



# Software View

World quality trainings!

# **Service Oriented Architecture (SOA)**

## **Making the IT Infrastructure Speaks Business**

by

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# Agenda

- What is SOA?
- Business capabilities of SOA
- Technical capabilities of SOA
- Building an SOA roadmap
- Barriers in implementing SOA

# Agenda

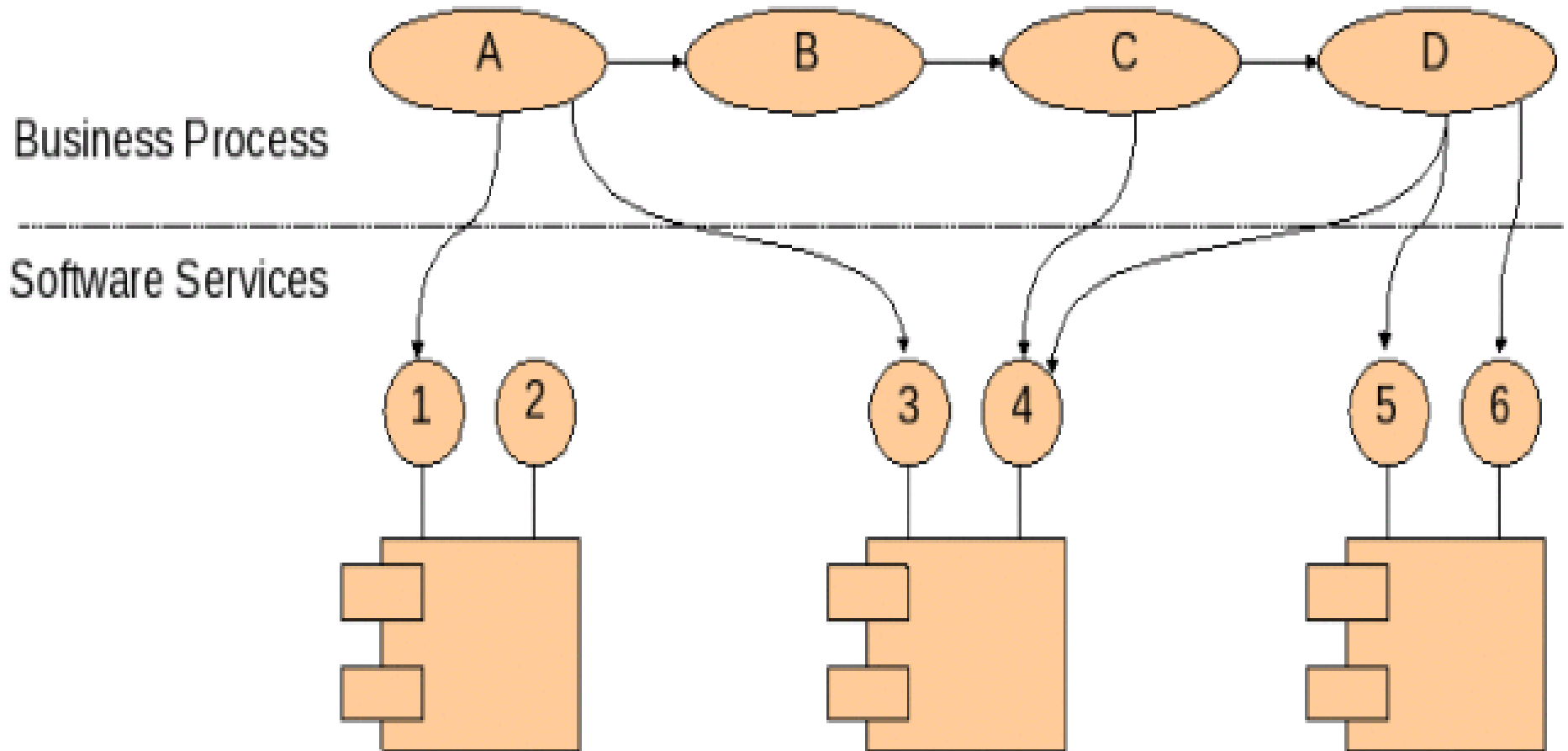
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# What is SOA?

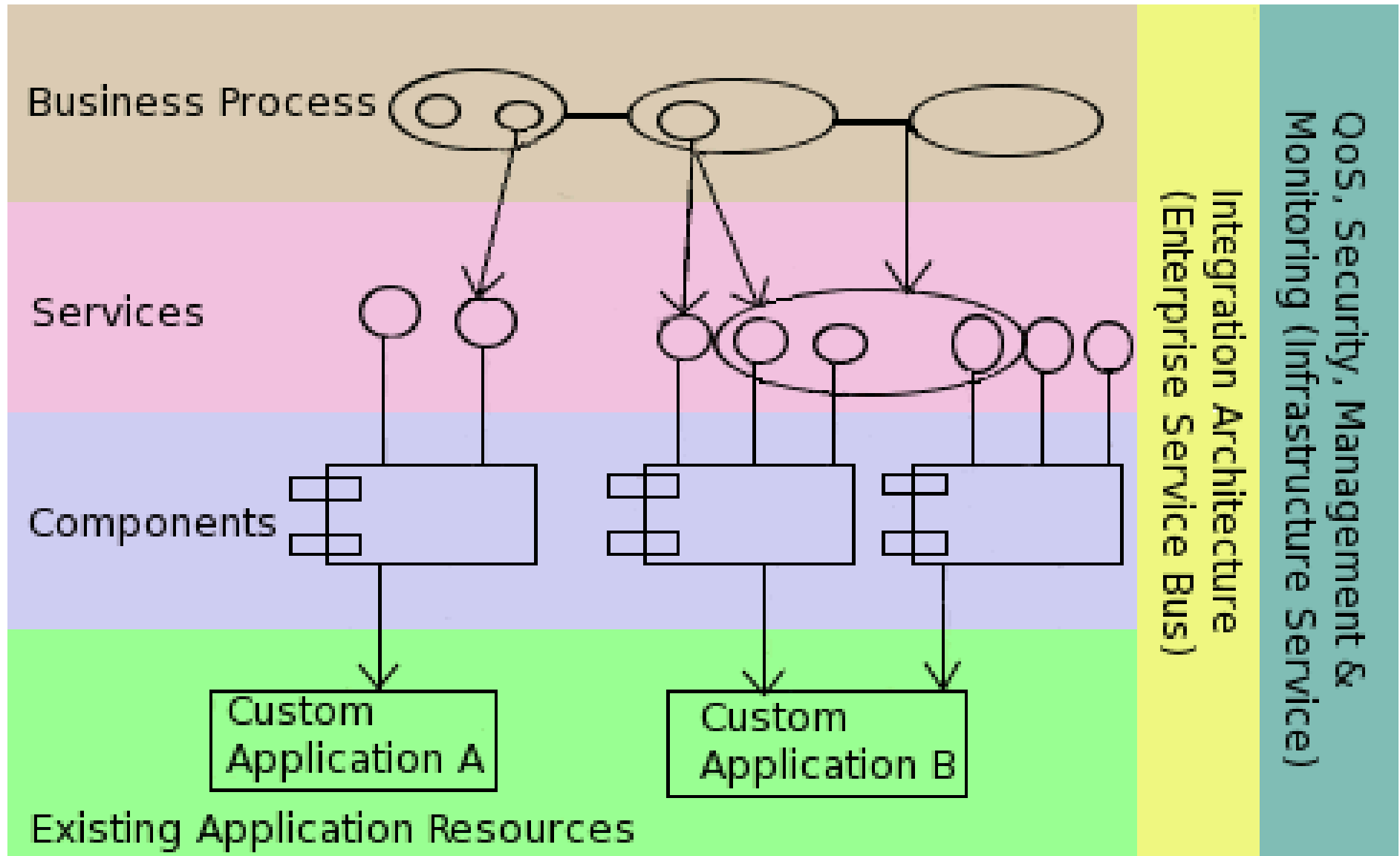
“Service Oriented Architecture (SOA) is a paradigm for organizing and utilizing distributed capabilities that may be under the control of different ownership domains.”

- OASIS Reference Model

# What is SOA?



# What is SOA?



# What is SOA?

- Business Executive and Business Analyst
  - A set of services that constitutes IT assets (capabilities) and can be used for building solutions and exposing them to customers and partners.

# What is SOA?

- Enterprise Architect
  - A set of architectural principles and patterns addressing overall characteristics of solutions: modularity, encapsulation, loose coupling, separations of concerns, reuse, composability and so on.

# What is SOA?

- Project Manager
  - A development approach supporting massive parallel development.

# What is SOA?

- Tester or Quality Assurance Engineer
  - A way to modularize, and consequently simplify, overall system testing.

# What is SOA?

- Software Developer
  - A programming model complete with standards, tools and technologies such as web services.

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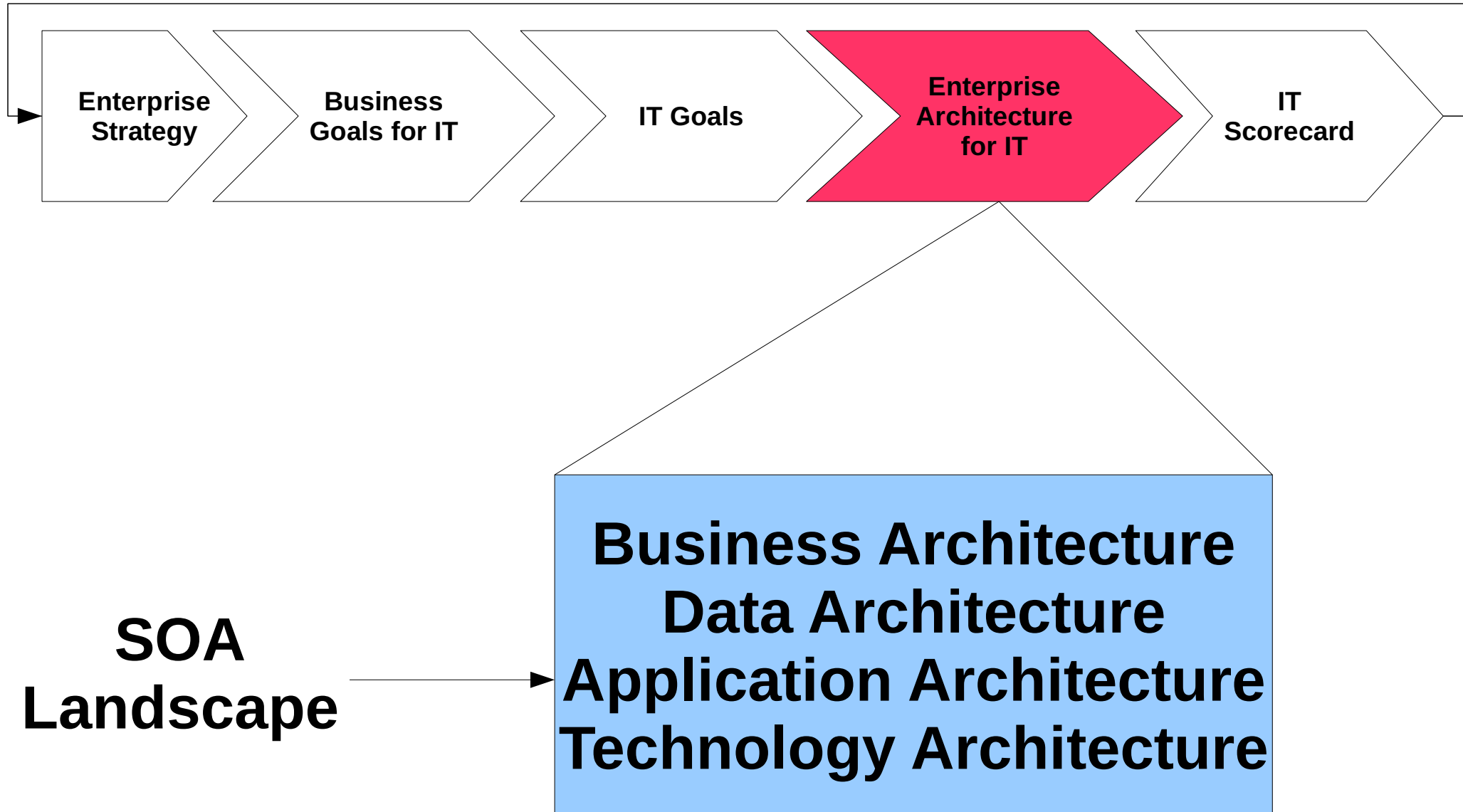
# Business Capabilities of SOA

- Business-driven. Business analysts can identify and define business processes and services without focusing on technical matters
- Provides business agility
- Services are reusable

# Business Capabilities of SOA

- Services are broadly usable across multiple departments, branches or even different ownership boundaries
- Can easily monitor the performance of atomic and composite services and the way they are used - provide business intelligence easily
- Enterprise IT infrastructure can grow little by little as the demand increases

# SOA is an Enterprise Architecture



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# Technical Capabilities of SOA

- SOA provides high degree of independence from both the technology and related functionality
- SOA can provide true platform independence
- Systems integration can become simple and less time consuming

# Technical Capabilities of SOA

- Service reuse can be much more easier and cost effective than source code or library reuse
- Developing small software bundles (services) is much more easier than building large scale systems

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# Building an SOA Roadmap

- Initiation (with an SOA value assessment)
- Roadmap development
- Implementation, migration planning
- Execution

# Building an SOA Roadmap

**Initiate**

**Develop Roadmap**

**Execute Plan**

## Initiate SOA

Project Objectives

Team Members

Timeline & Deliverables

## SOA Principles

Business Principles

Application Principles

Technology Principles

Data Principles

## Reference Architecture

Business Architecture

Infrastructure Arch

Data Architecture

Develop Roadmap

## Execute SOA Roadmap

Portfolio Management

Project Management

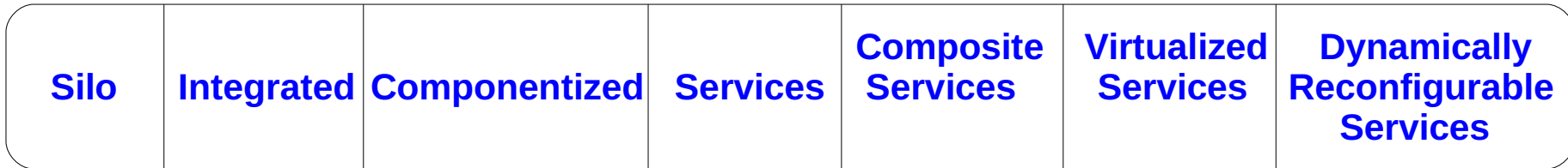
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Application / Infrastructure / Data

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Testing / Publish / Discover

**Governance – Organization  
- Skills Mapping**

**Review and Update Roadmap**

# Building an SOA Roadmap



**Business View of IT**

**Methods**

**Applications**

**Architecture**

**Infrastructure**

**Growth** 

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# Barriers in Implementing SOA

- Misunderstanding
- No commitment from business executives
- No commitment from technical executives
- Lack of skills
- Poor or no governance at all
- Improper paths taken

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The End.