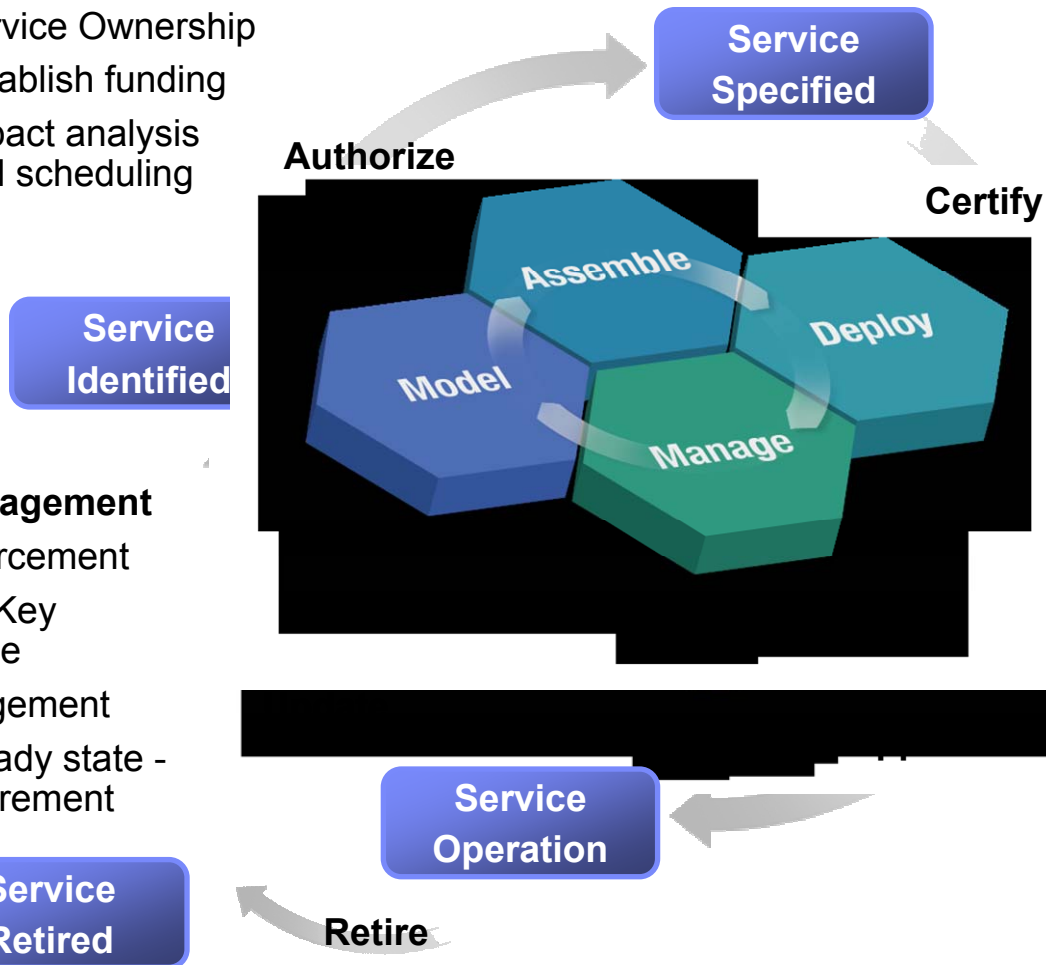


# Service Lifecycle Governance



## Service Modeling

- Role of Service
- Service Ownership
- Establish funding
- Impact analysis and scheduling



## Service Assembly

- Development, test
- Architecture adherence
- Design for reuse
- Design for declarative policy

## Service Management

- Policy Enforcement
- Monitoring/Key Performance
- QoS Management
- Service steady state - revision/retirement

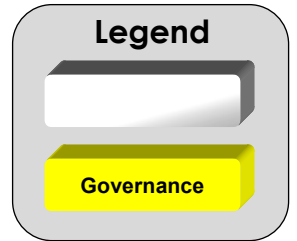
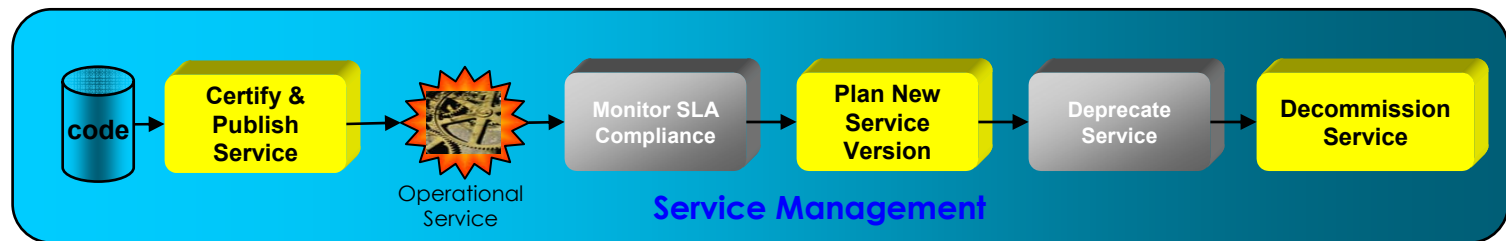
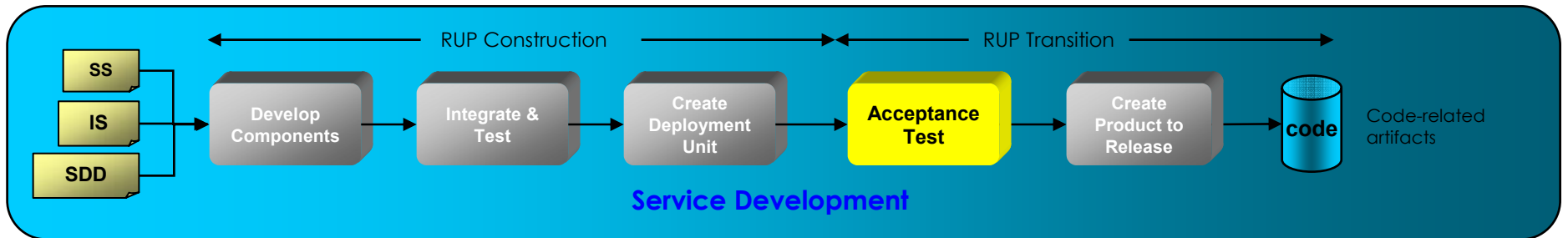
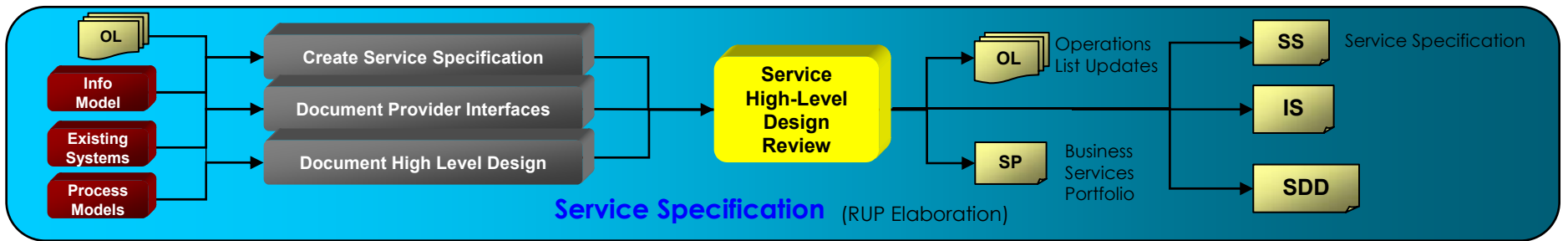
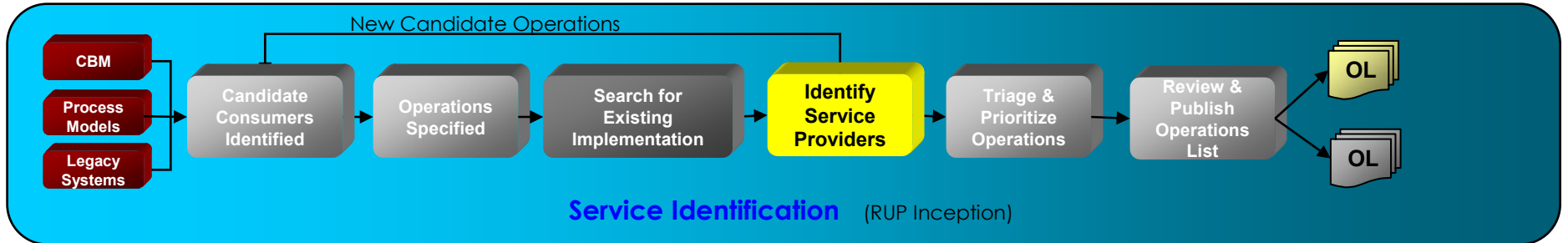
## Service Implemented

## Service Deployment

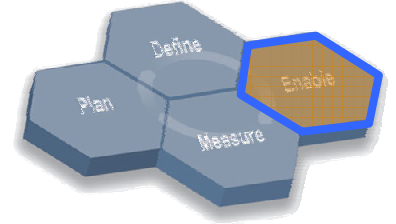
- Adherence to change management
- Configuration and workload
- Verification of deployment
- Deployment to production



# Governance in an Existing Service Lifecycle



# SOA Governance - Enable



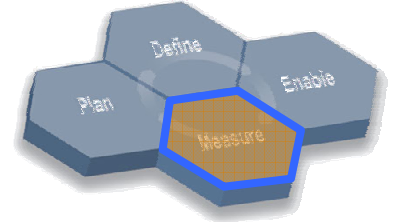
## Objective:

- Execute the control points in the Service Lifecycle
- Deploy processes and infrastructure to enable governance checkpoints.
  - ▶ System of record from the service lifecycle – service repositories
  - ▶ Leads to the creation and deployment of services and automated business processes appropriate for the service consumers

## When to perform?

- Continuously. This is the new way that IT will operate and communicate with the organization

# SOA Governance - Measure



## Objective:

- Measure the effectiveness of SOA Governance through the effectiveness of the SOA solutions
  - ▶ Ensure that all deployed services honor their Service Level Agreements
  - ▶ Tune the deployment options of high-usage services & automated processes
  - ▶ Determine the actual level of use and reuse
  - ▶ Manage operational expenses

## When to perform?

- Continuously. This is the new context for IT management and organizations will gain insight into effectiveness of SOA governance

## Topic 5: SOA Governance in the Open Group





## SOA Governance Project in the Open Group

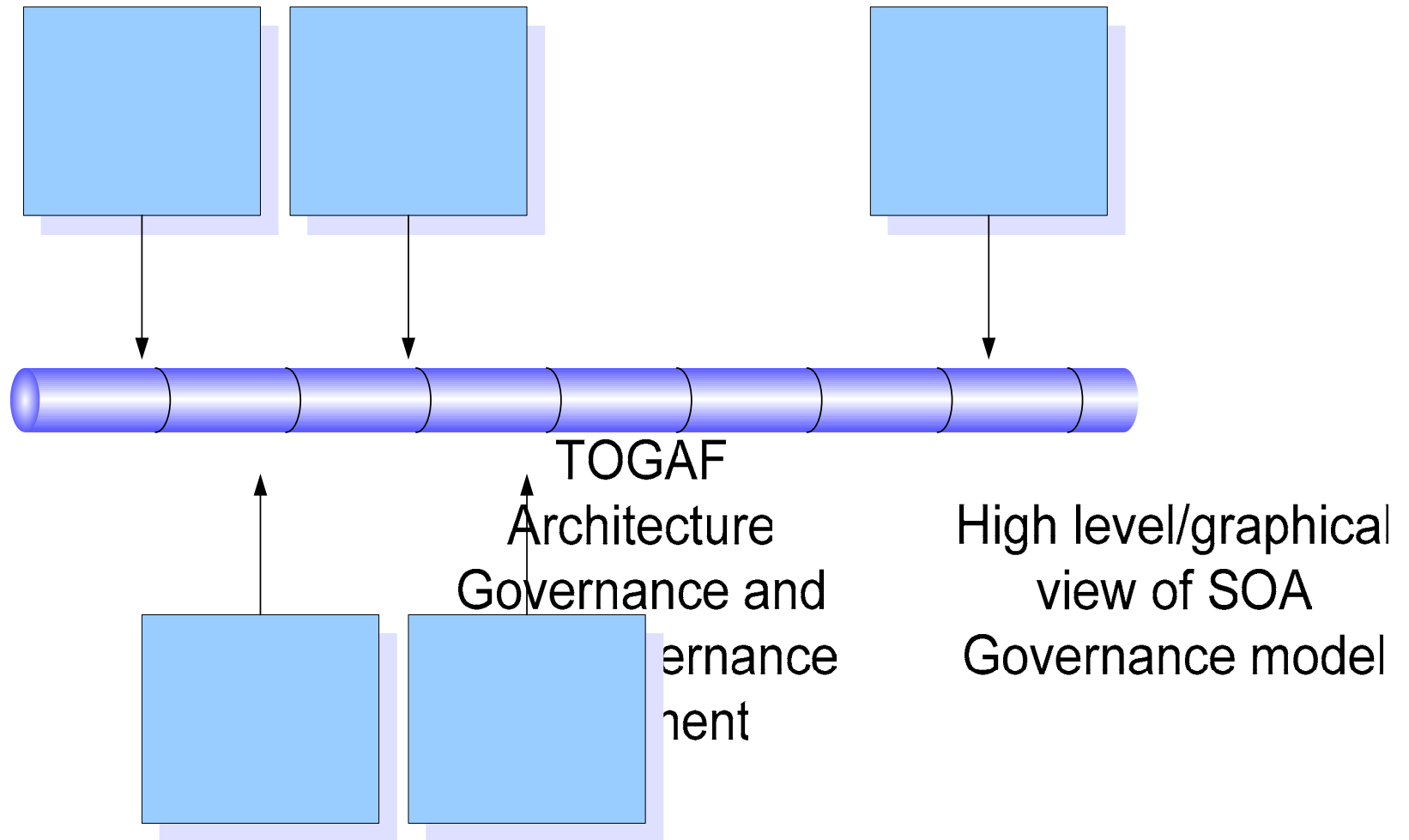
- Established a SOA Governance working definition and project scope

### Next Steps:

- Establish SOA Governance Principles
  - ▶ Document in the same format as TOGAF 8.1.1 Principles
- Establish SOA Governance Reference Model
  - ▶ Based on IT Governance processes from CobiT and establish effects of and considerations particular to SOA solutions on those processes
  - ▶ Provide SOA Key Performance Indicators for IT Governance and EA Governance processes
- Examine impact of SOA Governance on IT processes
  - ▶ Evaluate impact on ITILv2 and/or ITIL refresh

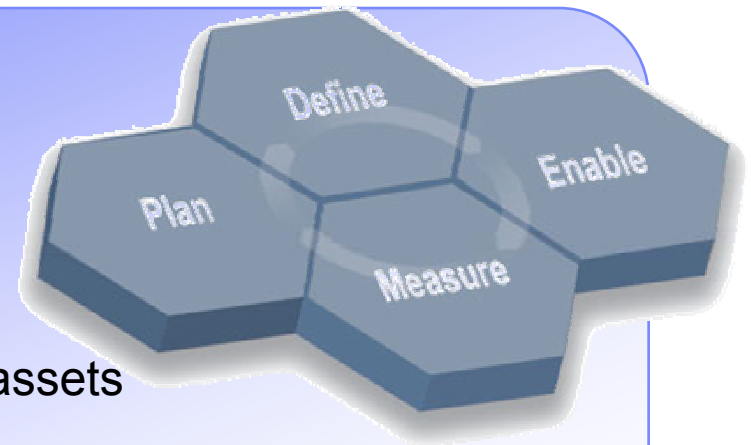


# SOA Governance Work Plan Highlights



## Summary: Enabling SOA Governance

- Methods, process, tools and technology for:
  - Defining/refining governance approach
  - Identifying high value business services and instantiating policy and standards
  - Managing the lifecycle of services and other assets
  - Gaining visibility to performance against goals
- Develop services and expertise to assist across the entire service lifecycle
- Participate in the industry definition of SOA Governance at the Open Group



- More information at: <http://www.opengroup.org/projects/soa>
- More information at: <http://www.ibm.com/soa>

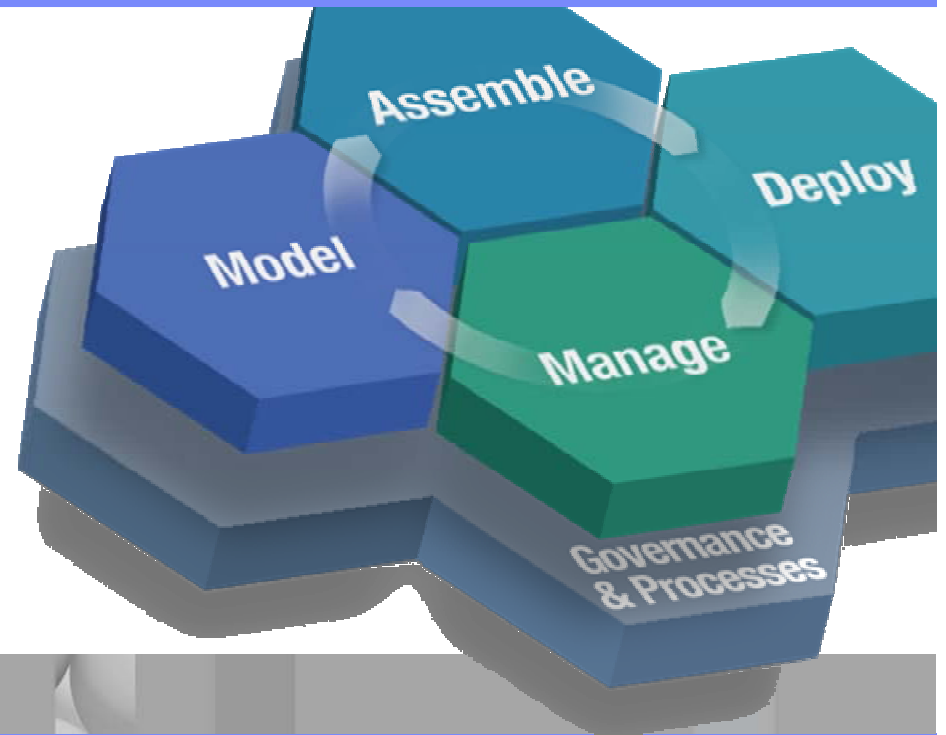




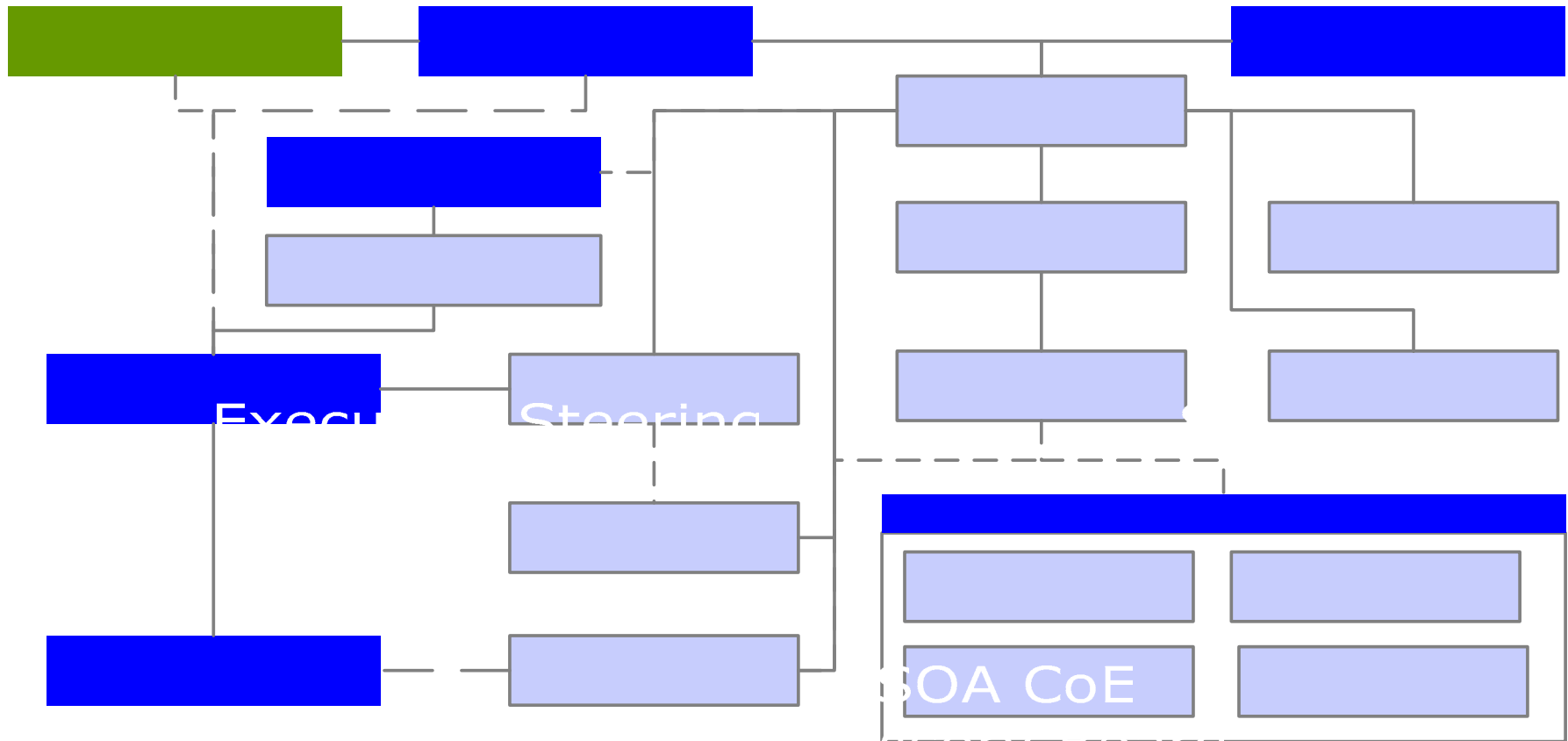
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Thank you.

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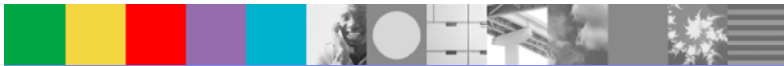


SOA CoE Organizational Blueprint reflects the combination of technical and business expertise for the whole service lifecycle



Business

Relationship Director



## Detailed view of Method

