

# ISM

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IT Solutions Management for Human Services

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an affiliate of the American Public Human Services Association



Social Services, SOA Middleware

# SOA Middleware: Bridging Your Data on the Information Highway

July 19, 2007



# Agenda

- **What is the Challenge?**
- **Definition of SOA**
- **Definition of Middleware**
- **Benefits**
- **Case Study: LA ACCESS & Indiana Eligibility Modernization**

# The Challenge: Business and IT Alignment

## Business Pressures:

Provide  
Functionality  
to Citizens

Shorter  
change  
cycles

Quicker  
Response to  
Citizen Needs

Citizens



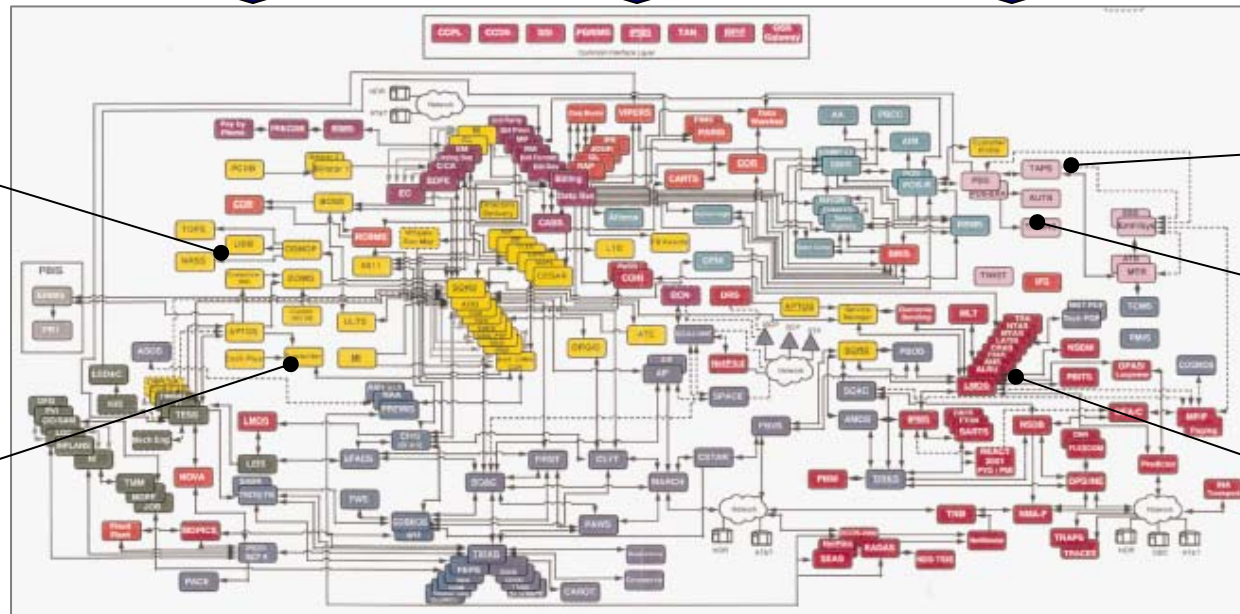
Employees



Service  
Providers



External  
Agencies



Channels



## IT Constraints:

Complex  
processes  
and systems

Complex  
applications  
and interfaces

IT budget priorities on  
maintenance, not new  
investments

Let's start by looking at some base-line definitions so we're all talking about in the same terms.

### ... a service?

A **repeatable business task** – e.g.,  
check customer credit;  
open new account

### ... service orientation?

A way of integrating your  
**business as linked services**  
and the outcomes that  
they bring

### ... service oriented architecture (SOA)?

An IT **architectural style** that supports  
service orientation

### ... a composite application?

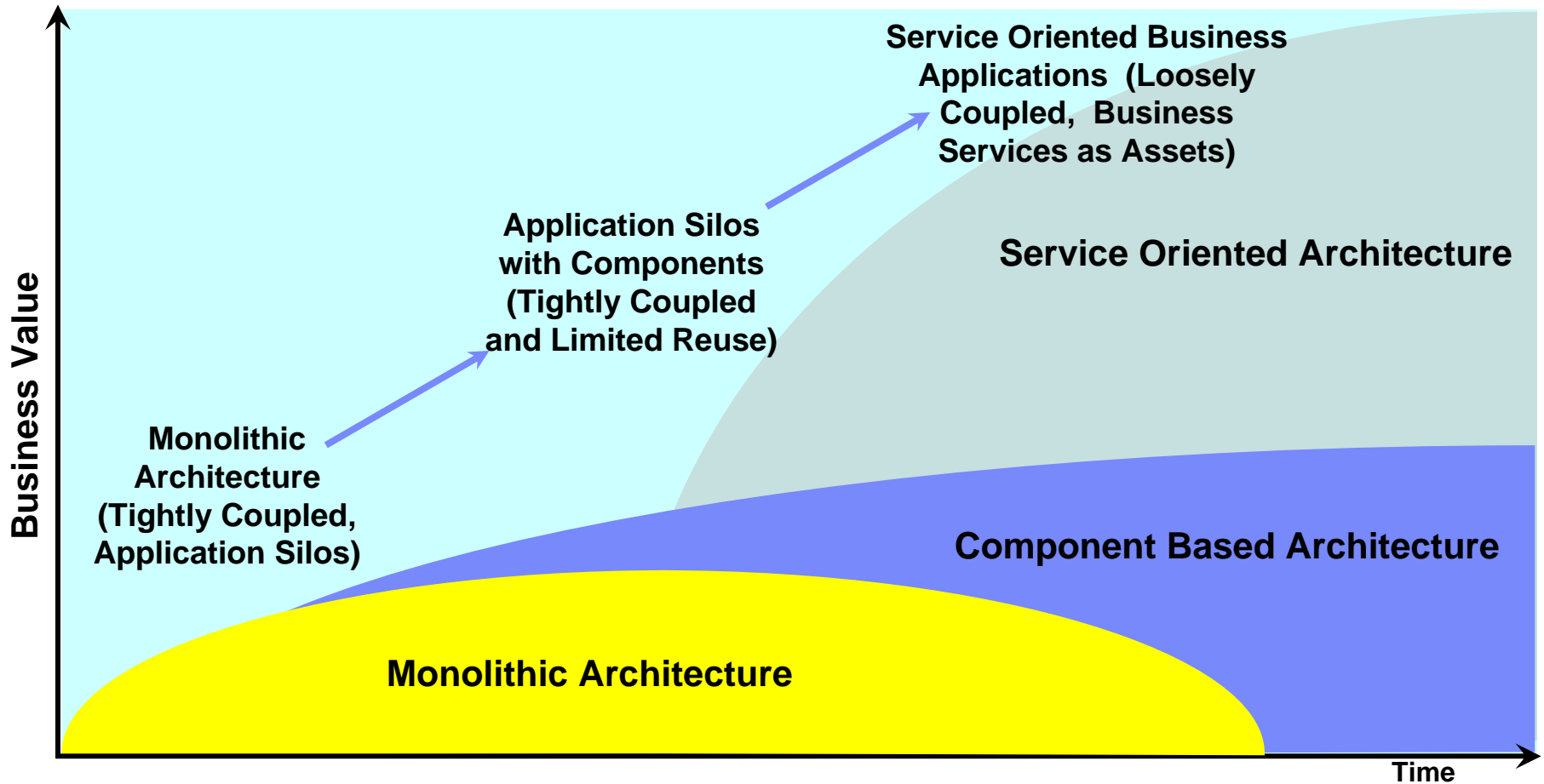
A set of **related & integrated** services that  
support a business  
process built on an SOA



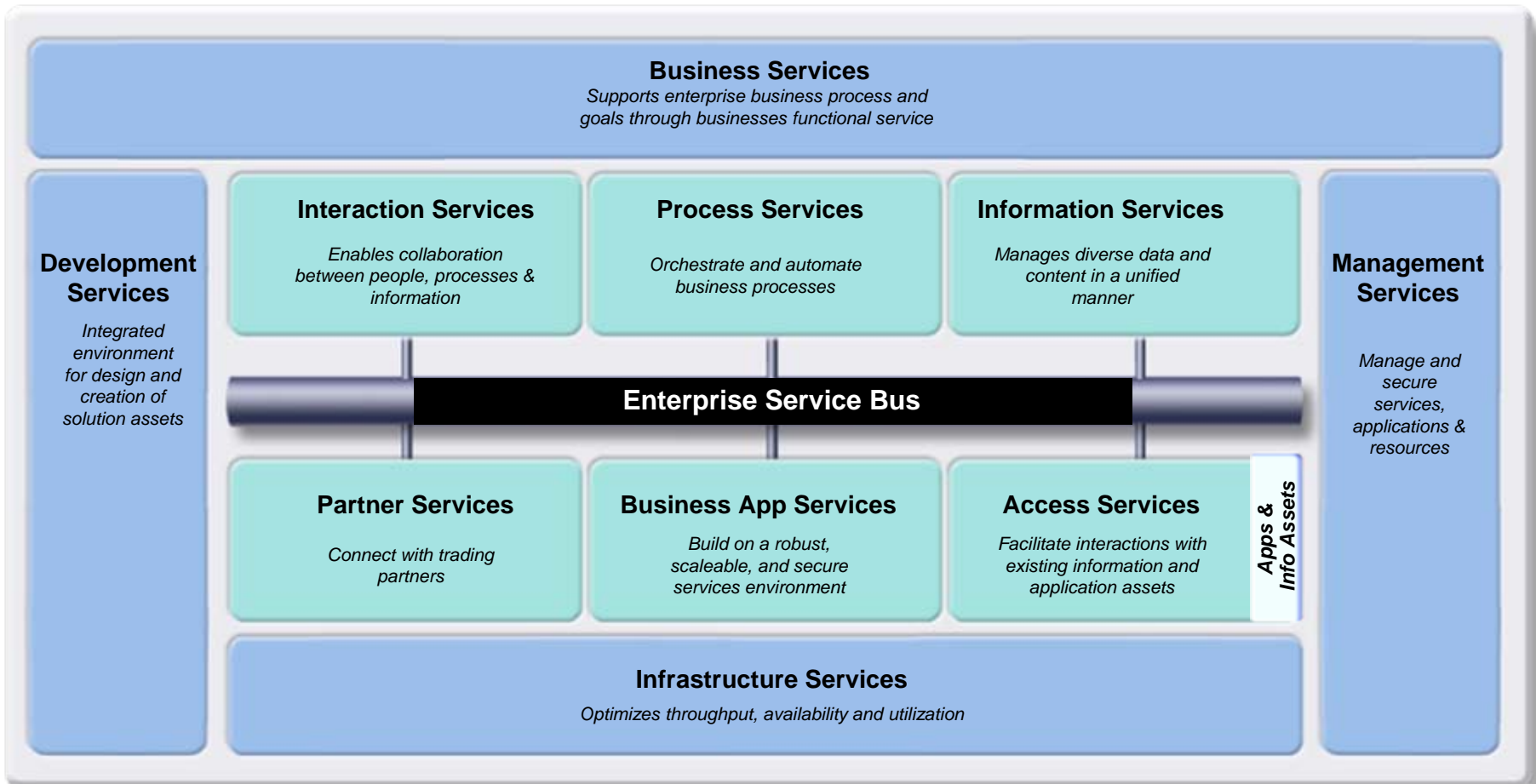
## What is Middleware?

- **Software that connects two otherwise separate applications. Middleware is sometimes called "plumbing" because it connects two sides of an application and passes data between them.**
- **In the computer industry, middleware is a general term for any programming that serves to "glue together" or mediate between two separate and often already existing programs. A common use of middleware is to allow one database to access to access other databases. The systematic tying together of disparate applications, often through the use of middleware, is known as enterprise application integration.**
- **Software that mediates between an applications program and a network. It manages the interaction between disparate applications across the heterogeneous computing platforms.**

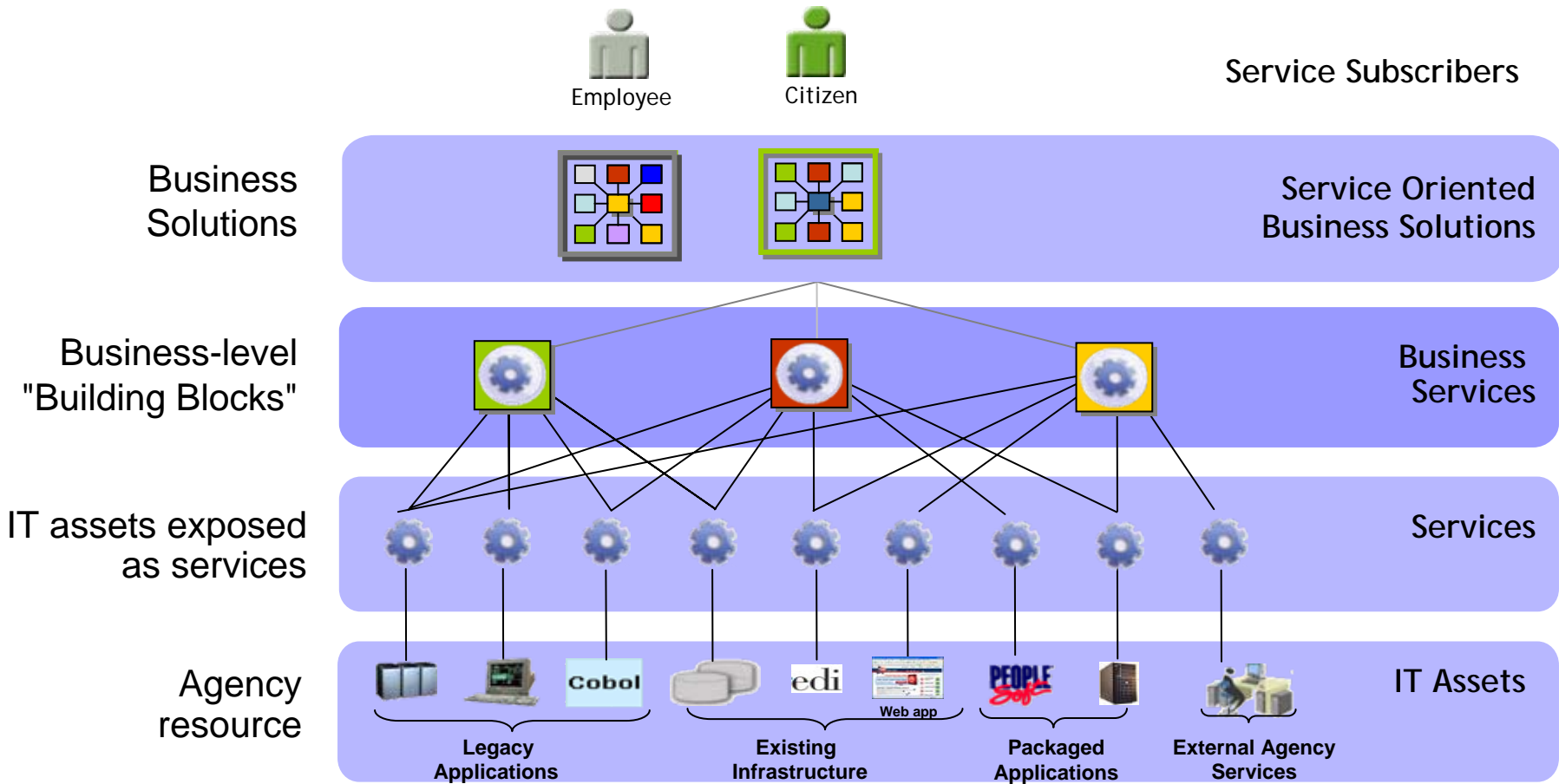
# Evolution of software and architectures



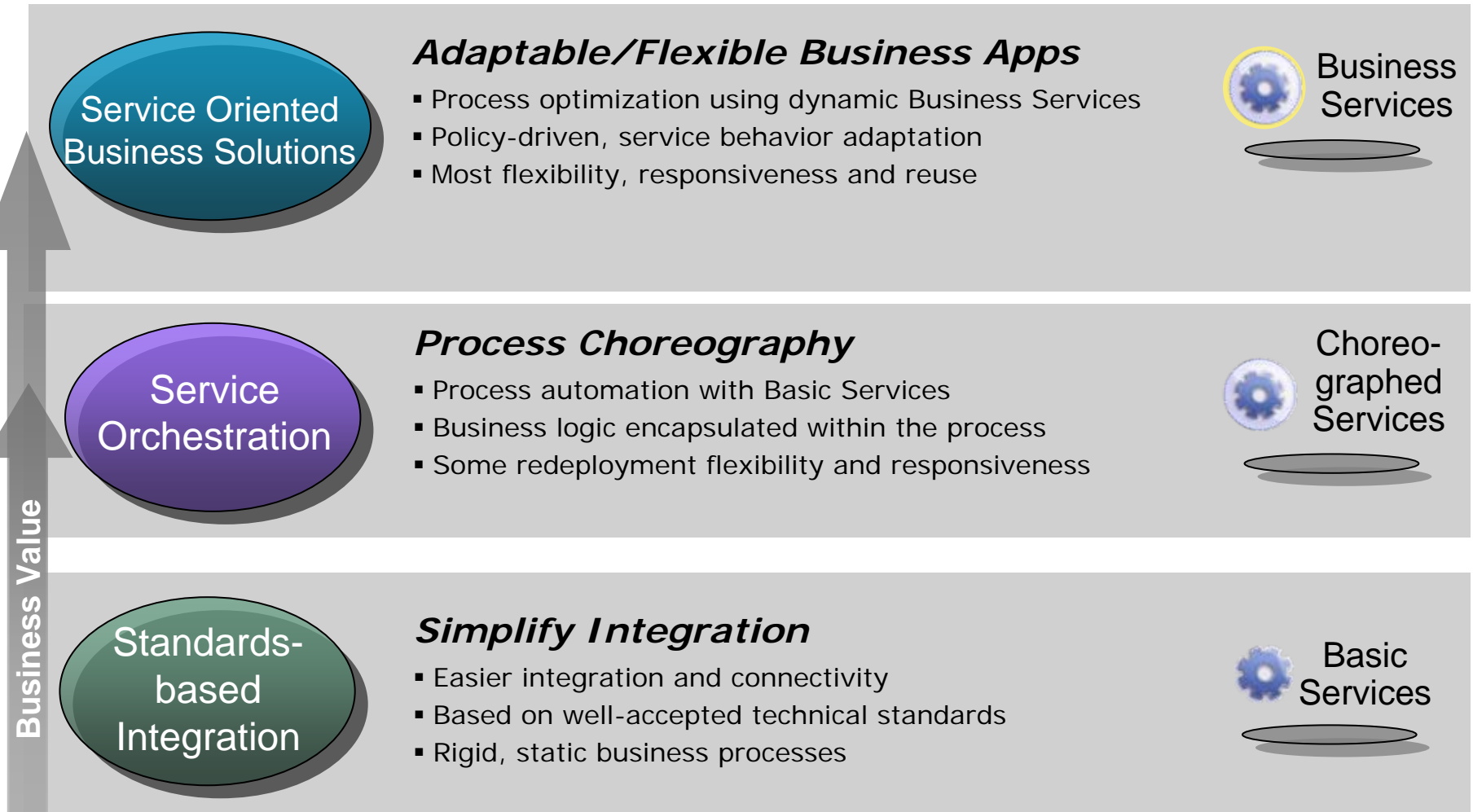
# Service interactions through SOA Reference Architecture



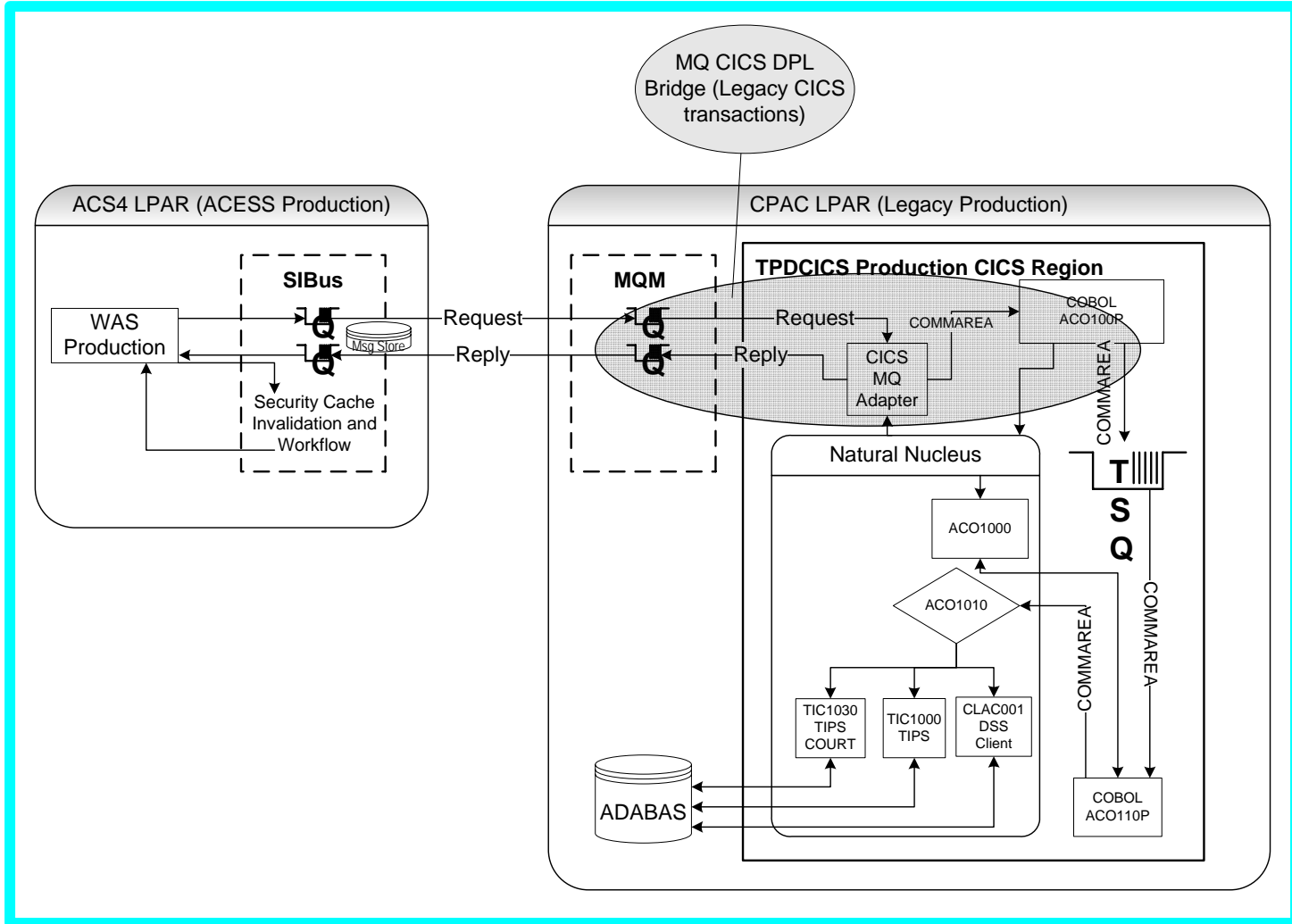
# Service Oriented Business Solutions are Composed of Multiple Layers with Services at its Core



# What are Customers doing with SOA?



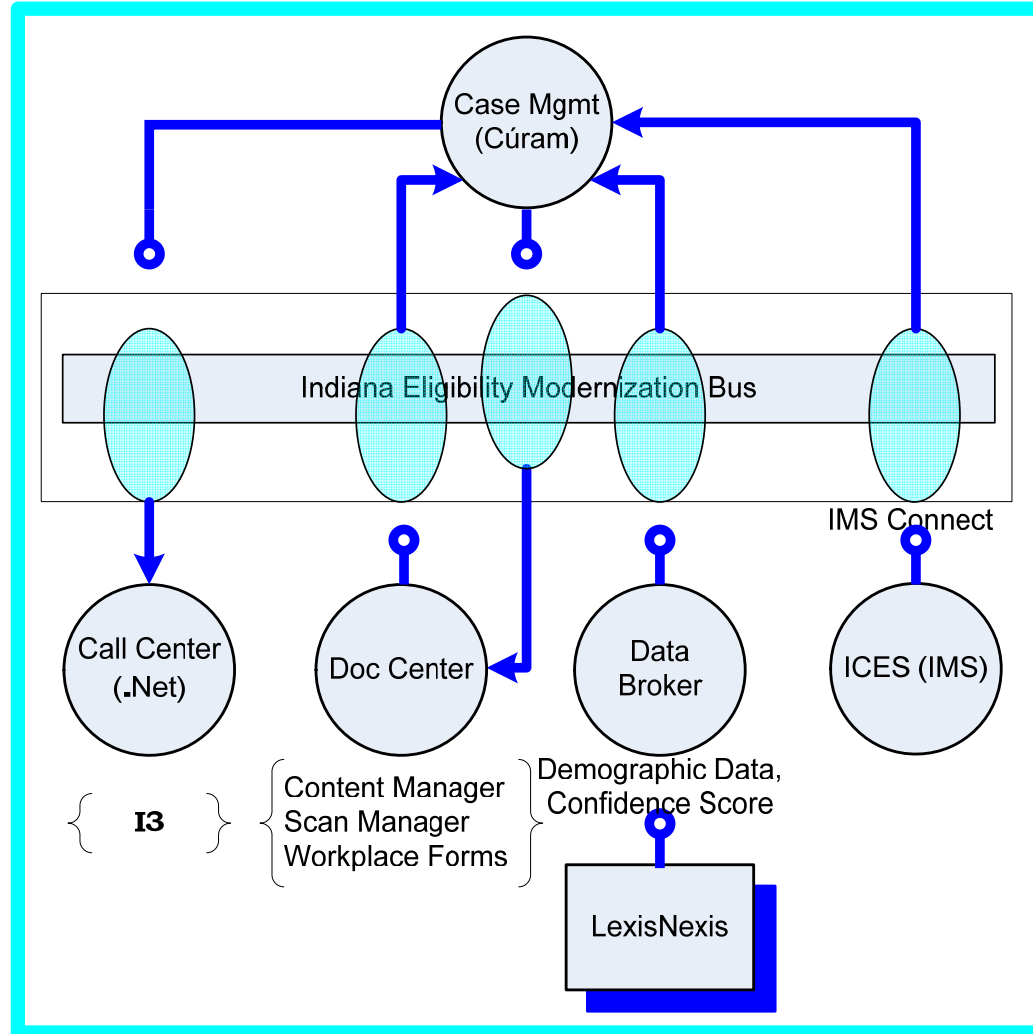
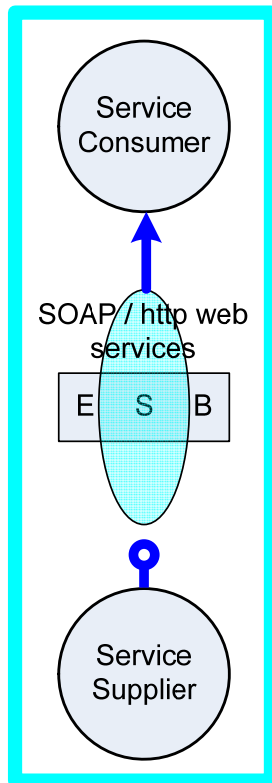
# Middleware Technical Architecture of LA ACCESS



## Benefits of Middleware in LA ACCESS

- **Legacy interfaces are temporary until ACCESS subsumes legacy functionality**
- **Generic legacy interface but not as open as an SOA solution**
- **Leverages on-site product suite (Cúram, MQ, CICS, COBOL, Natural, ADABAS)**
- **First step toward a more generalized connectivity architecture**

# Middleware Technical Architecture of Indiana Eligibility Modernization



## Benefits of Middleware in Indiana Eligibility Modernization

- **SOA-compliant plug-n-play architecture**
- **Open Standards**
- **Adaptable**
- **Flexible**
- **Agile**
- **Reusable**
- **Provides services at an appropriate granularity to fulfill business use cases**

## Messages To Remember

- **SOA depends on middleware as a core component of its architecture**
- **Effective leveraging of an enterprise middleware strategy requires coordination among business and technology users**
- **SOA permits you to shift your middleware strategy from simple data exchange to the delivery of business services and solutions**