

Business Rules User Group

Rules Implementation - BCBSMN

March 8, 2007

Agenda

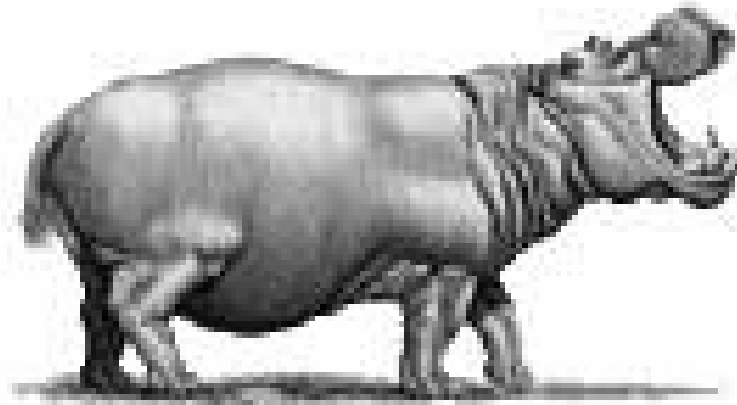
- Introduction
- Background - Transaction Framework
- Rules Implementation
- Pharmacy Project
- Enrollment Project
- Barriers
- Future Recommendations
- Future Initiatives

“Who am I, Why am I here?” – Adm. Stark 1992

- Walter Ritschel (15+ years HealthCare Experience)
 - Blue Cross Blue Shield of Minnesota (12+ years)
 - Principal Enterprise Transaction Framework Engineer
 - Consulting Architect to the National Blue Cross Association
 - Co-Developed the National HIPAA Transaction Exchange mechanism for the Blue Cross Association (BlueExchange)
 - Voting Member X.12 Healthcare
 - Aetna Pharmacy Management
 - Implemented First Mail Order Drug programs
- Avid Proponent of “A process is just a organized set of rules”

Background – The Transaction Framework

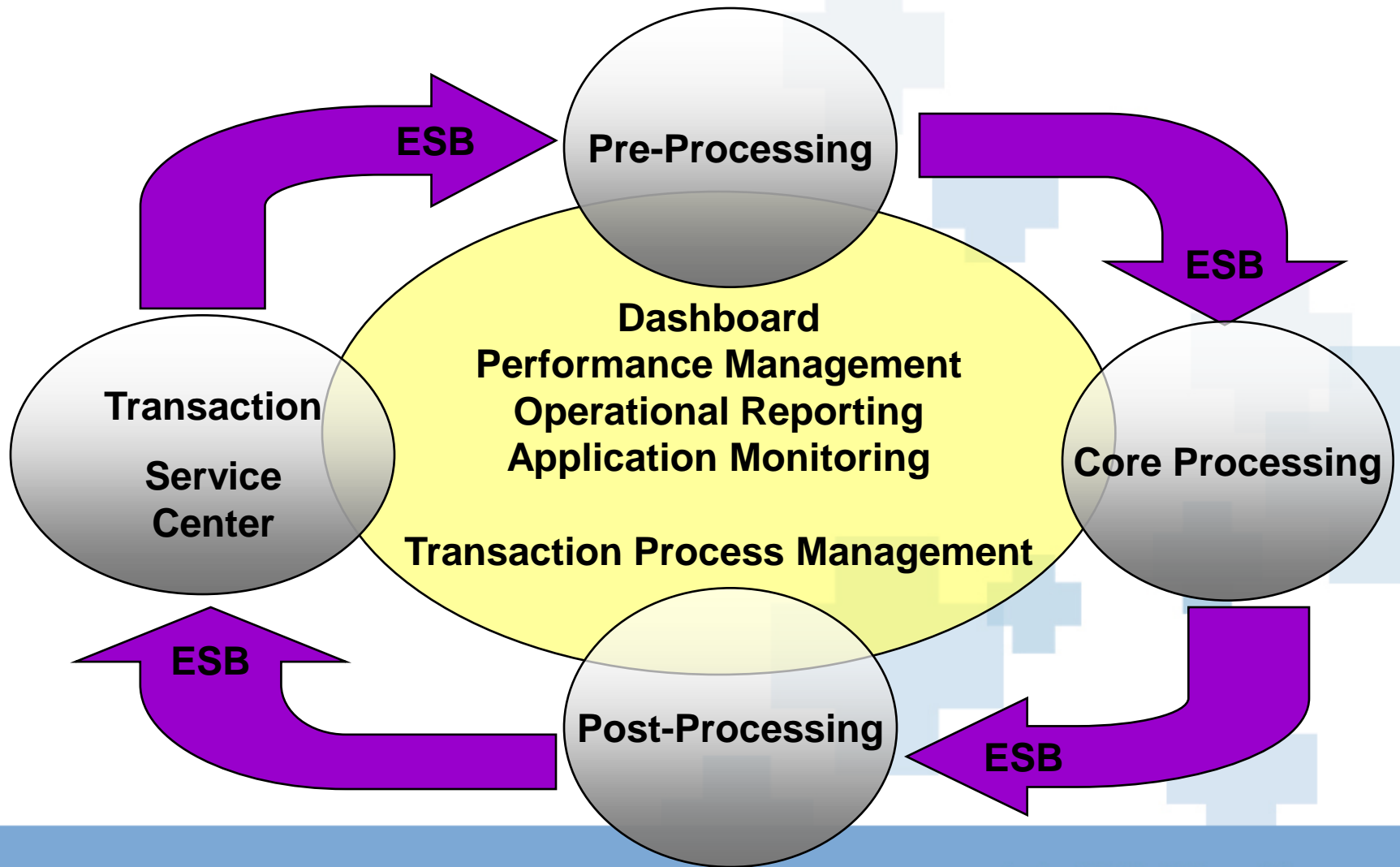
What started the transaction framework?



HIPAA

Managing the transaction lifecycle

HIPAA allowed us to “re-think” the lifecycle of a transaction



How did we choose our path?

- The Process
 - Embracement of Rules Based Technology
 - Begin the Collection, Categorization and Collation
 - Implement with some low risk projects

- BCBSMN actually has 3 rules engines
 - Strategic – Enterprise Transaction Processing (Pega PRPC)
 - Tactical based on specific business functional requirements (buy vs. build)

Transaction Framework – Initial Projects

- Each project provided unique implementation opportunities, which helped to validate Pega PRPC capabilities:
 - Real-time connectivity was established with Prime
 - Projects re-used components between themselves
 - Established integration with our data services
 - Utilized Adobe Forms for data-entry
- Implemented necessary integration components to enable data access and communication between varying technical platforms;
 - Pharmacy Claims History Service
 - Membership Service
 - Benefit Service
 - Enterprise System Error Notification

Implementation Path

- Establishment of a SWAT Team
 - Coordinate Candidate Projects
 - Training
 - Methodology

Implementation Path

- Identify the Projects

Pharmacy Project

■ Business Overview - Product offering

- Combined medical and pharmacy accumulation of deductible and out of pockets.
 - Medical and pharmacy claims process on two separate systems
- Number of BCBSMN accounts utilizing different third-party PBM's
- Requires data integration between health plan and PBM

■ Business Problem

- Numerous service issues related to delayed data exchanges
- Identification of member
- PBM's provide adjudicated pharmacy data via unique batch formats
- Several adjustments to reimburse member overages
- Impacts to the members financial spending account balances

Enrollment Project - Medicare Vantage Blue

Medicare Enrollment – Vantage Blue

To implement an automated enrollment process for new Vantage Blue applications ensuring compliance with CMS regulations.

Project Deliverables...

- Building the foundation for the Enrollment Transaction Framework
 - Implement new common data entry and exception screens and workflow
 - Implement new Transaction Framework leveraging Pega technologies
 - Automate data services (i.e. Identity Hub, legacy membership calls, etc.)
 - Automate business rules (i.e. validation, routing, data set-up, etc.)
 - Automate membership transactions into back-end systems
 - Automate interfaces to CMS
 - Automate letter generation

Implementation Path

- Identify the Projects
- Training

Training

- Overall Goal was for BCBSMN to be self-sufficient
 - Long-Term commitment
 - Reduce overall support costs
- Types of Training Programs – 2006
 - Trained 97 individuals (IT 87 and Business 10)
 - (now over 120 staff have been trained)
- Four Types of Training
 - Informative (Leadership, Project Managers, Business Analysts)
 - Just in Time (Project based)
 - Strategic Technical (Developers, Architects, Engineers, Testers, DBA)
 - Strategic Business (Business Analysts, Rule Managers, Subject SME's)

Implementation Path

- Identify the Projects
- Training
- Develop Methodology

Methodology

Integrate with BCBSMN Methodology

- RUP Based
 - Determine what artifacts from each Methodology are required
 - Eliminate “potato potato”
 - 3 weeks to complete
-
- Communicate the new process
 - BA’s
 - Developers
 - Project Managers
 - Change Management Governance
 - Development Managers
 - Executives

Methodology – Affected Areas

- Business Analyst::
 - Define and Implement Business Process
 - Define and Implement Business Rules
 - Determine Business Requirements
 - Develop Use Case
 - Review Test/Implementation Strategy
- Business Owner:
 - Define Business Implementation Plan
 - Update Business Operational Documentation
 - Define Training Requirements
 - Provide Staff Re-alignment plans
 - Assist BA's with process development
 - Application Architect::
 - Review, Access and Document Technical impact of business and technical process definitions
 - Create Software Architecture Documents
 - Implementation Strategy
- Integration Strategy

Methodology – Affected Areas

- Developer:
 - Technical Design
 - Define and Implement Technical Process
 - Unit Test Plans and Testing
 - Code Walk Through
 - Code / Service / Portlet Development
 - Develop and Implement Enterprise Services
 - Define and Implement Business Objects
 - Portal Integration
 - Application to Application Integration
- Tester:
 - Test Strategy
 - Integration Test Plan
 - Test Cases / Test Data
 - Test Automation
 - Unit and Integration Testing
 - Test Result Walk-throughs
 - Defect / Incident Review Management

Implementation Path

- Identify the Projects
- Training
- Develop Methodology
- Infrastructure

Implementation Path - Infrastructure

- Determine Requirements
- Hardware
- Software (not just the product)
- Database Infrastructure
- DASD
- D/R
- Configuration Management
- Application Monitoring
- Performance Tuning
- Security/Networking

Implementation Path

- Identify the Projects
- Training
- Develop Methodology
- Infrastructure
- Integration with Existing SOA Services

Implementation Path – Integration Approach

- BCBSMN has also embraced the SOA approach...along with almost every other vendor/company/etc.
- Integration technique based on industry standards
- Ensure supporting services are up to handling the new SLA requirements

Implementation Path

- Identify the Projects
- Training
- Develop Methodology
- Infrastructure
- Integration with Existing SOA Services
- Development

Implementation Path – Development

- Now that the developers are trained
 - can they crawl walk or run?
- Team up with Senior experienced consultants (1:4)
- Checkpoints
- New mechanism to Unit test.

Implementation Path

- Identify the Projects
- Training
- Develop Methodology
- Infrastructure
- Integration with Existing SOA Services
- Development
- Testing

Implementation Path – Testing

- Now that the testers are trained
 - can they crawl, walk or run?
- Develop new testing strategies
- Team up with the development teams in Unit Test
- Trail and Error approach
- Pleasantly surprised at tools available and re-usable.

Implementation Path

- Identify the Projects
- Training
- Develop Methodology
- Infrastructure
- Integration with Existing SOA Services
- Development
- Testing
- Production

Implementation Path - Production

- Results

Pharmacy Project - Results

- Developed a common framework for exchanging pharmacy claim payment information
- Developed real time claim accumulation updates
- First application to implement member matching
- Built a new pharmacy data repository
- Created a web service for RxClaim information
- New exception handling using the pega workdesk
- Enhanced reporting and controls
- Enhance duplicate file handling

Pharmacy Project - Results (continued)

- **BEFORE** - 2006 Volumes (to December 15, 2006)
 - 15 million Accumulation updates
 - 0 NRT Claims
 - 71% straight through processing
 - 2 FTE IT Support
- **AFTER** - Current YTD Volumes (Jan 31, 2007)
(based on December 15, 2006 Implementation)
 - 1.44 Million Accumulation updates (48,000 per day)
 - 500,000 NRT Claims (27,000 per day)
 - Achieved 92.0% straight through processing
 - .25 FTE support

BCBSMN 2006 Barriers

- Need to continue to strengthen the business rules implementation process
- Integrate with Governance
- Experts - not as expert as hoped
- Security implementation
- WSDL generation – what versions
- Pooling bean leaks
- Multiple Technology Integration - Adobe forms
 - Complex java scripting limitations
 - Functional buttons not supporting transfer to a specified URL

Thank You