Managing IT Investment – The Role of EA and SOA with Governance

Eric A. Stephens

Overview

Introduction to Excellus BCBS

SOA Vision

SOA Enablers

SOA Visualized

Governance and Practices

SOAPbox

Abstract

IT departments for healthcare payers face a number of challenges. The need to innovate and differentiate within a tumultuous market is contrasted by a sea of regulation and mandates. Some payers spend a majority of their annual project investment just staying compliant with government regulations and licensing agency (e.g. BCBSA) mandates. Compounding this problem oftentimes is the vast IT footprint that payers have accumulated over the years as a result of hustling to meet mandates without considering long-term implications. Modern approaches to software architecture such as SOA – which really isn't that modern – are even more critical to an organization in order to remain flexible.

This talk will discuss why Excellus chose to utilize an SOA to optimize its IT footprint to address these challenges. The discussion will also include experiences on successful and challenging SOA governance efforts.

An Introduction to Excellus BCBS

Corporate Overview
Product & Service Offerings

Blue on demand

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Corporate Overview

Independent Licensee of the BCBS Association

Headquartered in Rochester, NY

~2M Members, $5B Revenue, 7000 Employees

Multiple Offices

As New York State's largest nonprofit health plan, the company remains committed to three core principles:

- We exist to assure, in the communities we serve, that as many people as possible have affordable, dignified access to needed, effective health care services, including long-term care.

- We recognize the need, and our responsibility, to reach out to all segments of the communities we serve, particularly the poor and aged and others who are underserved, to enhance quality of life, including health status.

- We are committed to being a nonprofit health insurer.

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SOA Vision

Excellus BlueCross BlueShield

Blue on demand

SOA Value Proposition

Less is More
Regulation Sources
- Federal Government
- State Government
- BCBS Association
- Accrediting Associations (NCQA)

Mandate Budget is High
- 65% - 2007
- 80% - 2008 (estimated)

Wide Reaching Remediation Projects a Reality
- Y2K, NPI, ICD-10, HIPAA 5010

Modifiability
Business Agility
Decreased Footprint
Lower TCO

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System of the Future -> Transformation

System of the Future (SoF)

   Effort to Modernize Aging Systems

   Maintenance was Key Factor

Shift in Business Strategy

   Enabled Movement to Modernized COTS

   Transformation Journey Ensue

SOA Integration Key Moving Forward

   Implementation Variation of SoF
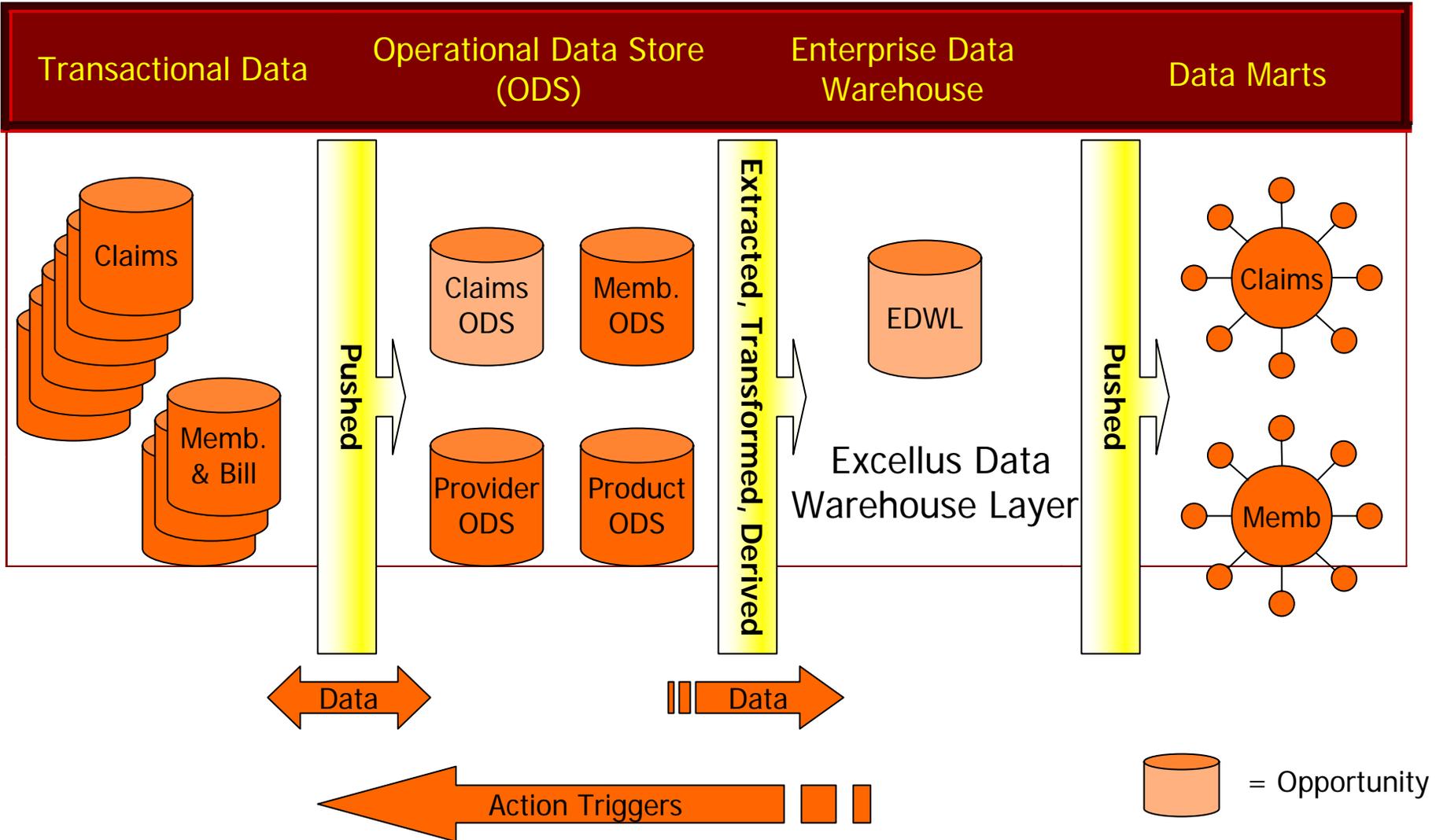
   Key SOA Practices Stay Germane

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SOA Enablers

Data Strategy Implementation Team

Data Continuum

Transactional Data	Operational Data Store (ODS)	Enterprise Data Warehouse	Data Marts

Claims

Memb. & Bill

Pushed

Claims ODS

Memb. ODS

Provider ODS

Product ODS

Extracted, Transformed, Derived

EDWL

Excellus Data Warehouse Layer

Pushed

Claims

Memb

← Data →

Data →

← Action Triggers

= Opportunity

Implementation Team

Established within the Application Development Organization

Empowered by the Enterprise Architecture Group

Authorized to Audit Projects

Recommends Services for Reuse

Recommends Services for Construction

Dual Model

Services Team Builds the Services

Project Team Builds the Services, Services Team Monitors

SOA Team Also Drives SOA Innovation
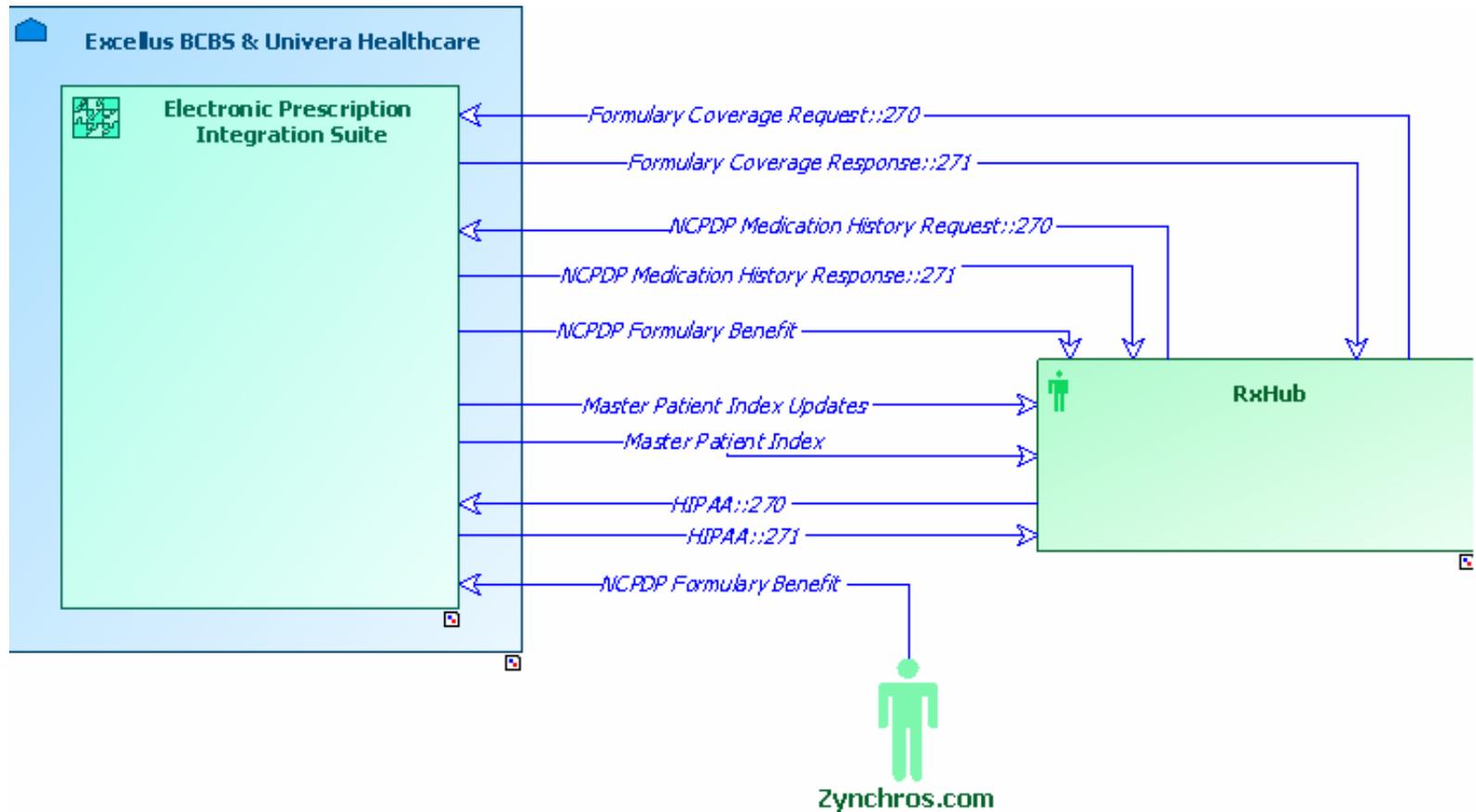
Education Challenging
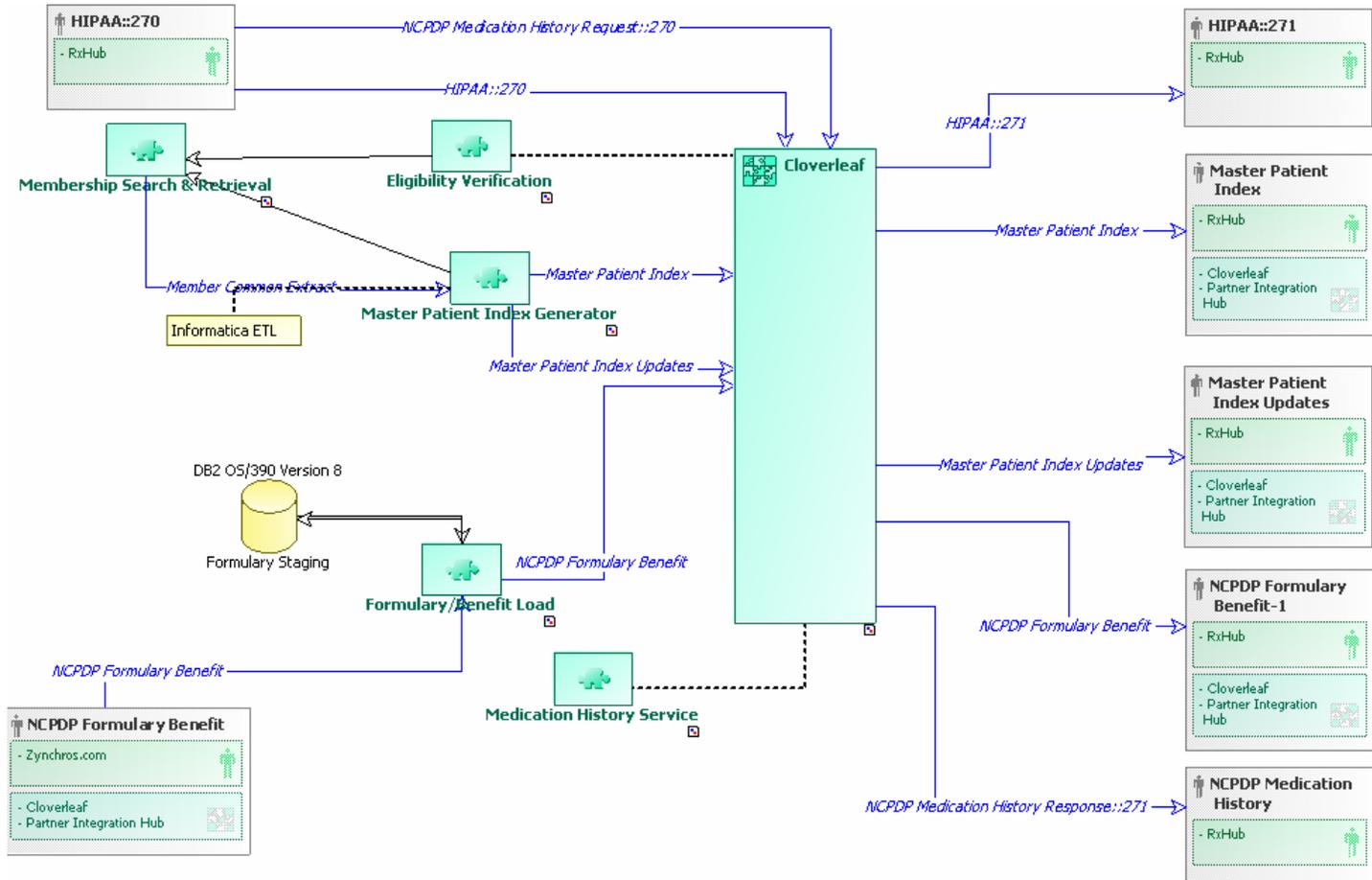
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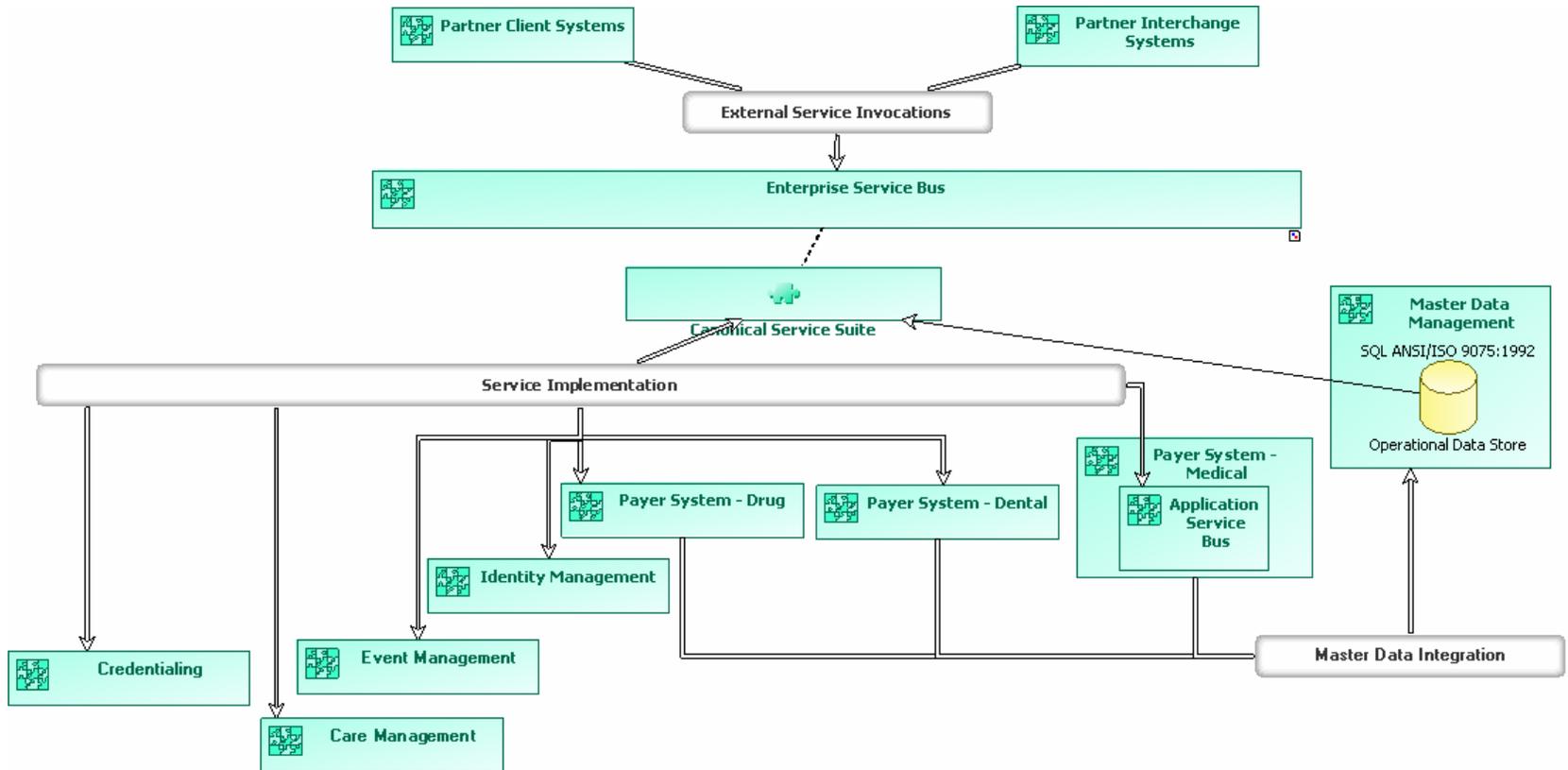# SOA Visualized

Intentionality Necessary

SOA Success – Third Party Rx Integration (2)

Notional Target State Enterprise Architecture

Governance and Practices

SOA Lifecycle

Preproduction

Planning

Modeling

Development

Function Testing

Load Testing

Production

Deployment & Patches

Upgrades & Rollbacks

Control Operations

Monitoring & Optimization

Security

Lifecycle Management

Unit of Delivery is Smaller Now with SOA

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SOA Solution Requirements - Development

Visualize SOA Components – Modeling

Instrumentation

Capture Relationship Information

Ability to Advertise Interface

Define QoS Policies

Versioning

Cox & Kreger. *Management of the SOA Life cycle.* IBM Systems Journal

SOA Solution Requirements - Testing

Visualize, again

Instrumentation, again

Generate Test Traffic

Stub-ability

Monitor & Report Test Results

Visualize Business Process Impact

SOA Solution Requirements - Production

Deploy-ability

Dynamic Provisioning Reacting to Capacity Needs

Security

Reduced Sign-on (Authentication/Authorization)

Visualize, Monitor, & Diagnose State of Execution

Enterprise Service Bus

Metadata Management

SOA Solution Requirements - Governance

Well-defined, repeatable processes

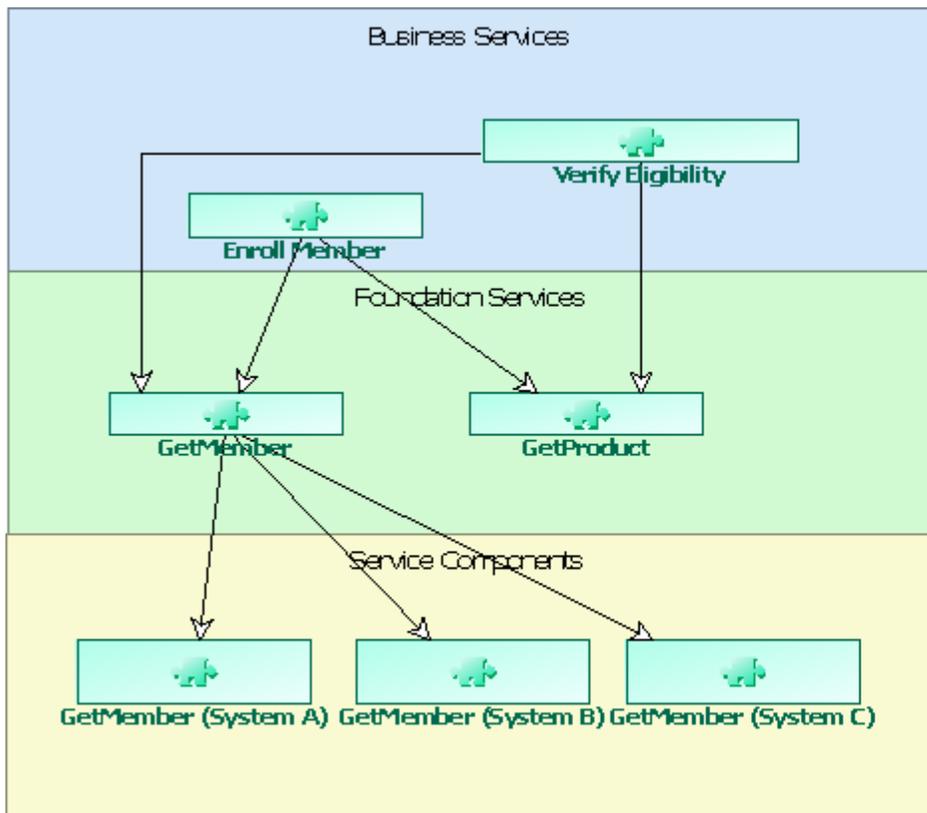Manage the Inventory of Services

Advocacy/Working Groups

Review Boards

Dedicated Implementation Team(s)

Classification Scheme [deep dive]

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Service Layering and Classification

Business Services
- Related to business process
- Controls Sequencing and orchestration
- Can be multiple layers

Foundation Services
- Match Corporate data subject areas OR are horizontal
- Multiple methods in a given subject area

Service Components
- Data
- Logic
- 3rd Party Software
- All components that make up a foundation service

The SOAPbox

Web Services != SOA

"The adoption of Web Services technologies does not necessarily mean that SOA principles are being embraced."

Curbera et. al. *Colombo: Lightweight middleware for service-oriented computing.* **IBM Systems Journal**

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Modularity!

On the Criteria To Be Used in Decomposing Systems into Modules
D.L. Parnas
Carnegie-Mellon University
Communications of the ACM, Vol. 15, No. 12, December 1972

http://www.acm.org/classics/may96/

Review

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Thank you

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