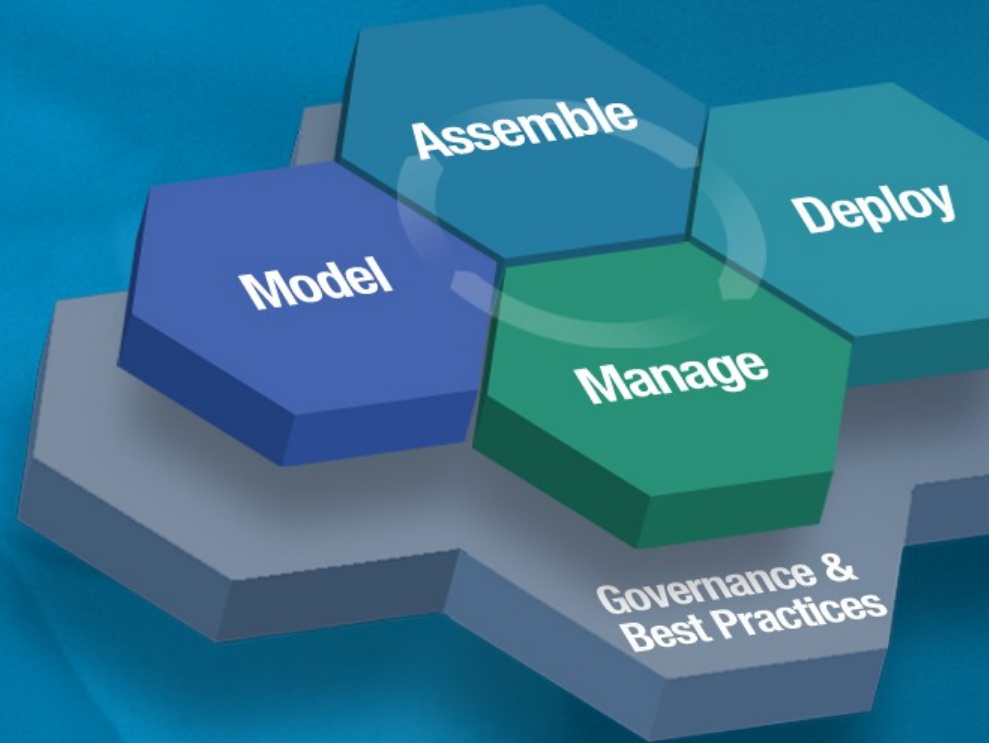
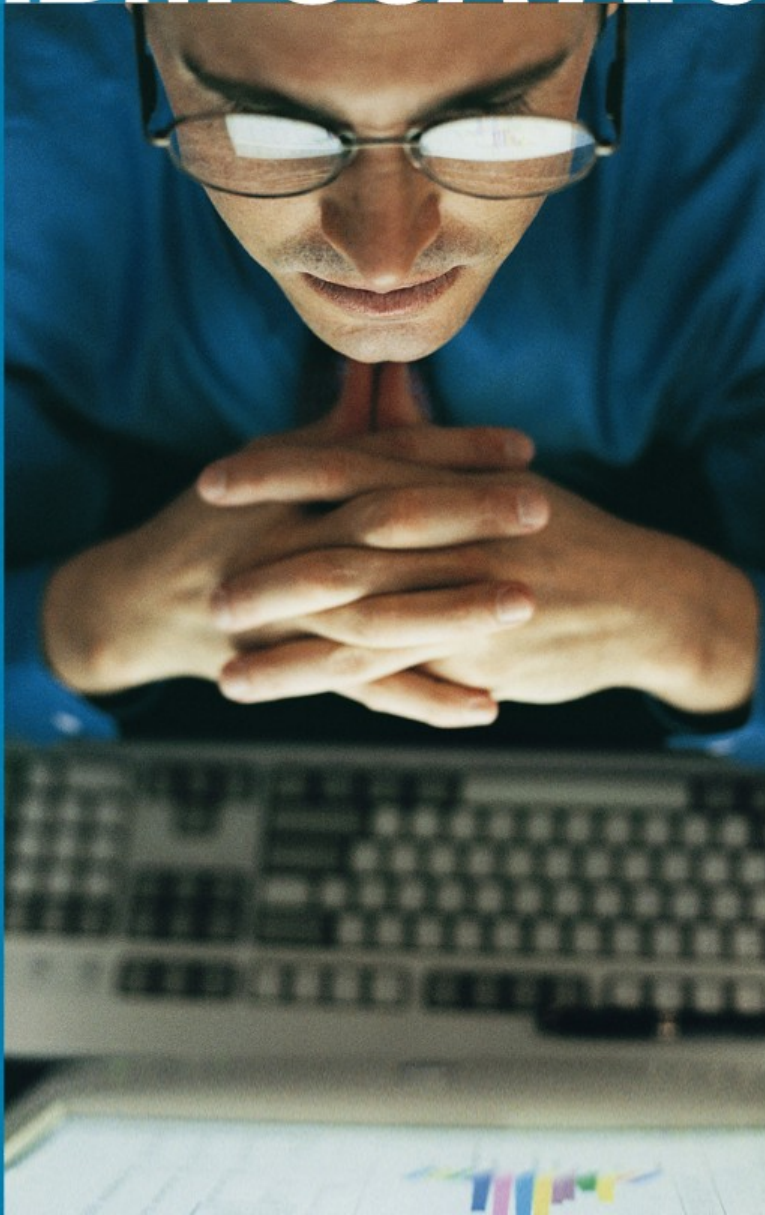


IBM SOA Architect Summit



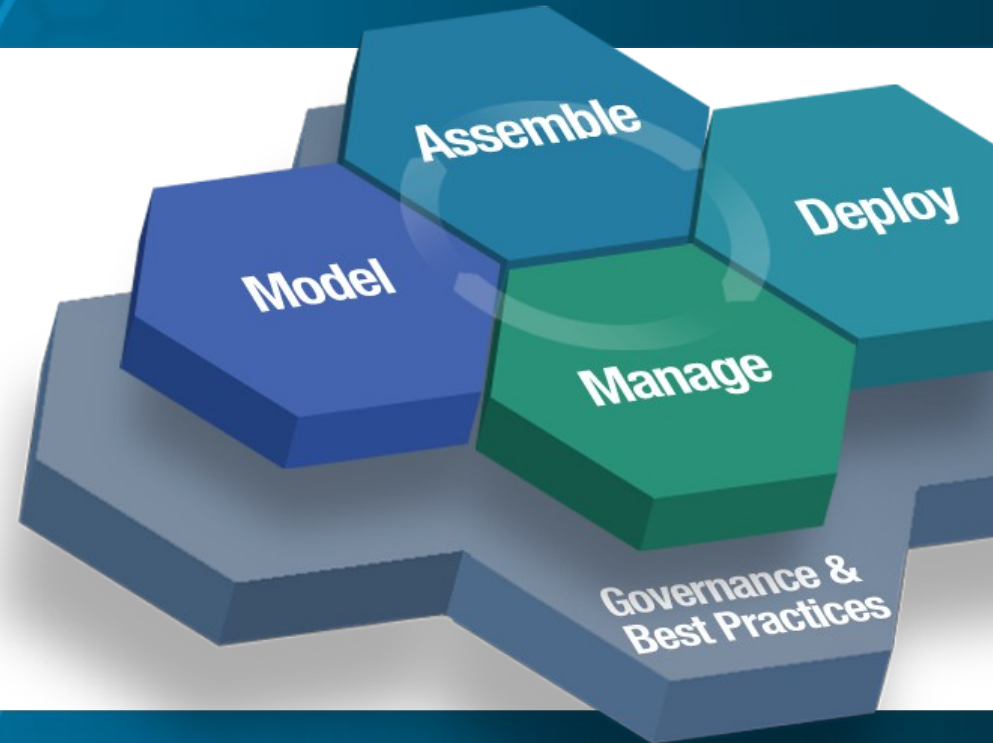
SOA on your terms and our expertise



IBM SOA Architect Summit

Service Oriented Architecture

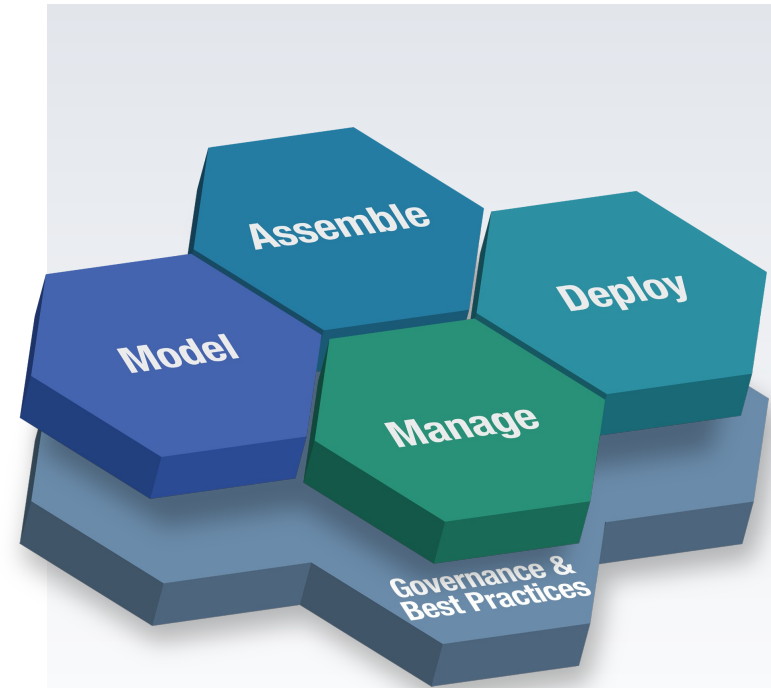
An Overview for the Enterprise Architect



ON DEMAND BUSINESS™

Agenda

- Introduction
- SOA Reference Architecture
- SOA Roadmap
- SOA Governance
- Summary



Service Oriented Architecture

Different Things to Different People

Roles

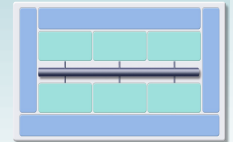
Capabilities that a business wants to expose as a **set of services** to clients and partner organizations

Business



An **architectural style** that requires a service provider, requestor and a service description. It addresses characteristics such as loose coupling, reuse and simple and composite implementations

Architecture



A **programming model** complete with standards, tools, methods and technologies such as Web services

Implementation

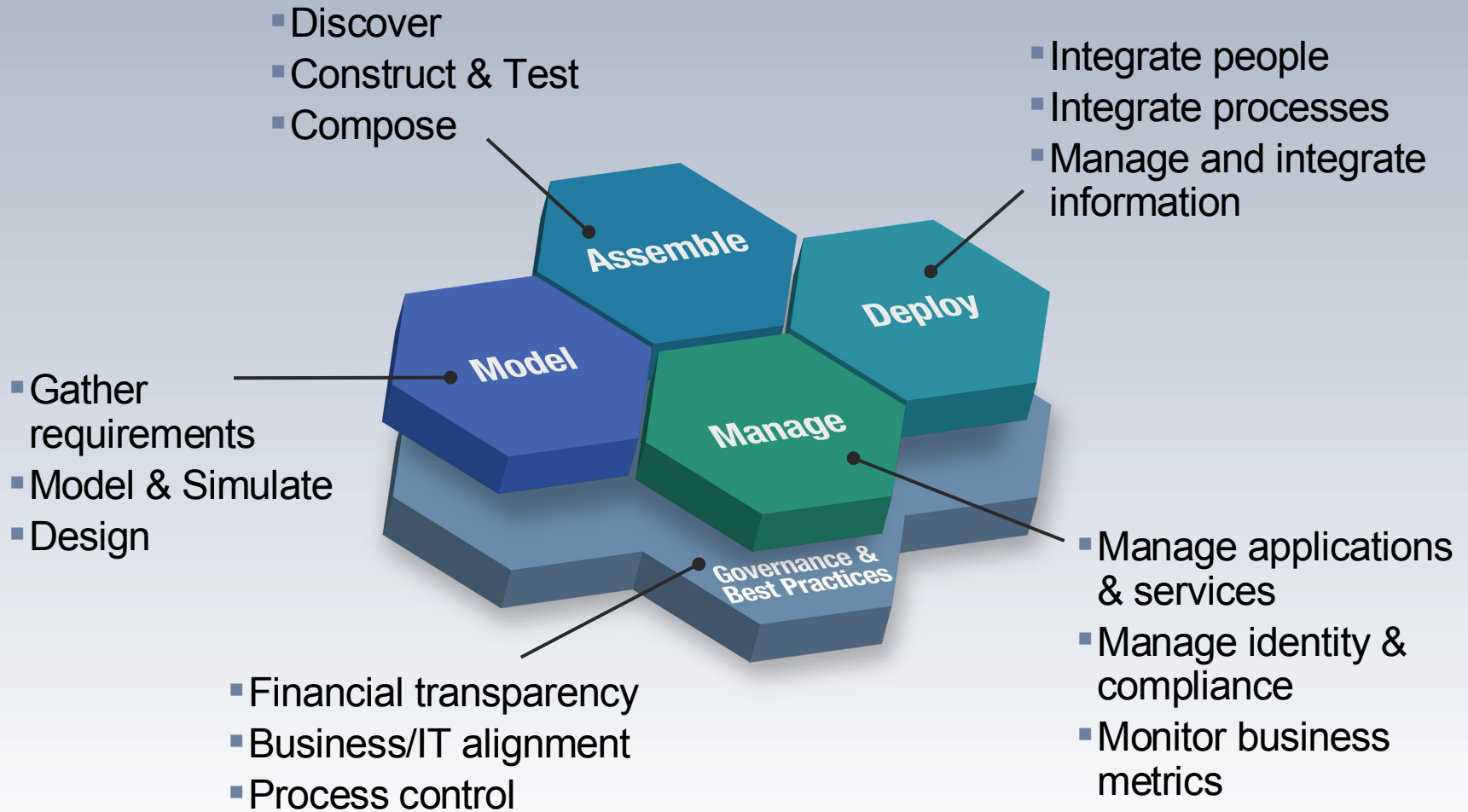


A **set of agreements** among service requestors and service providers that specify the quality of service and identify key business and IT metrics

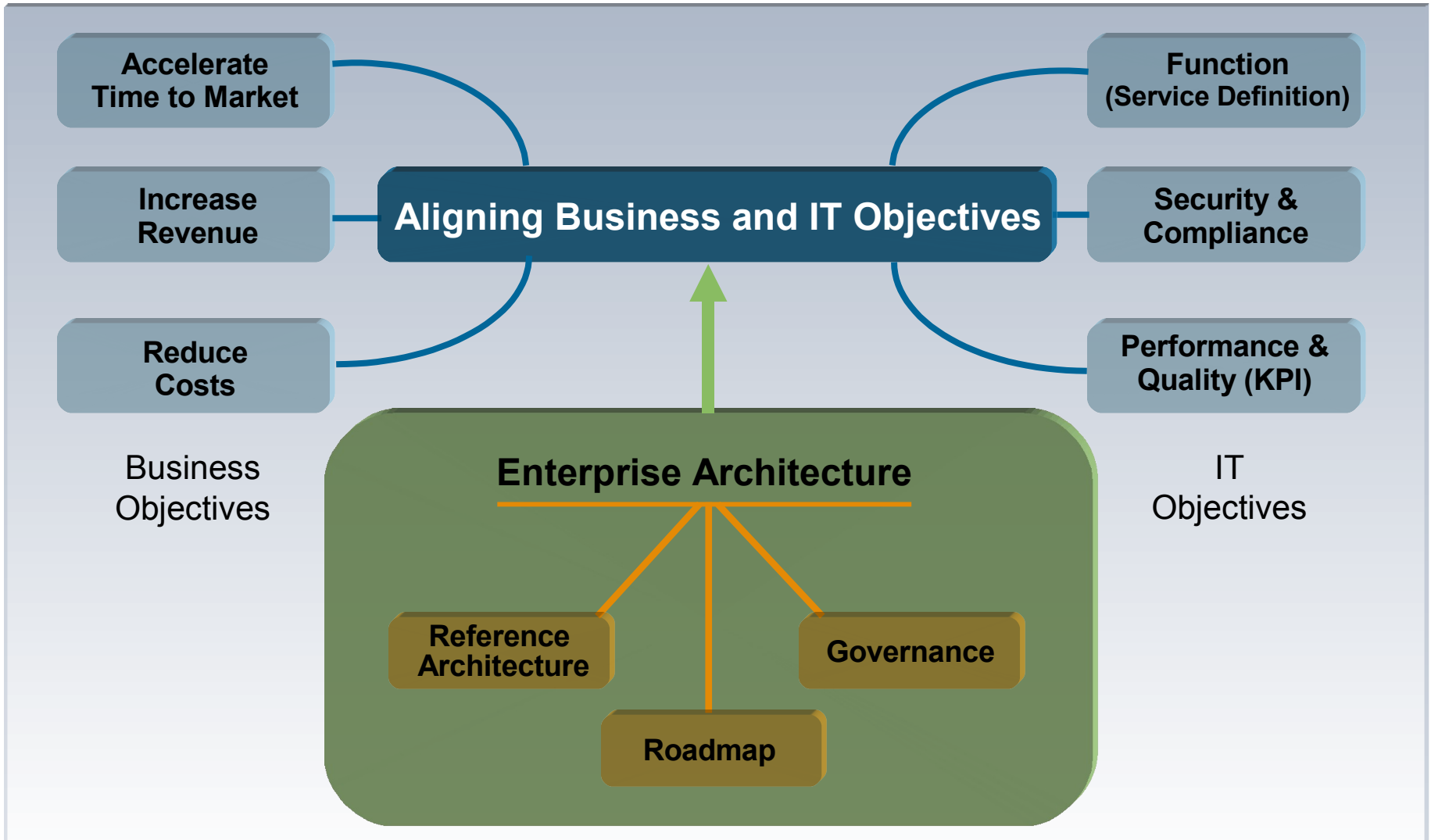
Operations



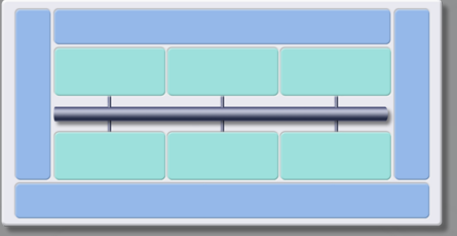
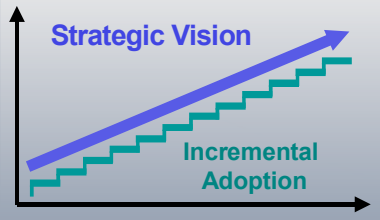
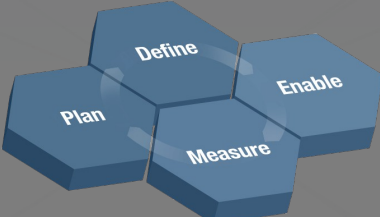
The SOA Lifecycle



SOA and Enterprise Architecture: A Common Goal

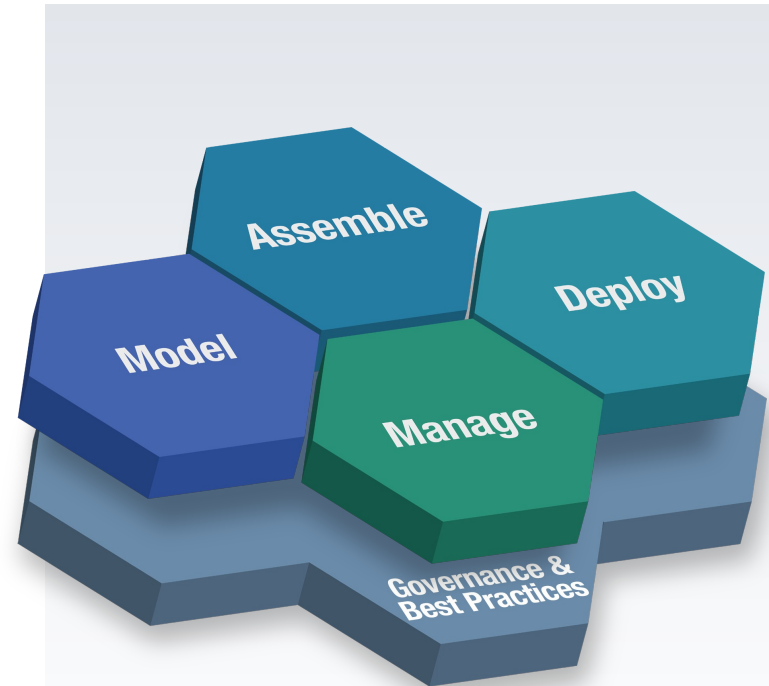


SOA: The Focus of the Enterprise Architect

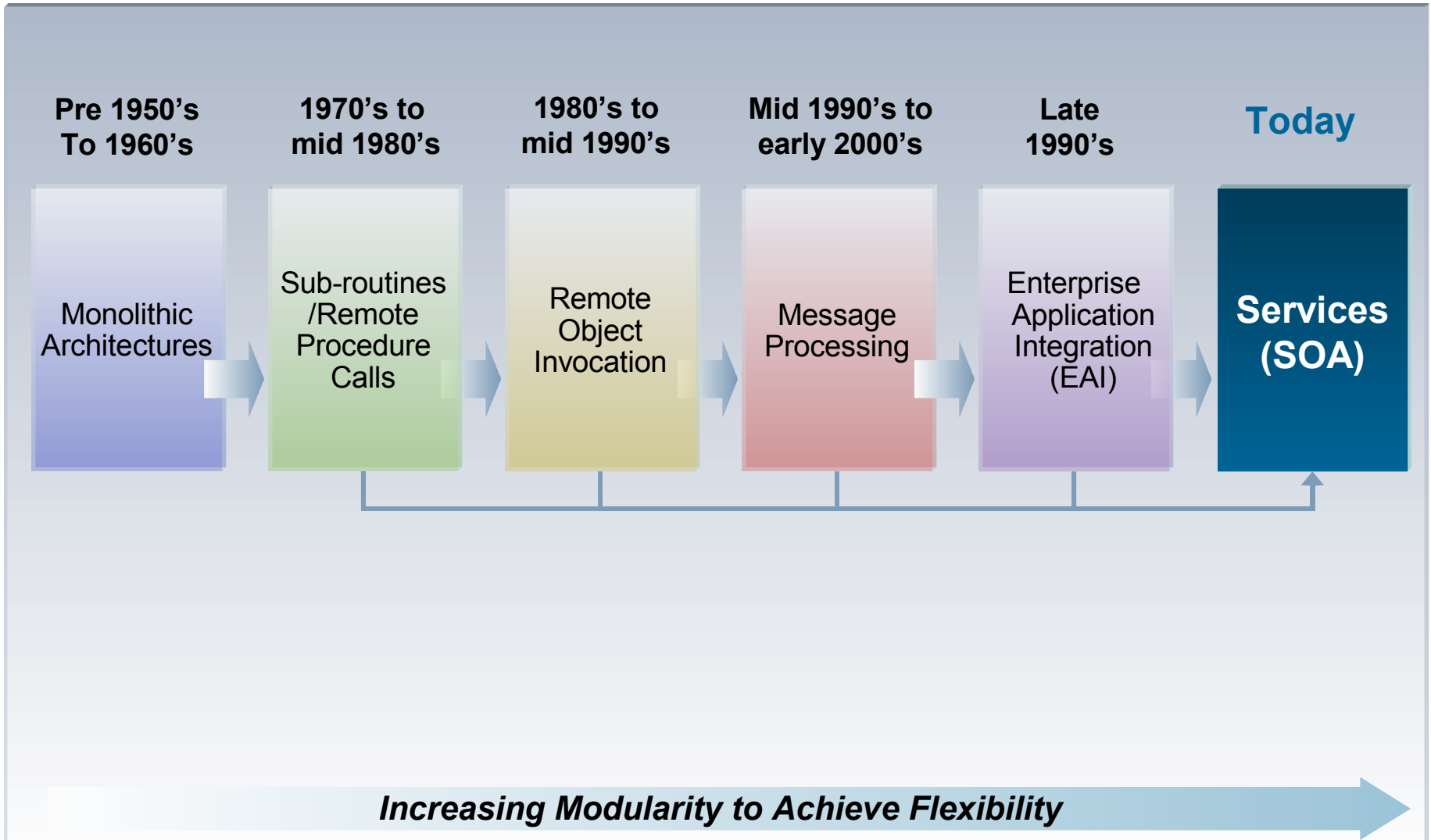
| Deliverable | Description | Overview |
|--|---|---|
| <p>SOA Reference Architecture</p> | <p>The SOA Reference Architecture defines a reference framework and corresponding IT principles for SOA implementation projects</p> |  |
| <p>SOA Roadmap</p> | <p>The Roadmap is used to create a tailored transition plan for moving toward the SOA Reference Architecture</p> |  |
| <p>SOA Governance Model</p> | <p>The SOA Governance Model defines the decision rights along with the associated measurements and controls</p> |  |

Agenda

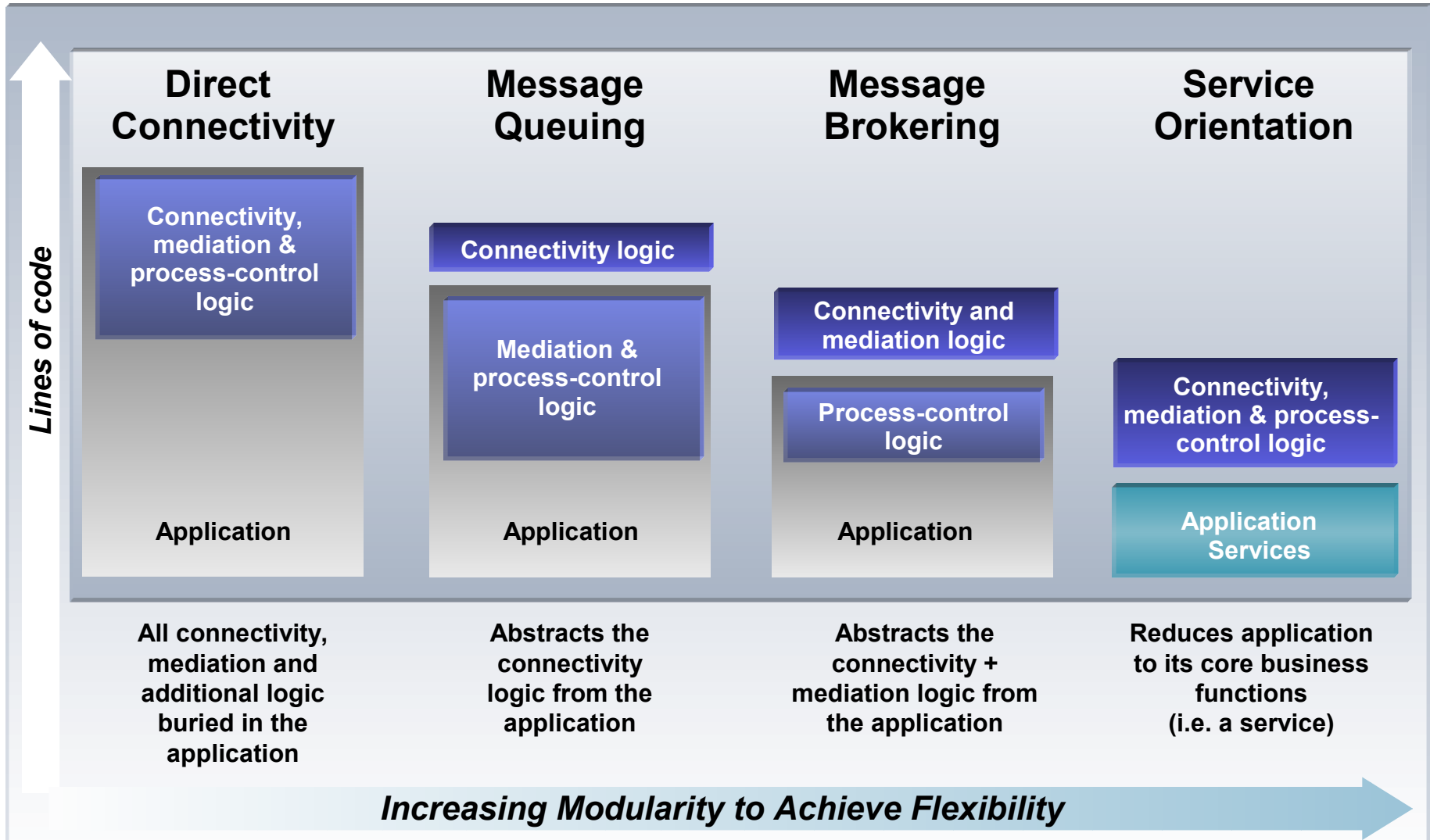
- Introduction
- **SOA Reference Architecture**
 - Providing a comprehensive model
- SOA Roadmap
- SOA Governance
- Summary



IT's Architectural Evolution: Making IT More Responsive

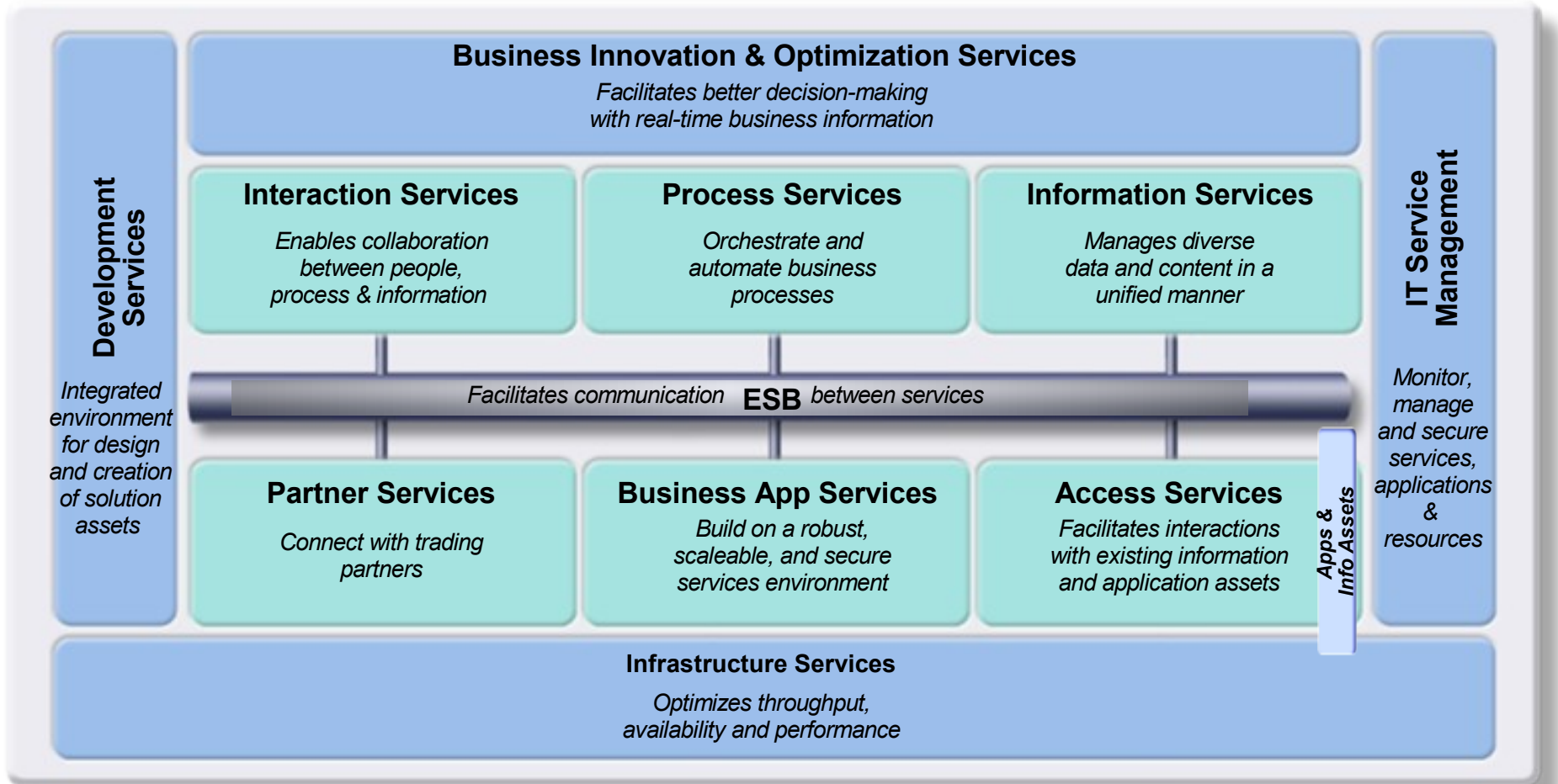


SOA: The Next Step on the Connectivity Evolution



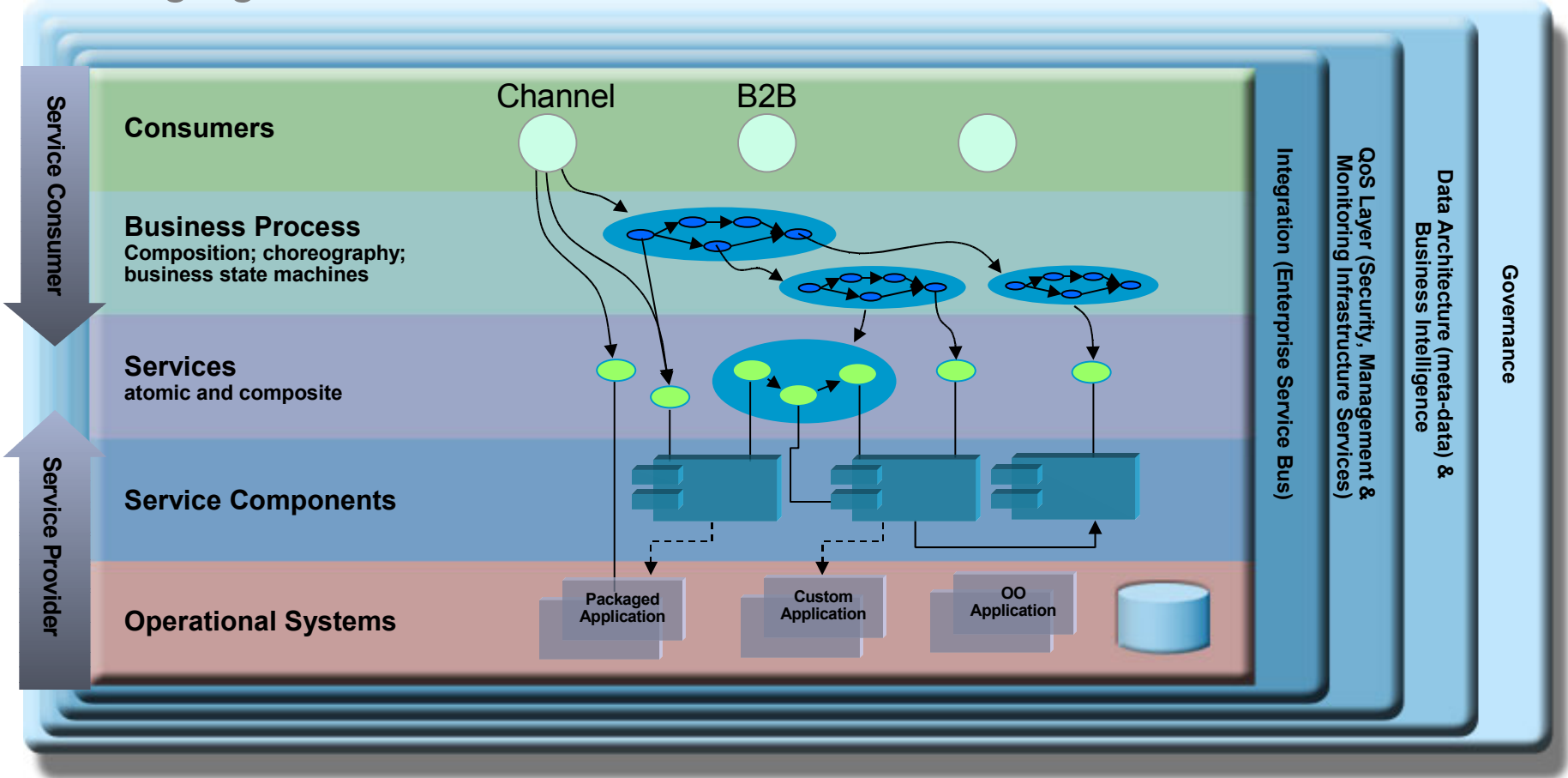
SOA Reference Architecture

Supporting the SOA Lifecycle



SOA Solution Layering

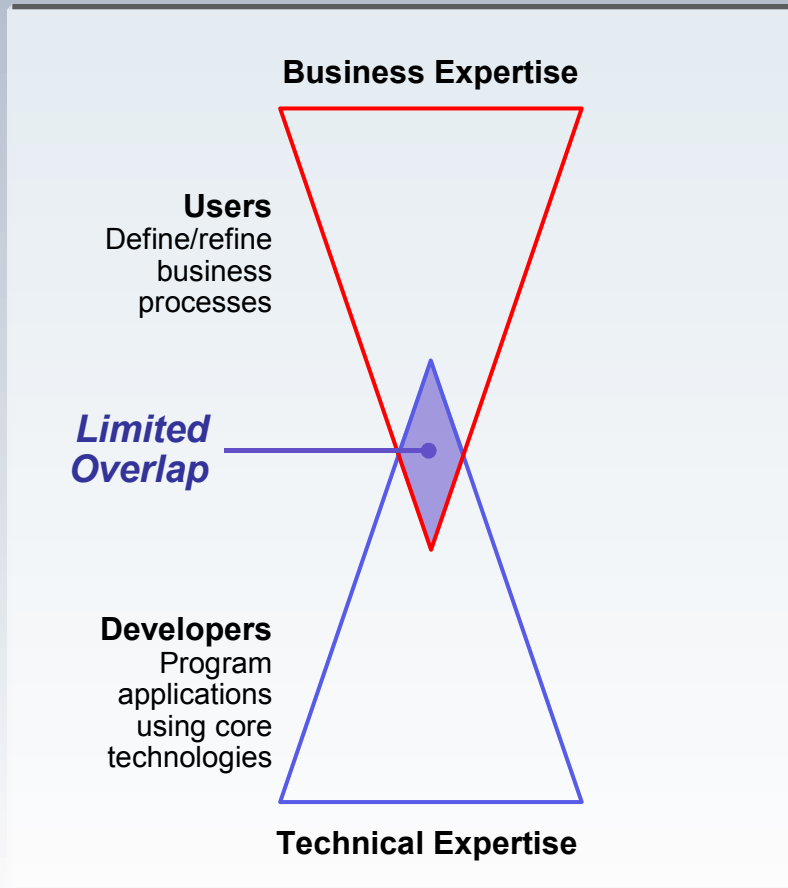
Leveraging the SOA Reference Architecture



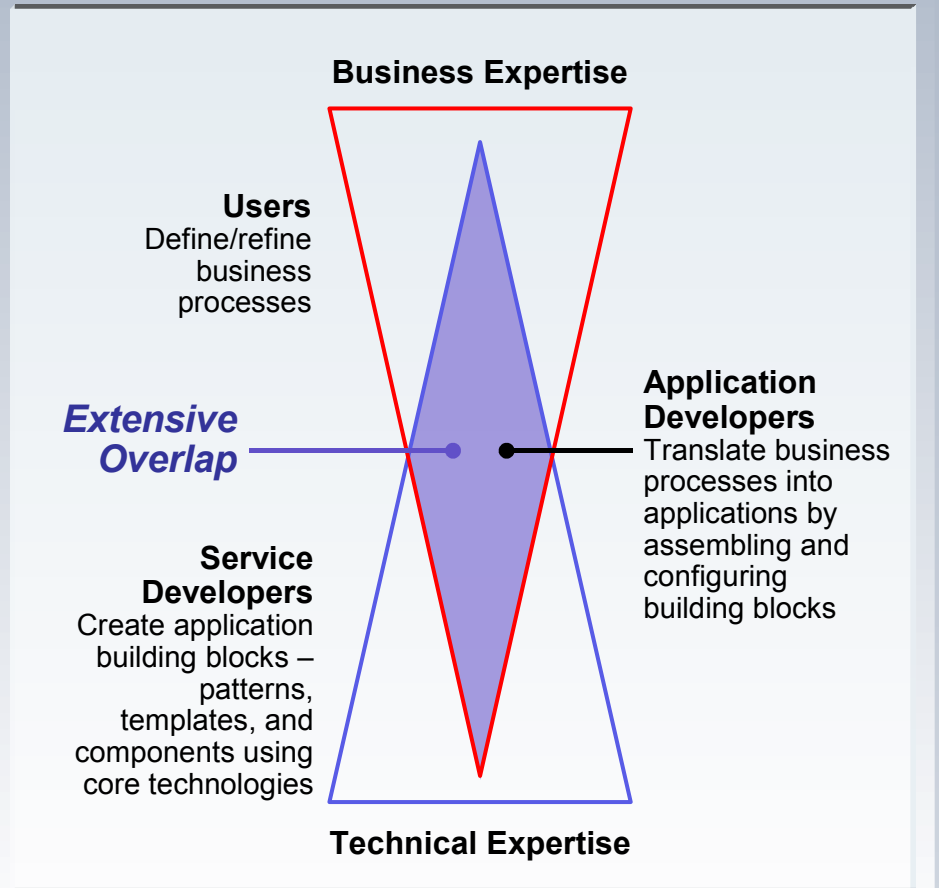
A New Programming Model

Supporting the SOA Abstraction Layering

Traditional Software Development



Service-Oriented Development



SOA Programming Model Aspects

■ Design

- Focus on business design modeling, simplification, and role-based collaboration
- Use of declarative policy to control execution behavior and relationships

■ Invocation

- Loosely-coupled call-style and event-driven interconnection of services with built-in support for topology transparency, mediation, and brokering featuring standards-based interoperability

■ User Interaction

- Dynamic support for people integration into the business design

■ Composition of Business-level Applications

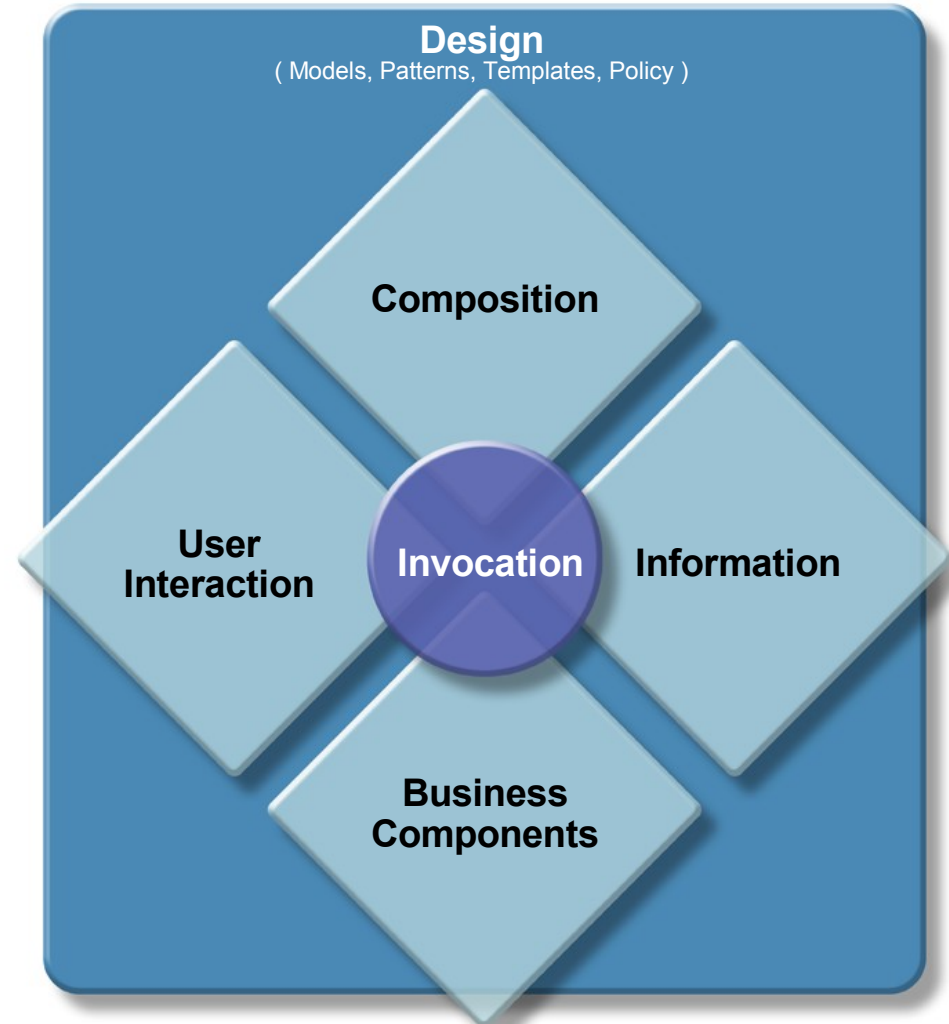
- Wired assembly of services to form business-level applications, workflows, and business orchestration

■ Information

- Built-in access to service state, disconnected service-data exchange, information composition and transformation

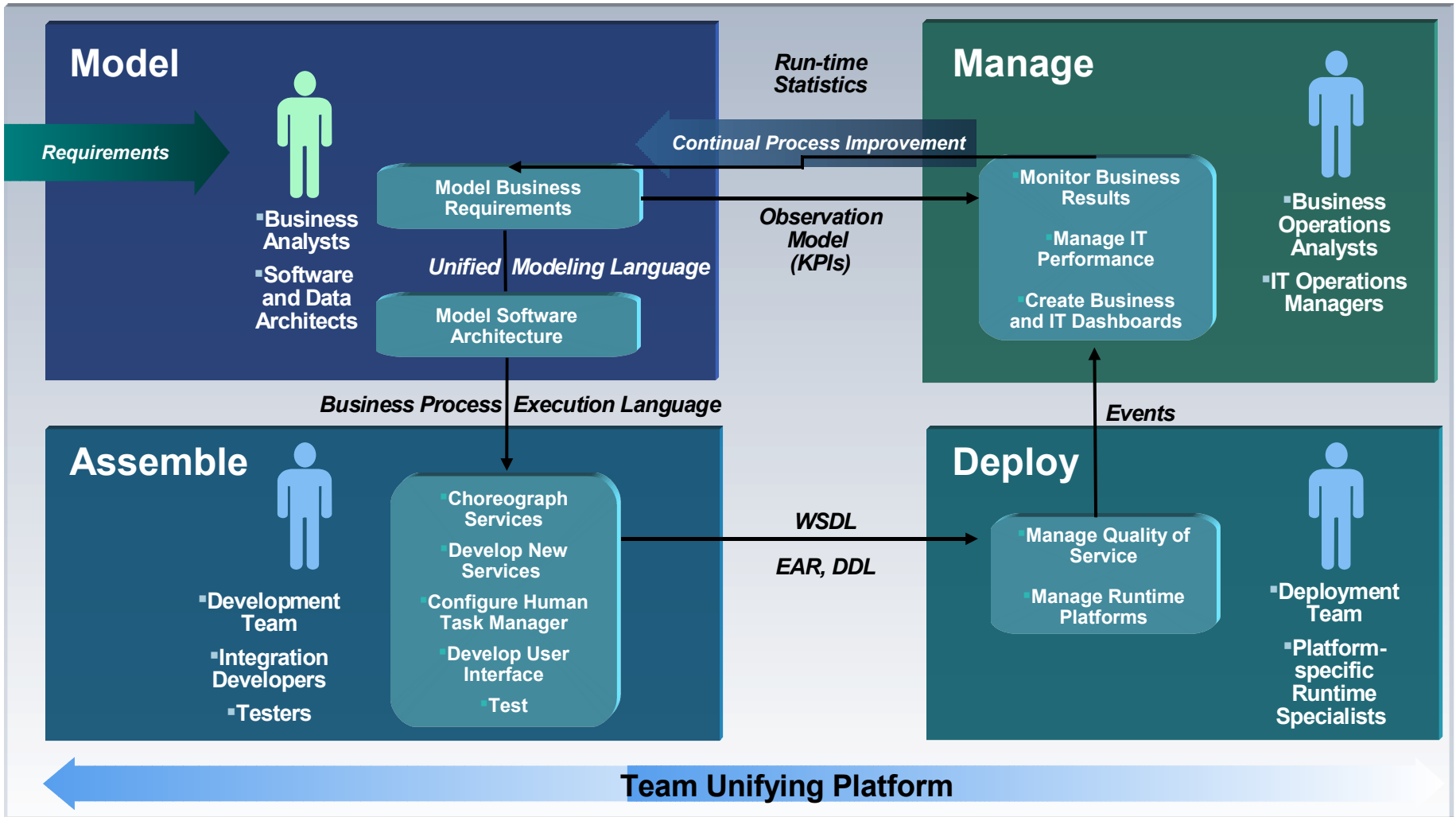
■ Business Components

- Composable and reusable services



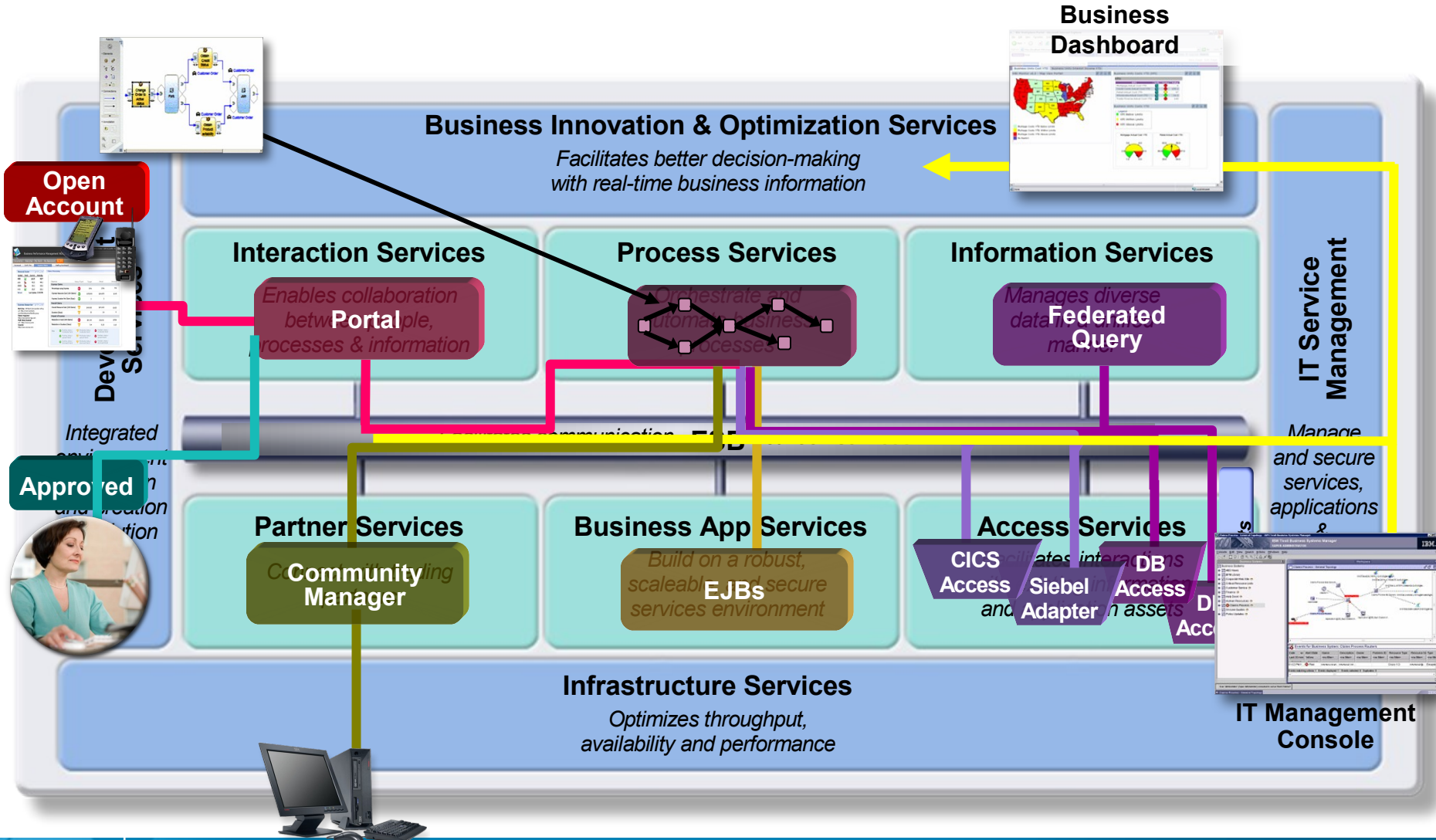
Business Driven Development

An Iterative, Business-focused Development Process

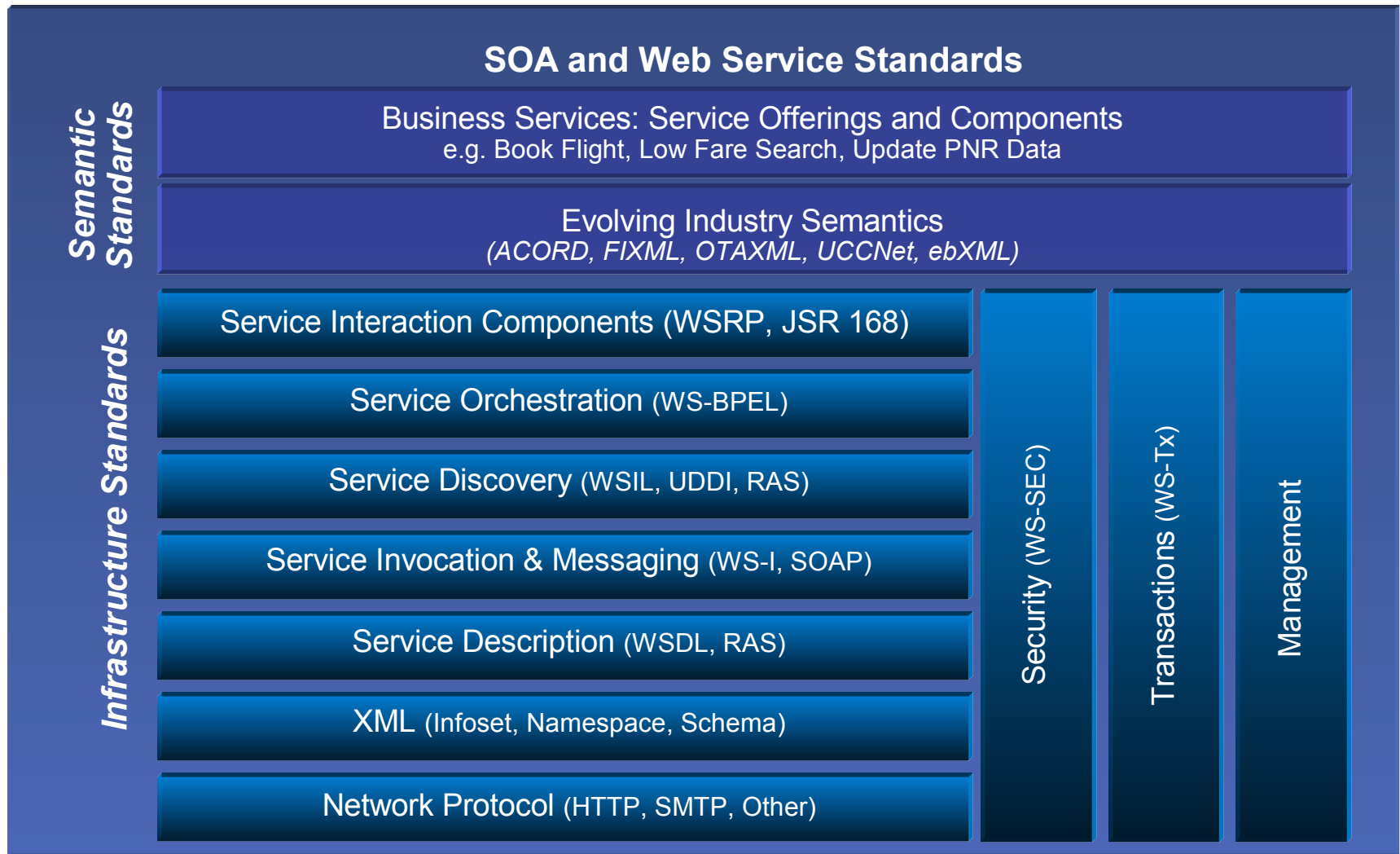


Separation of Concerns

The SOA Reference Architecture in Action



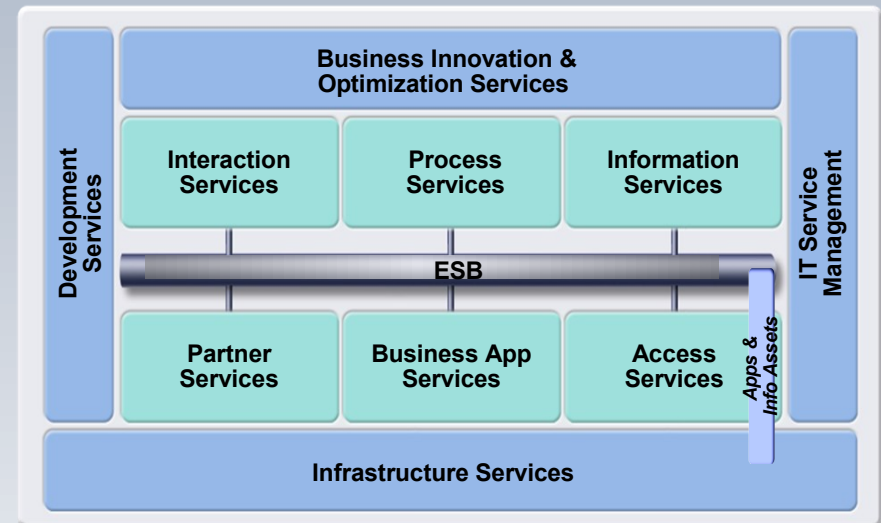
Key Standards for SOA



The SOA Reference Architecture and its Key Principles

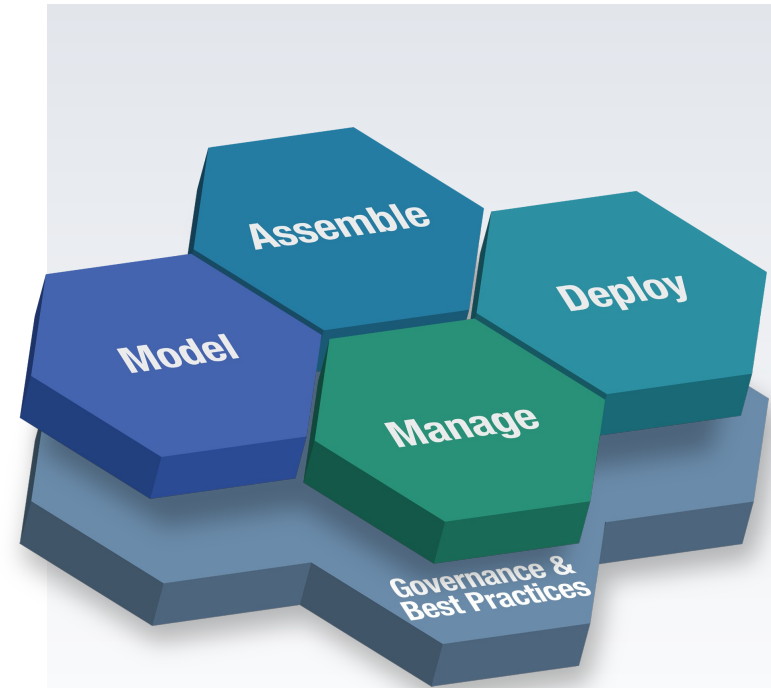
Providing IT Flexibility to Meet the Demands of Business

- Linkage between business and IT through support of the entire SOA Lifecycle
- Connectivity and Service Isolation through the Enterprise Service Bus
- Separation of Concerns/Modularity for incremental adoption
- Component-based Programming and Solution Development
- Business and IT Monitoring and Management
- Open Standards



Agenda

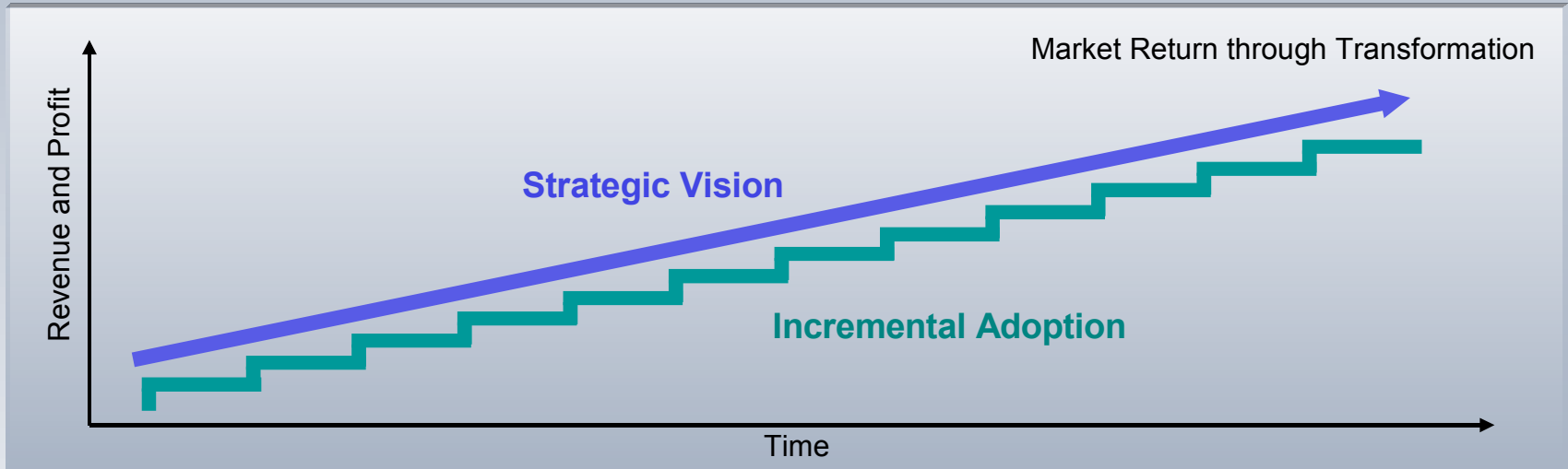
- Introduction
- SOA Reference Architecture
- **SOA Roadmap**
 - Relating business and IT objectives
- SOA Governance
- Summary



SOA Roadmap: A Plan for Adopting SOA

SOA Goal

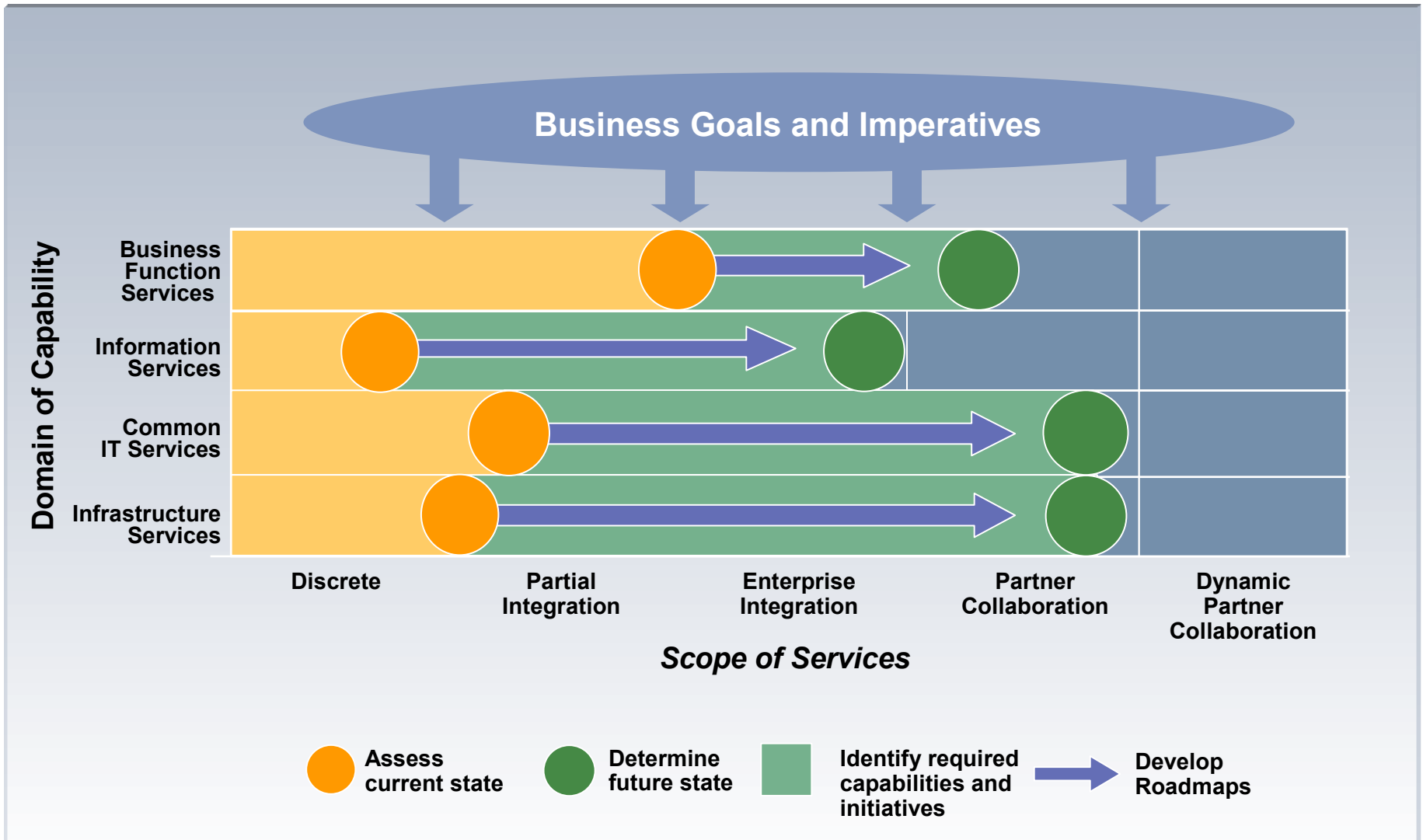
- Market return through transformation: quicker time to production, lower costs, competitive differentiation





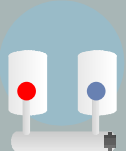


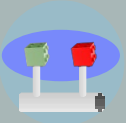

Two Primary Roadmap Perspectives

- 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

Roadmaps: Building Plans In Context

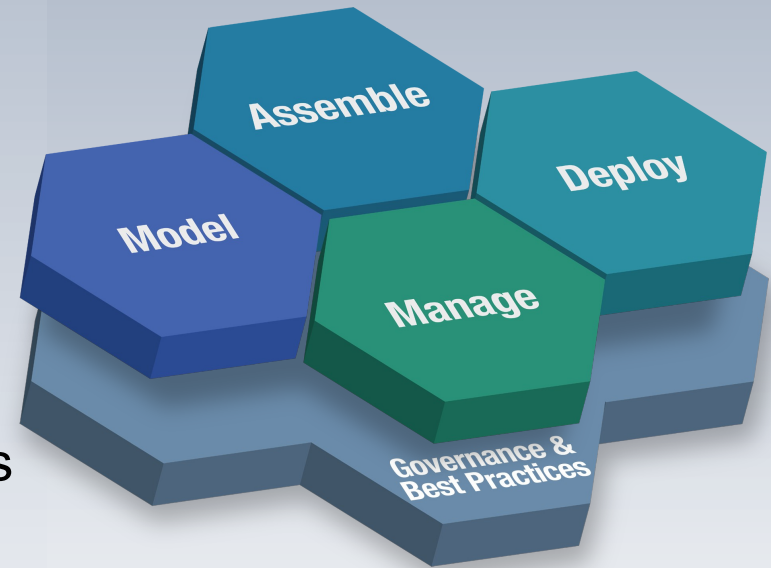


Service Integration Maturity Model (SIMM)

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

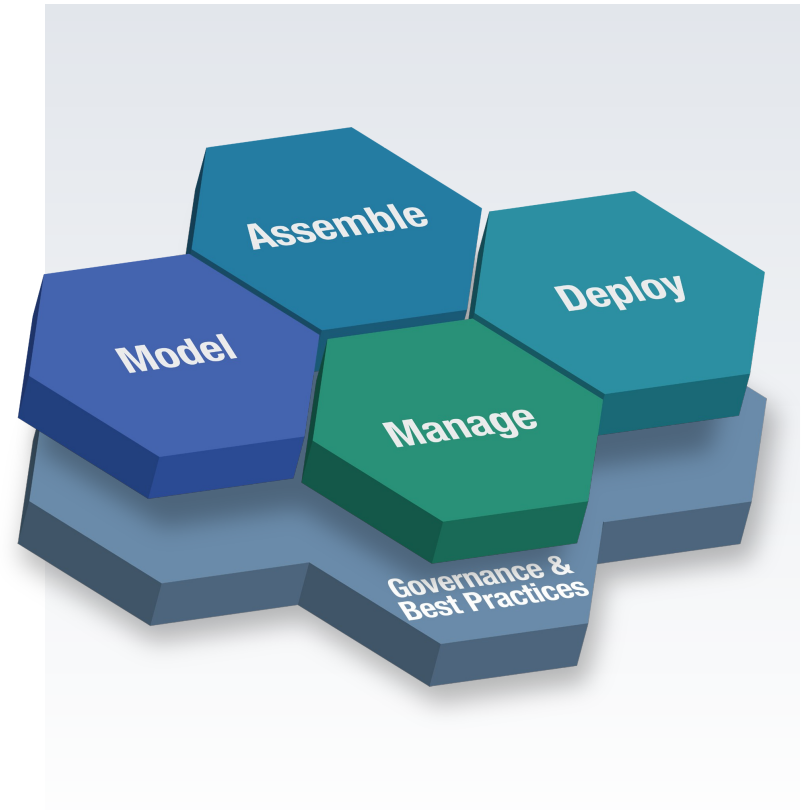
SOA Adoption Considerations

- **Business Drivers**
 - Accelerate time to market
 - Reduce costs
 - Increase revenue
 - Reduce risk and exposure
- **Organizational Readiness**
 - Executive support and sponsorship
 - Skills
- **Current Architecture and Environments**
 - Build and Runtime
 - Degree of heterogeneity
- **Operational Readiness**
 - Ability to monitor and manage current operations
 - Integration of monitoring functions into production environments



Agenda

- Introduction
- SOA Reference Architecture
- SOA Roadmap
- **SOA Governance**
 - Executing for success
- Summary



What is Governance?

SOA Governance is a catalyst for improving overall IT Governance

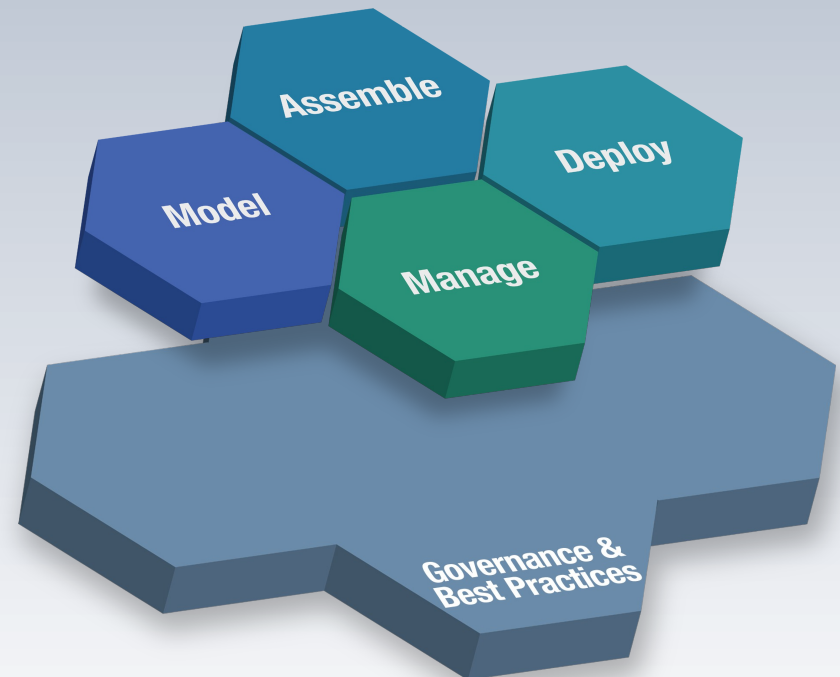
IT Governance

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



Why SOA Governance Matters

SOA Governance empowers teams to innovate

- 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



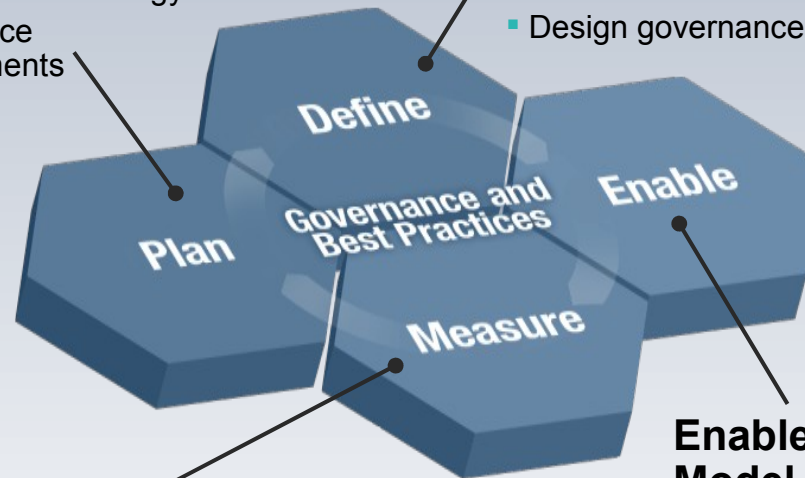
SOA Governance Lifecycle

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

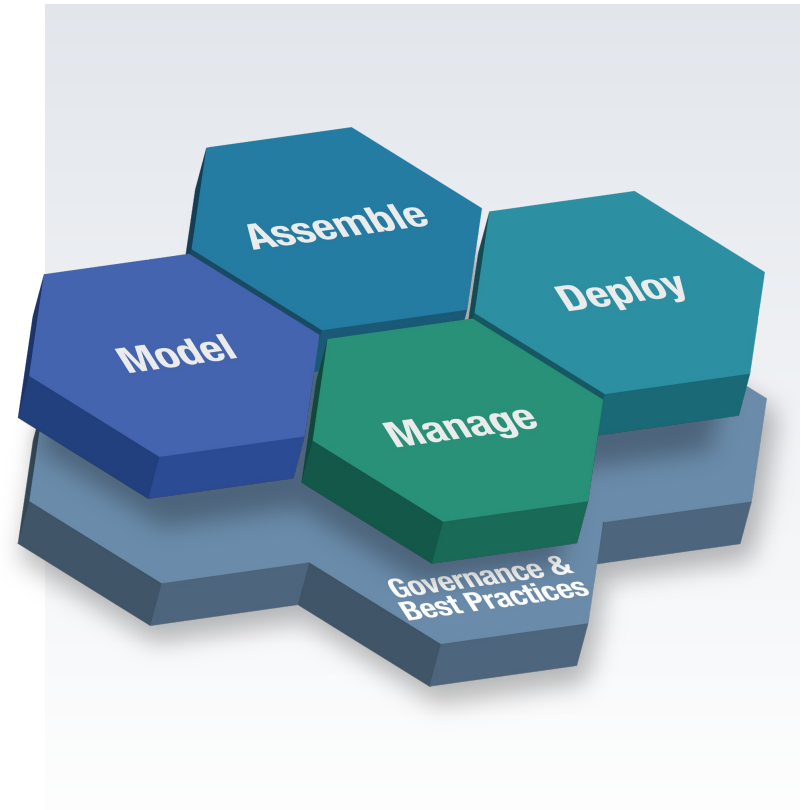
- Monitor compliance with policies
- Monitor compliance with governance arrangements
- Monitor IT effectiveness metrics

Enable the Governance Model Incrementally

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

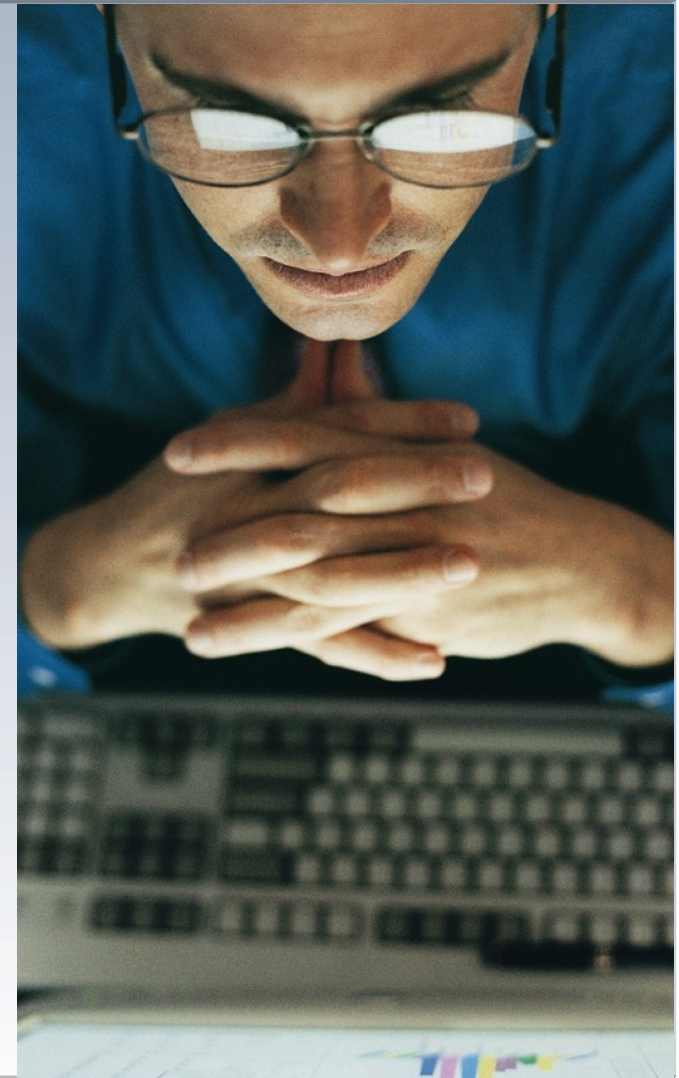
Agenda

- Introduction
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- **Summary**



SOA for the Enterprise Architect ...

- Understand your business goals, drivers, and context
- Understand your current environment
 - Development, Runtime, and Management
- Establish a Roadmap
 - Find appropriate starting point
 - Determine the development and runtime requirements
 - *Leverage Separation of Concerns and the SOA Programming Model*
- Establish Governance
 - Appropriate for your company culture and environment



धन्यवाद

Hindi

多謝

Traditional Chinese

ขอบพระคุณ

Thai

Спасибо

Russian

Gracias

Spanish

شكراً

Arabic

Thank You

Obrigado

Brazilian Portuguese

Grazie

Italian

Danke

German

Merci

French

நன்றி

Tamil

多谢

Simplified Chinese

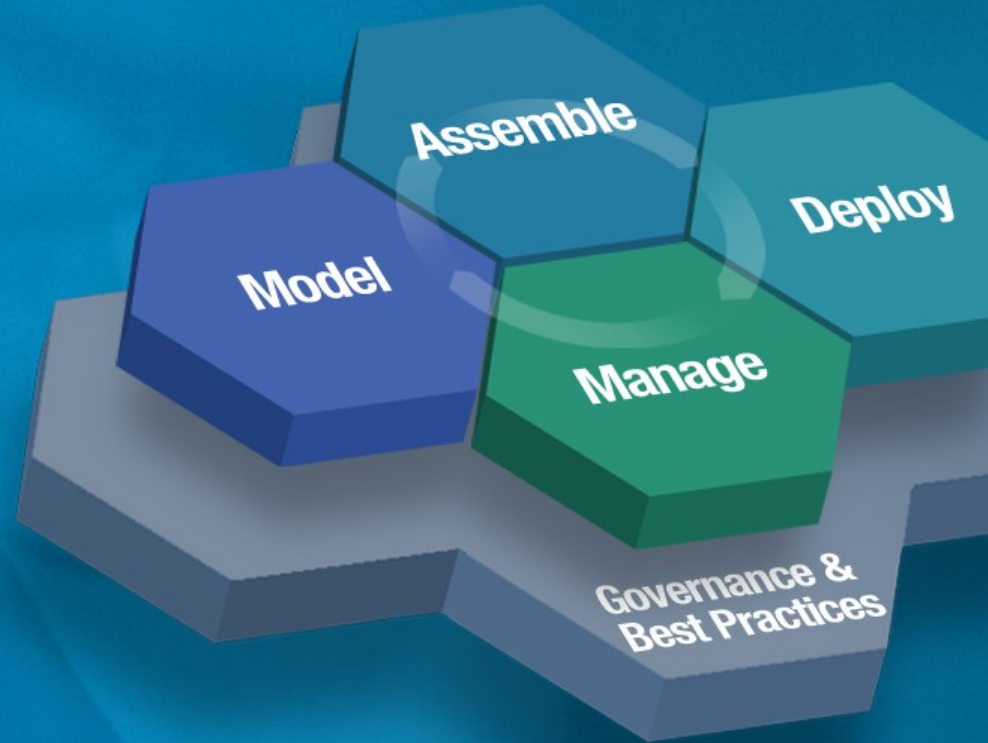
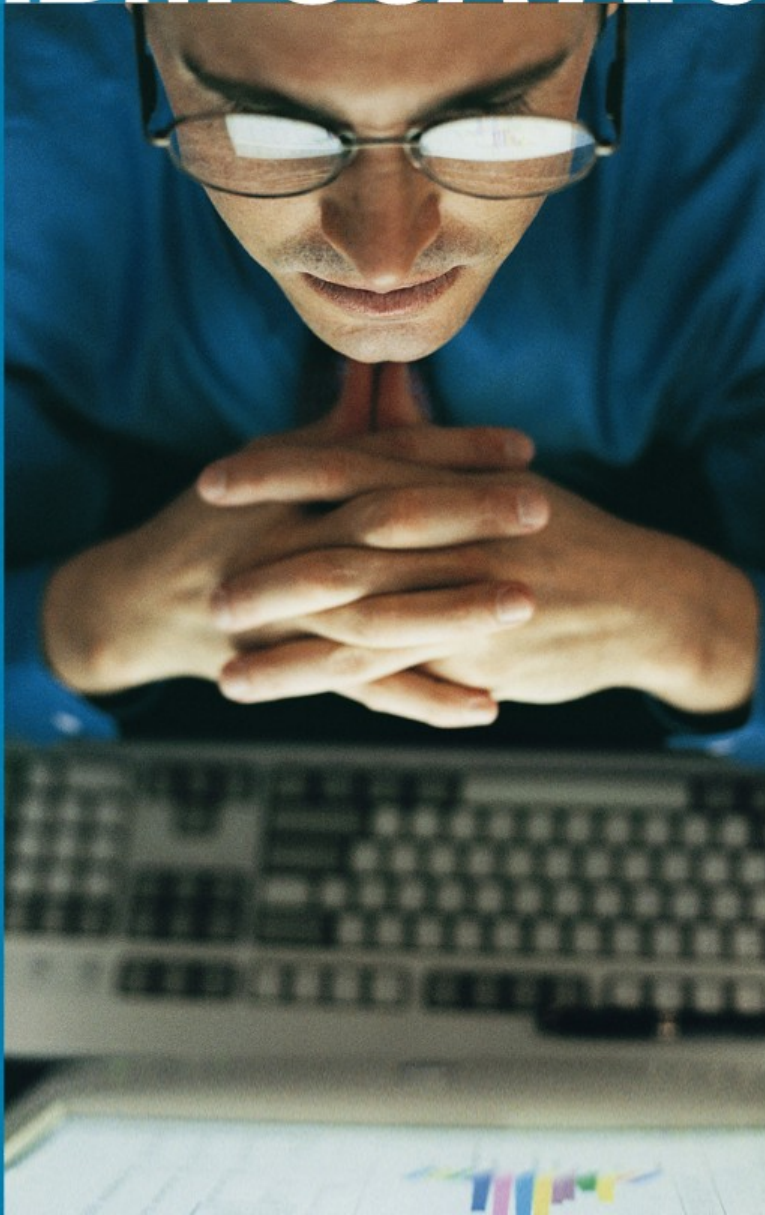
감사합니다

Korean

ありがとうございました

Japanese

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