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

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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

A nonprofit independent licensee of the BlueCross BlueShield Association
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.
SOA Vision
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
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
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
SOA Visualized
SOA Success - Third Party Rx Integration (2)
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
SOA Solution Requirements - Development

Visualize SOA Components - Modeling
Instrumentation
Capture Relationship Information
Ability to Advertise Interface
Define QoS Policies
Versioning
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]
Service Layering and Classification

- **Business Services**
  - Enroll Member
  - Verify Eligibility

- **Foundation Services**
  - GetMember
  - GetProduct

- **Service Components**
  - GetMember (System A)
  - GetMember (System B)
  - GetMember (System C)

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

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

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

Excellus
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
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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