SOA for a Customer Centric View Application
IT Enterprise Architecture Practitioners Conference - Mumbai

K.V. Raghava Krishna
Solution Architect

27 February 2007
Agenda

- Typical Call Center Applications
  - Moving Towards SOA
    - Desires (Functional & Technical)
    - Challenges
    - Solution Overview
    - Critical Success Factors
    - Future Deployment
  - Q&A
Typical Call Center Application

SOA for a Customer Centric View Application
Current Pain Areas

- System complexity constrains rollout of uniform business policies across the enterprise

- Decision making capabilities are limited due to fragmented and disparate data

- Customer calls are routed across multiple Business Units in a single session resulting in longer call times and customer dissatisfaction

- Front Office/Operations constrained to manage at a business unit level resulting in inconsistent customer experience
Current Pain Areas

- Multiple Applications
- Varying Processes
- Switching calls
- Account Centric Look-up
- Work force deployment
- Help Desk Support
- Decentralized Correspondence
- Learning curve
- Customer reach-out
- Customer needs assessment
- Offerings advice
- Cross sell/Up Sell

HIGH AVERAGE HANDLING TIME

LOW SALES CAPACITY

TIME SPENT SERVICING

TIME SPENT SELLING
Agenda

Typical Call Center Applications

Moving Towards SOA
Desires (Functional & Technical)
Challenges
Solution Overview
Critical Success Factors
Future Deployment

Q&A
Moving towards SOA – Desires (Functional)

Customer
- Move to customer centric paradigm from account centric view
- Integrate multiple accounts across multiple products into single customer account relationship view
- A single window service (Enterprise Wide) -- Provides capabilities to update information on multiple products with a single customer interaction
- Better Customer Experience

Operational
- Faster Time to Market
- Increase revenues by providing new-sales, cross-sell and up-sell capabilities
- Deliver the ability to monitor and manage risks
- Increase operational efficiency

Employee
- Enhance Job Satisfaction
- Work Sharing provides greater Job variety – Increased Responsibilities and Customer Variety
Moving towards SOA – Desires (Technical)

- Role Based Service Offerings
- Portal Services
- Reusable Business Services across Verticals
- Rule Engine based Applications (Easy to Customize)
- Reusable Business Processes and Business Flows (BPEL Compliant)
- Intelligent Routing
Challenges

- Performance of Application – Current Desktops respond in lightning speeds
- Communications between system of records to deliver messages where account “lives”
- Create channel agnostic business processes enabling standardized co-ordination of business logic
- Develop a industry standard rules management system to be applied consistently (reused) across business functions (currently in silos)
- Telephony Integration with existing and future telephony environment
- Single sign-on implementation across systems/data sources
- Minimize number of individuals and systems required to maintain and administer user entitlements
- Co-existence of existing systems and current implementation in production
- The system needed to be flexible enough for deployment across LOB’s, where processes, products were subject to change
- Design must account for any future acquisitions and timely integration of acquired data sources
Key Highlights of Solution

- Leverages existing data processing and persistence capabilities of legacy systems by exposing them as services
- Provides unified services for backend data management that will be available across the enterprise
- Replicate less volatile master file data for performance and to reduce cost of accessing 3rd party products and channels
- Provides uniform Customer Data Architecture ensuring data integrity across applications (Data model transition from Account-centric to Customer-centric)
- Persistent view of customer across products is a key to success
- Provides dashboard reporting capability
- Provides a configurable UI that can respond quickly to business changes
- Designed to accommodate de-coupling of systems and data sources
- ESB plays key role in data integration, transformation and routing
Implementation Tech Stack

- Role based Presentation
- Business Processes & Rules Engine
- Application Services
- Business Services

Enterprise Service Bus

System of Records

CRM Package

CDI Solution

Services Gateway
Portal Services
Message Bus
Customer Data
Operational Data Store
Analytic Data Mart
CDI Solution Highlights

- Data that is relevant for Customer view are maintained in CDI Environment.
- Data Management is coordinated across the enterprise.
- Responses to requests coming from different channels to be close to real-time.
- Identify synchronous and asynchronous mechanisms between LOBs and CDI.
- Architected to support global scalability.

LOB – Line of Business

* LOB – Line of Business
Critical Success Factors

• Proper gap analysis of the CRM product needs to be done to assess the extent of customization, extensions or new development is required
• A pilot implementation with a complex business offering will enable in identifying the limitations in the products or architecture
• Data modeling or mapping has to be done before the development starts
• An effective SOA messaging architecture should be defined to utilize as re-usable and standardized message structures and data vocabularies
• Caching strategy for the data needs to be identified during the architecture definition stage
• Service endpoints and any common reusable framework components like logging, error handling have to be done before the implementation is started
Moving towards SOA – Desires

- Reduce average handling time
- Increase selling capacity
- Time spent servicing
- Time spent selling

- Multiple Applications
- Varying Processes
- Switching calls
- Account Centric Look-up
- Work force deployment
- Help Desk Support
- Decentralized Correspondence
- Learning curve
- Customer reach-out
- Customer needs assessment
- Offerings advice
- Cross sell/Up Sell
Future State of Deployment

Common Offerings

LOB Specific Offerings

Portal Services

Common Processes & Services

LOB Specific Processes & Services

Enterprise Service Bus

SOR LOB 1

SOR LOB 2

SOR LOB 3

CDI Environment

Customer 1

Customer 2

Customer 2
Thanks for your time