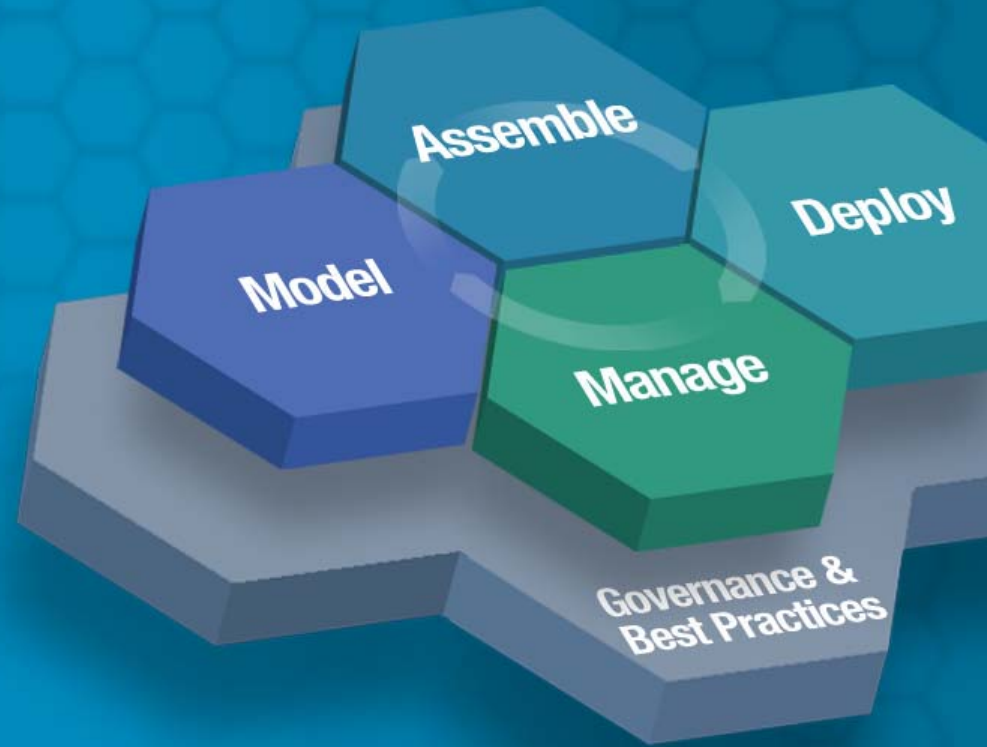


# IBM SOA Architect Summit



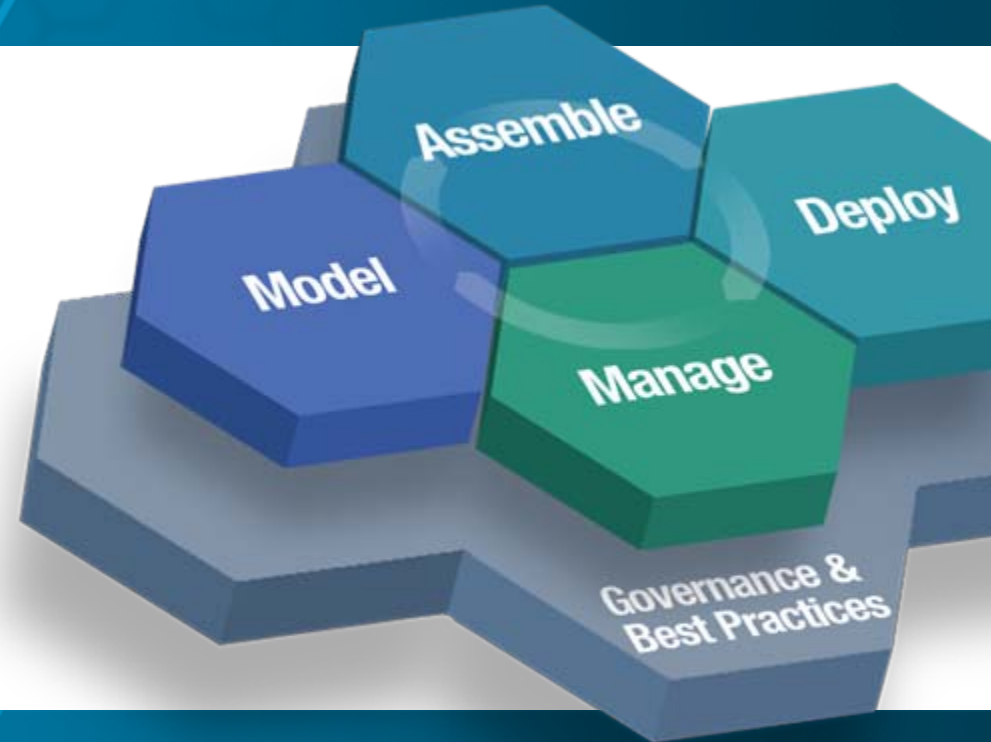
SOA on your terms and our expertise



IBM SOA Architect Summit

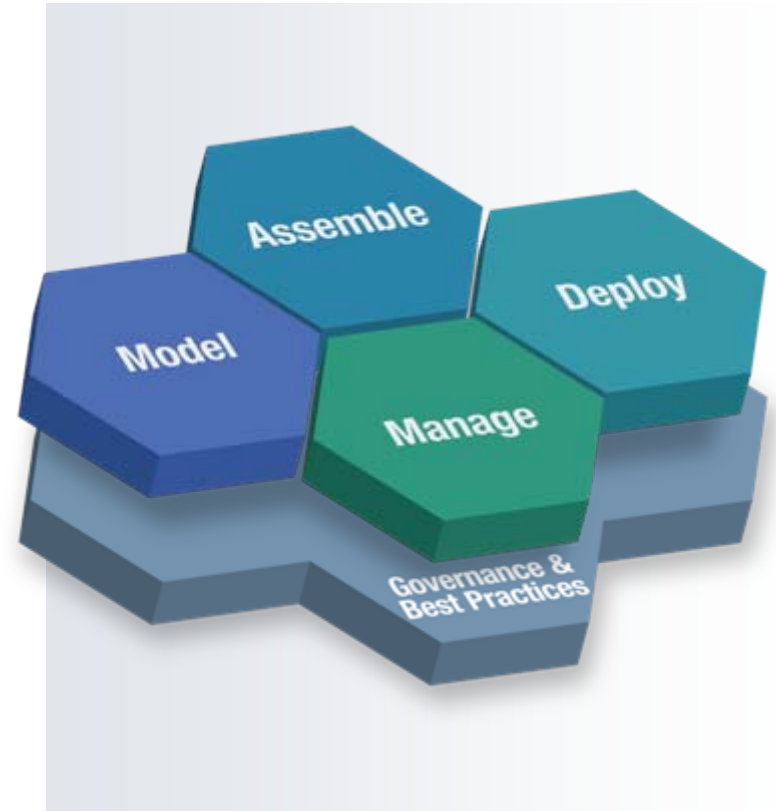
# Getting Started with SOA

A Presentation for the  
Enterprise Architect



# Agenda

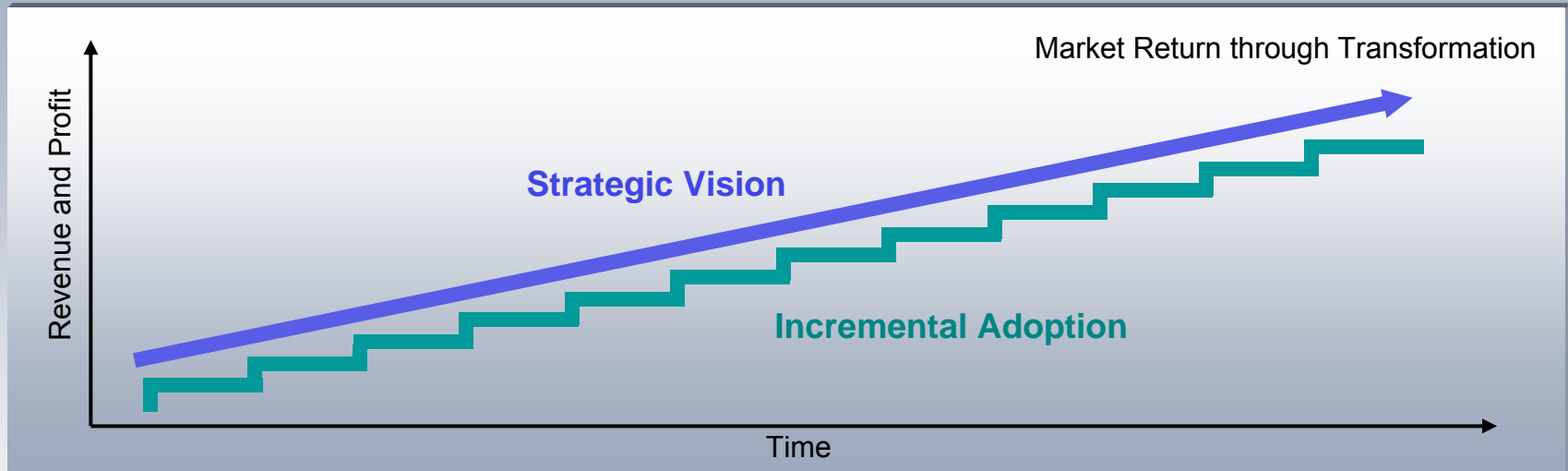
- The Adoption Process
- Establishing an SOA Vision
- Selecting Projects
- SOA Entry Points
- SOA Governance
- IBM Can Help



# SOA Adoption: Tactical and Strategic Action Combined

## SOA Goal

- Market return through transformation: quicker time to production, lower costs, competitive differentiation



## Two Primary Roadmap Perspectives

- Strategic Vision**  
Business and IT statement of direction which can be used as a guideline for decision making, organizational buy-in, standards adoption
- Project Plans**  
Implementation projects to meet immediate needs of the current business drivers

# Getting Started Requires Vision

- Assess your current maturity, across multiple dimensions
  - Business
  - Methodology
  - Technical
- Establish targets for where you want to be
- Document important goals and metrics for transitions across the maturity dimensions
- Recognize that aspects of the Vision may shift with experiences gained
  - Adopt regular checkpoints for Vision re-assessment

***IBM's Service Integration Maturity Model provides a guide for establishing a Vision***

# Service Integration Maturity Model (SIMM)

	 <b>Silo</b>	 <b>Integrated</b>	 <b>Componentized</b>	 <b>Services</b>	 <b>Composite Services</b>	 <b>Virtualized Services</b>	 <b>Dynamically Re-Configurable Services</b>
<b>Business View</b>	Function Oriented	Function Oriented	Function Oriented	Service Oriented	Service Oriented	Service Oriented	Service Oriented
<b>Organization</b>	Ad hoc IT Governance	Ad hoc IT Governance	Ad hoc IT Governance	Emerging SOA Governance	SOA and IT Governance Alignment	SOA and IT Governance Alignment	SOA and IT Governance Alignment
<b>Methods</b>	Structured Analysis & Design	Object Oriented Modeling	Component Based Development	Service Oriented Modeling	Service Oriented Modeling	Service Oriented Modeling	Grammar Oriented Modeling
<b>Applications</b>	Modules	Objects	Components	Services	Process Integration via Services	Process Integration via Services	Dynamic Application Assembly
<b>Architecture</b>	Monolithic Architecture	Layered Architecture	Component Architecture	Emerging SOA	SOA	Grid Enabled SOA	Dynamically Re-Configurable Architecture
<b>Infrastructure</b>	Platform Specific	Platform Specific	Platform Specific	Platform Specific	Platform Specific	Platform Neutral	Dynamic Sense & Respond
	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>	<b>Level 6</b>	<b>Level 7</b>



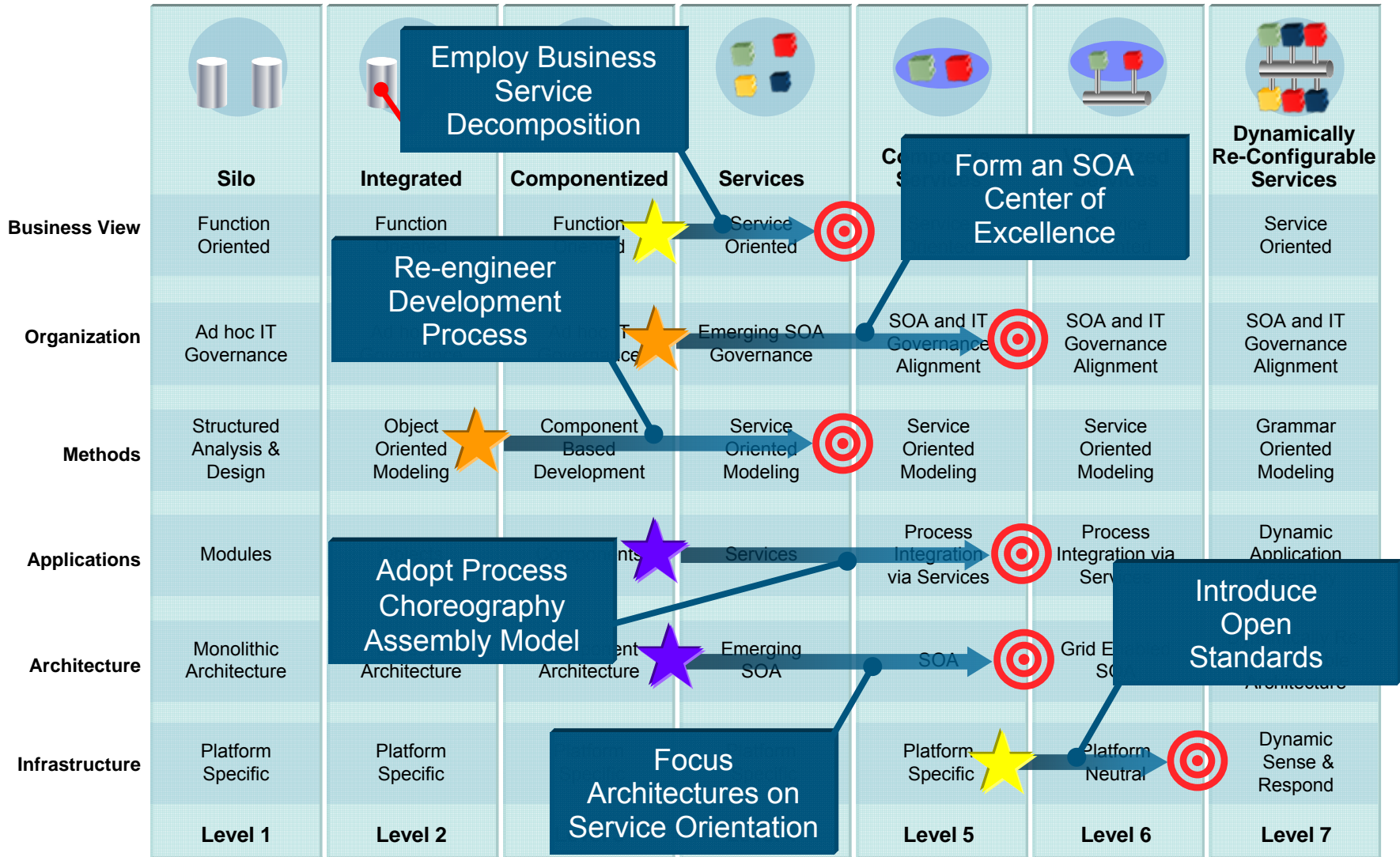
# Service Integration Maturity Model (SIMM)

★ = current level  
 🎯 = target level

	<b>Silo</b>	<b>Integrated</b>	<b>Componentized</b>	<b>Services</b>	<b>Composite Services</b>	<b>Virtualized Services</b>	<b>Dynamically Re-Configurable Services</b>
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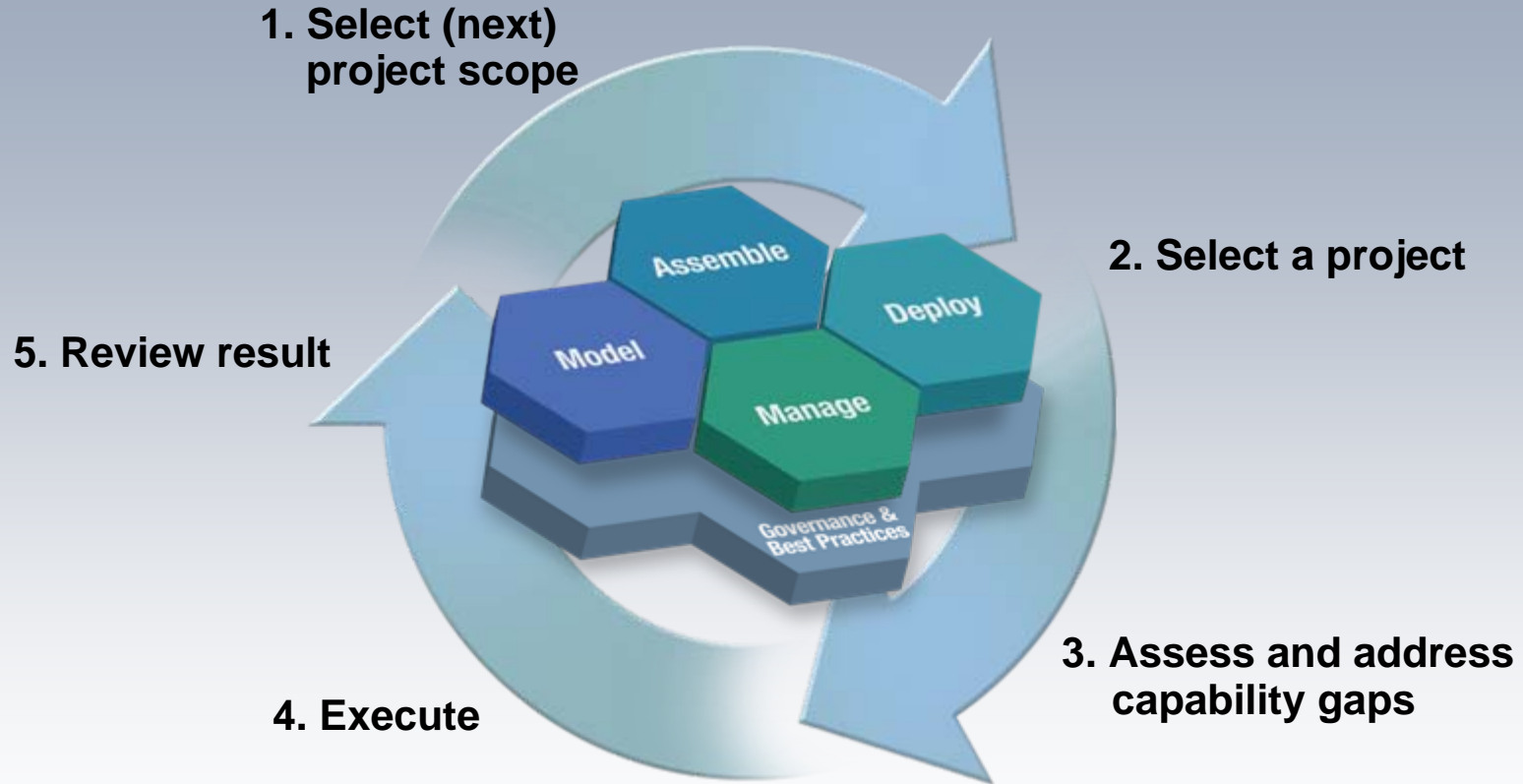
# Service Integration Maturity Model (SIMM)

★ = current level  
 🎯 = target level





# SOA Adoption is Iterative and Incremental ...



... with each project delivering immediate *and* long-term value

# Selecting Projects

## *Moving Incrementally Toward the Vision*

### ***A pilot project for SOA should ...***

- 1. Address a well understood Business problem**
- 2. Incorporate aspects of governance**
- 3. Include Line-of-business objectives and IT objectives**
- 4. Leverage SOA entry point patterns**
- 5. Require an achievable stretch beyond current capabilities to address gaps (skills, processes etc.)**
- 6. Be something you will put into production**

# Some Project Examples



**A service in front of my Loyalty System lets my customers consume points through partners**



**I outsourced a non-critical business service**













**I enabled multi-channel access to a key business service**



**I expanded my market by putting an industry standard interface on my proprietary application**

# Customer Success via SOA Entry Points

*Distinct But Interrelated Projects with Proven Value*

	What is it?	Customer	Value
 <b>People</b>	Greater productivity and flexibility through targeted user interactions for improved operations and collaboration		Increasing people's productivity and reducing financial close from 10 to 4 days with reusable services
 <b>Process</b>	Achieve business process innovation through treating tasks as modular services		Information reaches decision makers 70% faster by enabling LOBs to orchestrate modular services
 <b>Information</b>	Provide trusted information in business context by treating it as a service		Automated 80% of manual research process for underwriting. Offer as service to industry
 <b>Reuse</b>	Service-enable existing assets and fill portfolio gaps with new reusable services		Improved customer satisfaction, sales to delivery cycle and agility while reusing existing IT assets
 <b>Connectivity</b>	Connect systems, users, and business channels based on open standards		Significantly reduced time/cost required to integrate older applications with new SAP modules

# Entry Point to People Centric Collaboration

## *Intuitive & Adaptive User Experience*



### ■ How to recognize the entry point

#### – Business needs/pain points

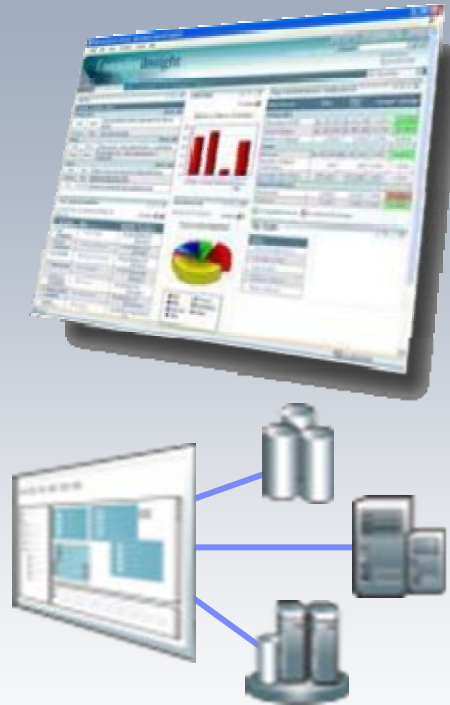
- *Too many applications required to complete a process*
- *Information gathering delays business processes*
- *Multiple participants in business process need differing access*

#### – IT needs/pain points

- *Business processes span applications that don't integrate well*
- *Supporting IT functions for business processes span organizations*
- *No single sign-on, no role-based information/application delivery*

### ■ Business and IT benefits

- Business applications are consistent and tailored to a given task/role
- Freedom to change IT resources without impact on the user experience
- Freedom to incrementally adapt to changing business requirements



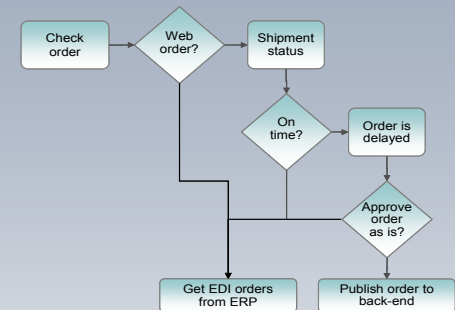


# Entry Point to a Process Centric Approach

## *Business Process Management for Continuous Innovation*



- How to recognize the entry point
  - Business needs/pain points
    - *Increasing need to tailor business processes on a per customer / per partner basis*
    - *Changing business processes takes too long*
  - IT needs/pain points
    - *Increasing maintenance costs as applications continuously evolve*
    - *Inflexible systems can't handle today's requirements*
  
- Business and IT benefits
  - Business processes are highly tailorable
  - Maintenance costs drop as changes in the business process can be effected in a process-managed environment, using standard technology like BPEL



# Entry Point to an Information Centric Approach

## *Delivering Information As A Service to People and Processes*



### ■ How to recognize the entry point

#### – Business needs/pain points

- *Trusted information is not available in the right place, at the right time, in the right context*
- *Existing business processes are not easily updated with new information*

#### – IT needs/pain points

- *Information semantics are coupled to applications; meaning does not accompany data*
- *Creation of trusted information sources and resolution of cross-source data quality issues is complex and difficult to achieve*
- *Difficult to control the cost of managing complex information infrastructure while providing flexibility; overly complex methods are required to integrate data*

### ■ Business and IT benefits

- Applications benefit from new information as it comes online
- Information Integration complexity is contained in one place and handled once



# Entry Point to Creating and Reusing Services

## *Create Flexible, Service-based Business Applications*

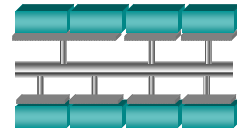


- How to recognize the entry point
  - Business needs/pain points
    - *Freedom to outsource without impact to existing applications*
    - *Turn proprietary systems into marketable business assets*
  - IT needs/pain points
    - *Leverage existing IT investment*
    - *Need to consolidate redundant systems*
  
- Business and IT benefits
  - Unlock the value of existing IT assets
  - Eliminate the costs associated with non-key functions

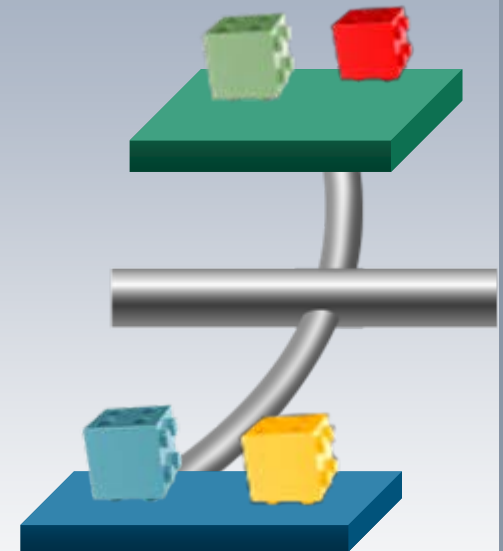


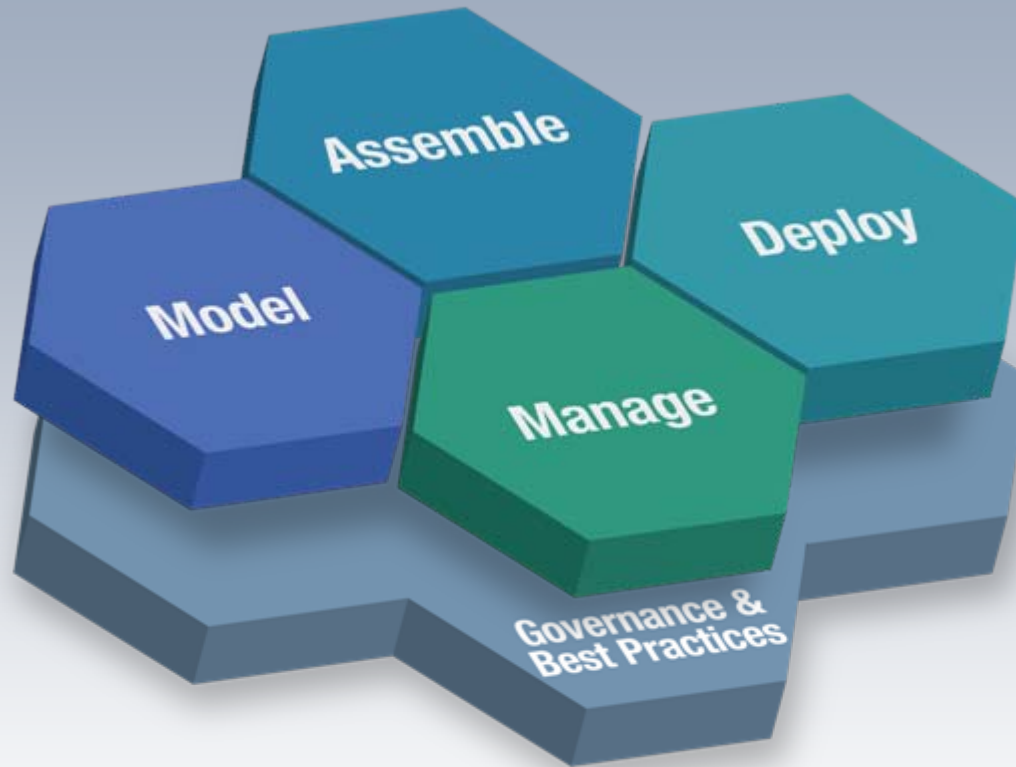
# Entry Point to Connectivity

## *Underlying Connectivity to Support Business-centric SOA*



- How to recognize the entry point
  - Business needs/pain points
    - *Modernization/conversion of backend systems needs to be isolated from applications*
    - *Speed up new application development and integration*
  - IT needs/pain points
    - *Manage all traffic to/from services consistently and with minimal redundancy*
    - *Flexibility to change service implementations and add service consumers*
    - *Strengthen governance of service*
  
- Business and IT benefits
  - Decoupling of service providers and consumers provides flexibility to implement applications more quickly
  - All service consumption is subject to consistent auditing, security, validation etc.
  - Speed availability of existing systems by leveraging existing messaging backbones





# SOA Governance



# What is ...

## IT Governance?

Establishing decision making rights associated with IT

Establishing mechanisms and policies used to measure and control the way IT decisions are made and carried out



## SOA Governance?

Extension of IT Governance focused on the **lifecycle of services** to ensure the business value of SOA

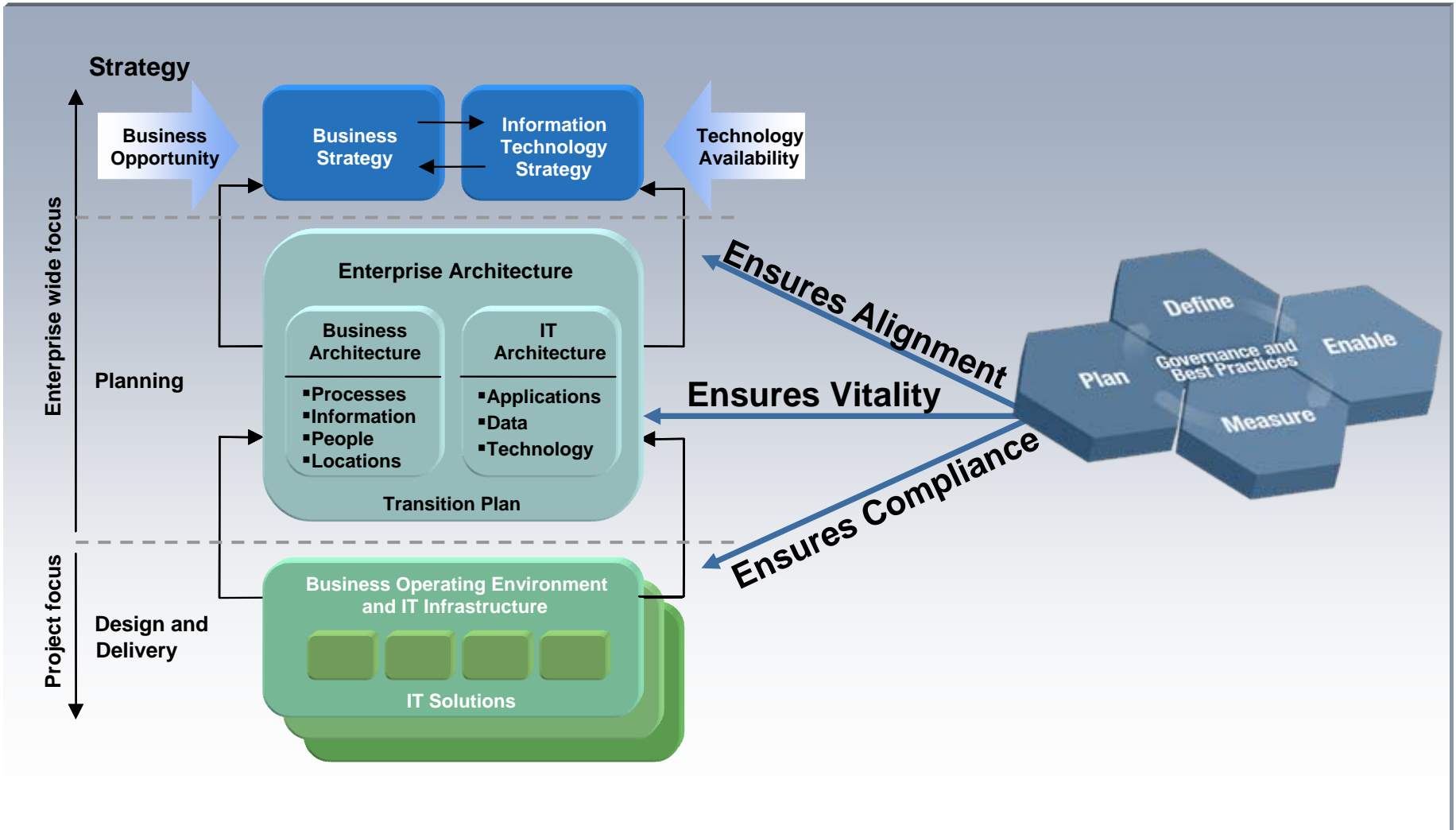
***SOA Governance is a catalyst for improving overall IT Governance***

# Why SOA Governance Matters

- Realize business benefits of SOA
  - Business process flexibility
  - Improved time to market
- Mitigate business risk and regain control
  - Maintaining quality of service
  - Ensuring consistency of service
- Improved team effectiveness
  - Measuring the right things
  - Communicating clearly between business and IT



# Enterprise Architecture and SOA Governance



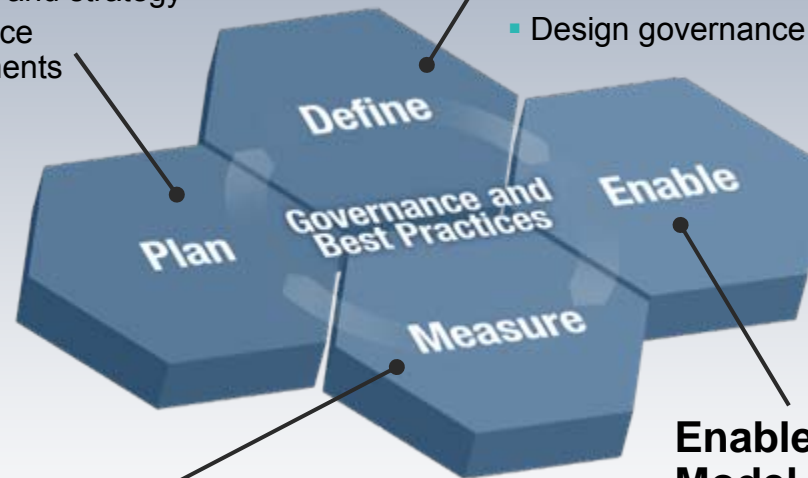
# SOA Governance Lifecycle

## Plan the Governance Need

- Document and validate business strategy for SOA and IT
- Assess current IT and SOA capabilities
- Define/Refine SOA vision and strategy
- Review current Governance capabilities and arrangements
- Layout governance plan

## Define the Governance Approach

- Define/modify governance processes
- Design policies and enforcement mechanisms
- Identify success factors, metrics
- Identify owners and funding model
- Charter/refine SOA Center of Excellence
- Design governance IT infrastructure



## Monitor and Manage the Governance Processes

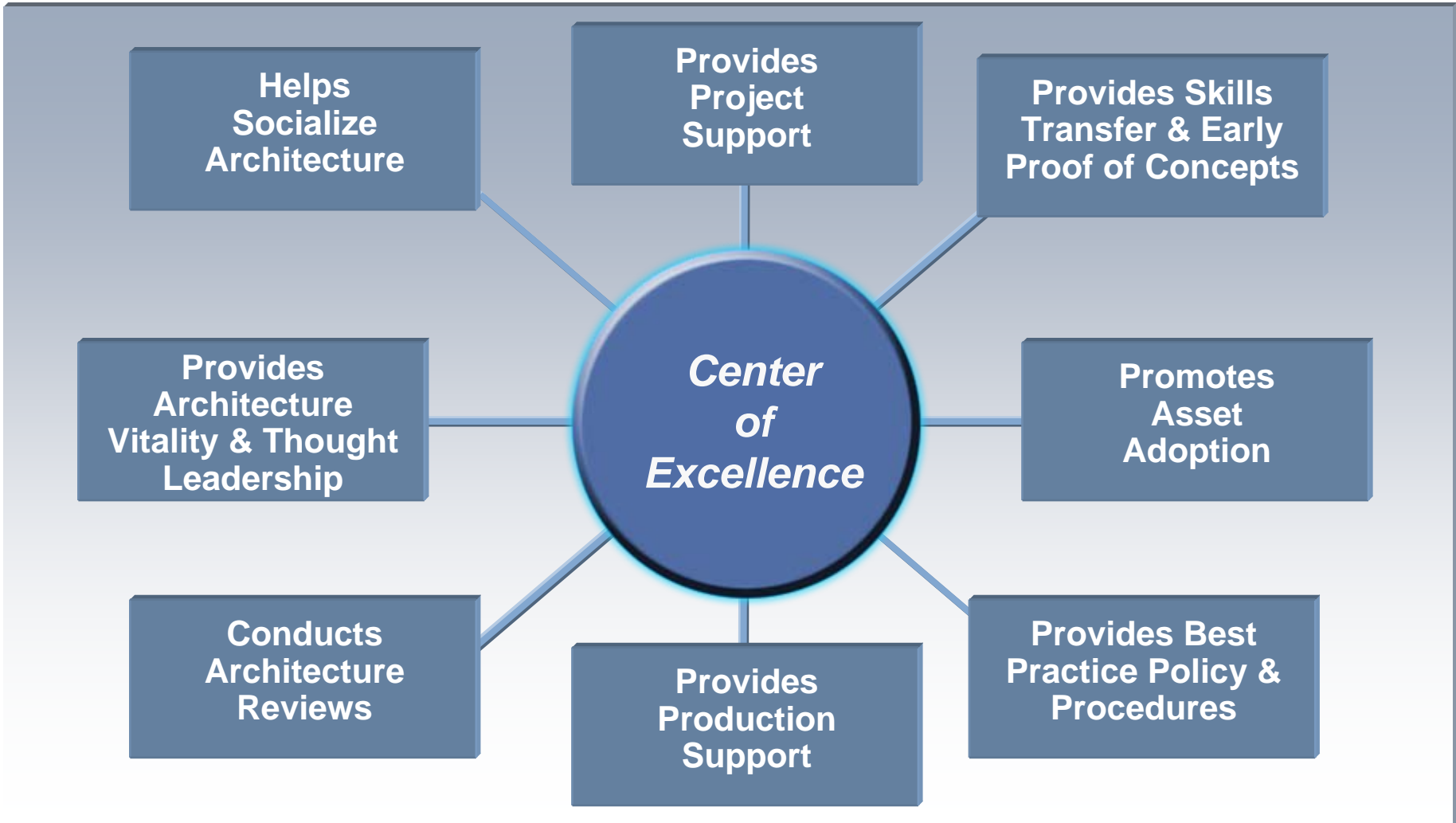
- Monitor compliance with policies
- Monitor compliance with governance arrangements
- Monitor IT effectiveness metrics

## Enable the Governance Model Incrementally

- Deploy governance mechanisms
- Deploy governance IT infrastructure
- Educate and deploy on expected behaviors and practices
- Deploy policies

# SOA Center of Excellence (COE)

*A Proven Organizational Model for Governance and Management*





# Service Identification, Definition and Ownership

- Perform service modeling to identify high value business services and specify services
- Classify services into logical domains and assign owners to each domain, to simplify the management and implementation of an SOA
  - Business Service Domains – services which provide business value, e.g., request for information, and contain business logic
  - Infrastructure Service Domains – services which provide indirect business value and do not contain business logic, e.g., authenticate user
- Domain owners monitor, define, and authorize changes to existing services and decide when a new service in their domain is required

# Tools to Manage Assets and Govern Access

- Publish, Deploy
- Discover, Harvest

## Service Development Lifecycle



- UDDI discovery, Retrieve
- Publish

## Service Endpoint Registries / Repositories

Discovery Utilities and Integration

### Service Registry and Repository

## Change and Release Management



ITSM Processes

- Publish, Deploy

## Operational Efficiency and Resilience

Composite Application / Service Management

- Retrieve Operational policies
- Service descriptions

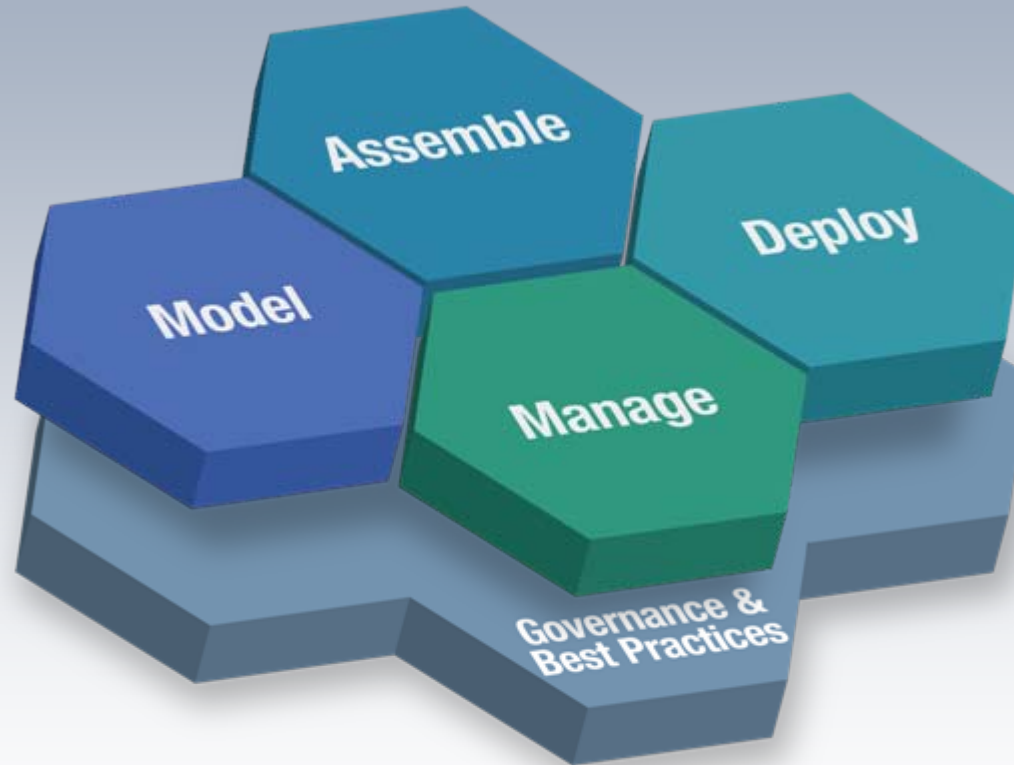
- Runtime access: search, select, bind, route, filter, transform

# How IBM Enables 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
- Services and expertise to assist across the entire service lifecycle



# IBM can help you get started with SOA...



## IBM SOA Offerings

# Take the Next Step with SOA TODAY!

*SOA Maturity Model, Assessment Tool and Workshops to Help Project Selection*



*Receive actionable recommendations customized to your level of SOA maturity*

- On-line at [ibm.com/soa/assessment](http://ibm.com/soa/assessment)  
.....or face to face with an IBM representative by mailing [soa@us.ibm.com](mailto:soa@us.ibm.com)
- Available in 10 languages!

## Lay out your specific game-plan in detail:

Line-of-business or IT-led SOA Workshops

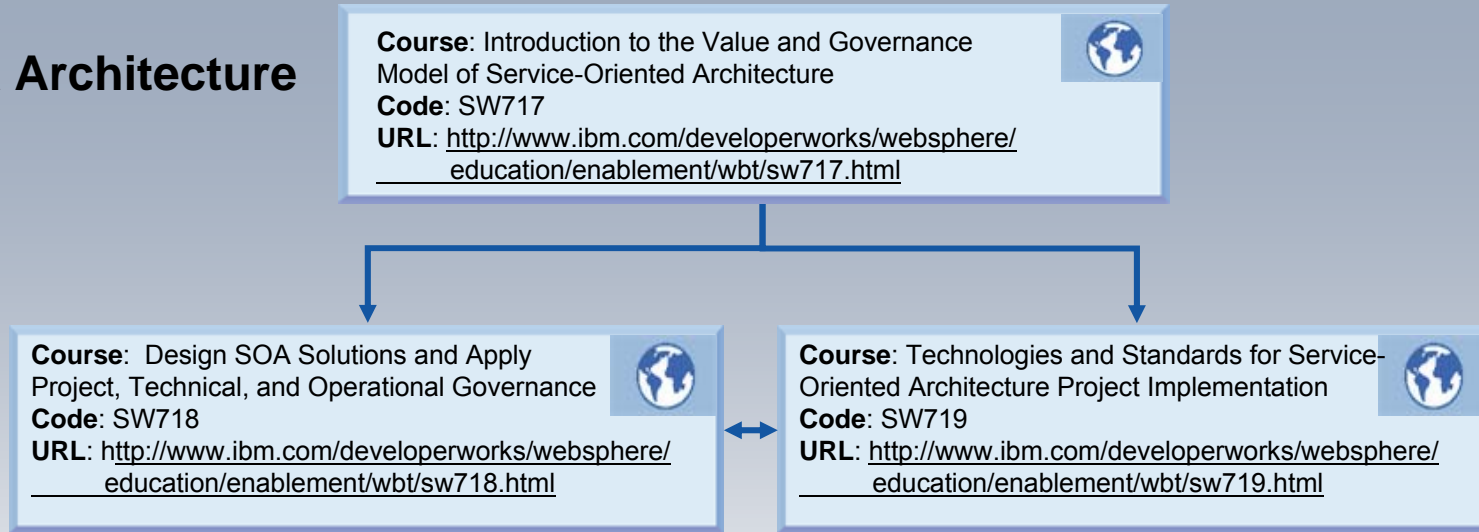
- Overview, assessment, modeling, roadmap, architecture, project plans, benefits analysis, .....






# SOA Skills Development – SOA Architect Role

## SOA Architecture



## Enterprise Service Bus

**Course:** Implementing ESB Solutions using IBM WebSphere products   
**Code:** SW340  
**Duration:** 3 days

Legend	
	Audio tape
	CD-ROM
	Certification
	Classroom
	Instructor Led Online
	Prerequisite
	Publication
	Teleconference
	Web-based

# Why IBM for SOA?

## IBM understands service orientation and your business



### Expertise in aligning business and IT processes

- SOA consultants, architects and IT specialists
- Dozens of SOA-enabled business solutions

### Thriving ecosystem of partners (ISVs, SIs, Resellers)

- 1200+ partners in SOA community

### Extensive Industry experience and best practices

- Over 1800 customers worldwide
- SOA Entry Points

### Unmatched breadth and depth of products

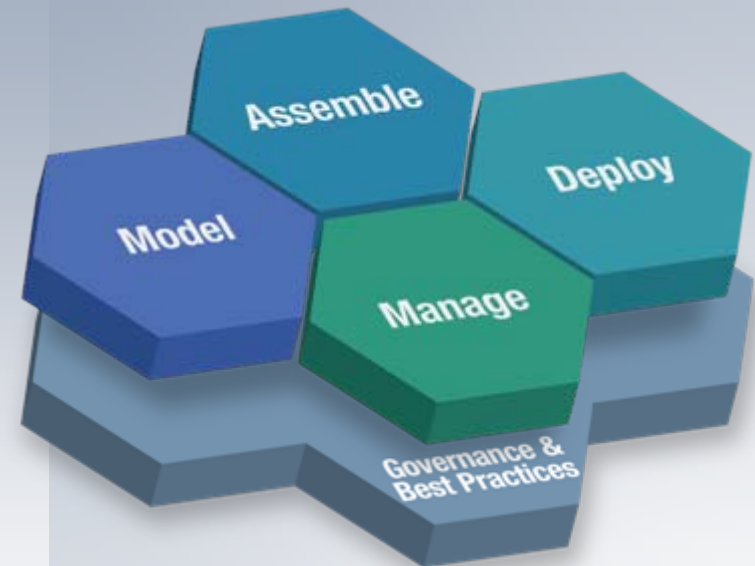
- Over \$1B/yr invested in SOA
- Leadership in open standards & 300+ SOA-related patents

### Proven Governance & best practices

- IBM SOA Governance & Management Method that spans services lifecycle

# Summary

- Establish a Strategic Vision at the appropriate level
- Assess and address capability gaps:
  - Skills
  - Processes
  - Architecture
  - Infrastructure
  - Application
- Identify a pilot project
  - Extending Assets
  - Collaboration
  - Application Integration
  - Business Process Management
  - Information Integration
- Execute the project
- Approach adoption incrementally
  - Introduce infrastructure, processes *as needed* – SOA is not about infrastructure and processes, it's about enabling organizations to be agile in solving business problems
- IBM is here to help



धन्यवाद

Hindi

多謝

Traditional Chinese

Teşekkür ederim

Turkish

Спасибо

Russian

Gracias

Spanish

شكراً

Arabic

Thank You

Mange tak

Danish

Grazie

Italian

Danke

German

Merci

French

நன்றி

Tamil

多谢

Simplified Chinese

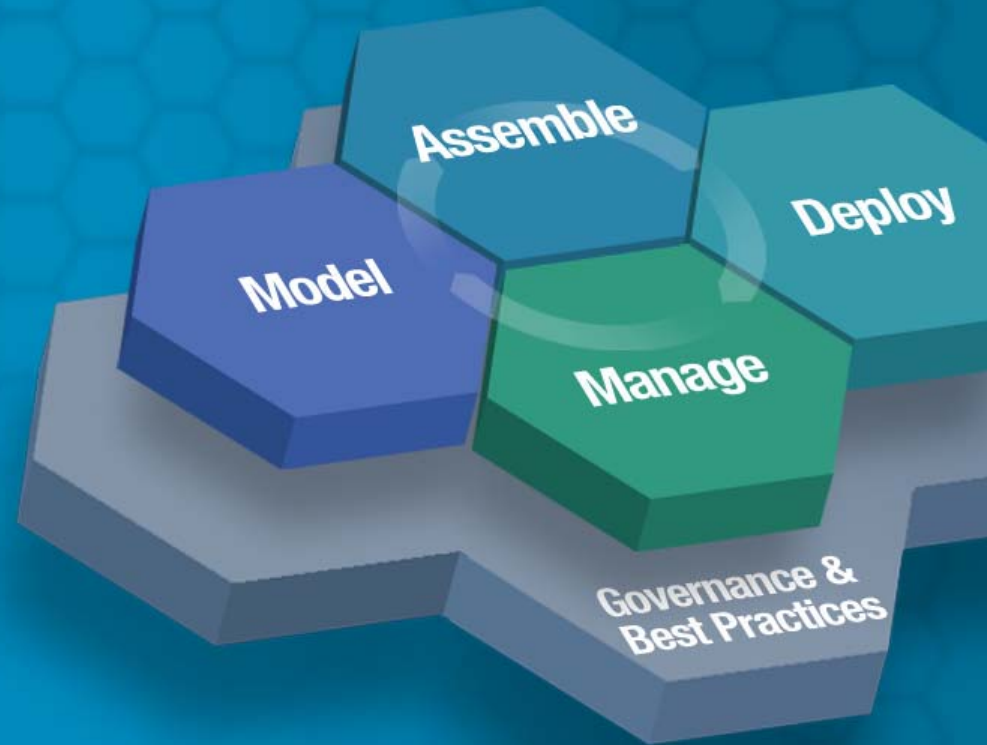
감사합니다

Korean

ありがとうございました

Japanese

# IBM SOA Architect Summit



SOA on your terms and our expertise