



# Customer Service & Delivery Management

Using **WebMethods** for BPM & EAI

## Client:

A recently acquired subsidiary that serves as the Retail & Office services arm of a Fortune 100 Corp.

## CASE STUDY

### GOAL

- To unify the customer base for all operating companies within the enterprise in support of the following corporate initiatives:
  - ➔ Provide a single view of customers within and across operating companies (op-cos) and functional channels
  - ➔ Grow revenue
  - ➔ Minimize operating cost
  - ➔ Establish customer segmentation programs to support Sales and Marketing efforts expanding over different op-cos
  - ➔ Optimize management of the business
  - ➔ Focus efforts on highest potential customer segments
  - ➔ Differentiate between customer attrition and product declines
  - ➔ More clearly identify individual impacts of Sales, Marketing, Product and Operations initiatives on sales, revenue and the bottom line
- Serve as the foundation for transitioning to a Single Account solution for the Enterprise
- Implement a comprehensive, systematic means to uniquely identify customers at both the Enterprise and

### Company level

- Implement a centralized back office and call center application for account creation and maintenance

### EXISTING PROCESS

- Invoiced, Non-Invoiced & Corporate discount accounts were created in ERP (People Soft - AR) at the subsidiary side & then manually downstream
- No capability to share information with the parent enterprise existed
- Batch files were manually uploaded in downstream systems
- No Dashboard available
- Sales Commissioning had audit issues

### CHALLENGES

#### Customer Creation

- Accounts can arrive through various channels:
  - ➔ Ecommerce Web portals of Enterprise or Op-co
  - ➔ Mail/Fax/Email/1-800
  - ➔ Lead Generation application (Corp. Account Exec)
  - ➔ Batch loading by Sales rep & Field Ops
- All accounts should be created in the

new system and should gradually flow to all downstream enterprise systems:

- ➔ Enterprise Databases
  - ➔ Mainframe Enterprise account generation system (shared b/w all op-cos/subsidiaries)
  - ➔ Enterprise Duns & Bradstreet hierarchy matching system
  - ➔ ERP (People Soft - AR)
  - ➔ Point of Sale system used in stores (National customer DB)
  - ➔ Vendor's Card Order Fulfillment
  - ➔ Customer Taxation database (Tax-exemptions)
  - ➔ Retek - Item and price management system
  - ➔ System for sales commissioning
  - ➔ Data warehouse
- The new system should send account request attributes to a Enterprise-level account generation system. On acknowledgement of which, it should create the account on the subsidiary side
  - Define, design, develop & implement an upstream BPM solution that supports enterprise initiatives
  - Build EAI capability around the BPM solution to push newly issued accounts to all downstream systems within the op-co & the enterprise

## Customer Maintenance

- Fetch scattered customer elements from the above mentioned systems and implement the ability to present them on a single system via Enterprise Application Integration
- Ownership of High-level data should be at the Enterprise level
- All attributes like invoicing, taxes, & pricing should be maintained in downstream systems within the operating company
- Only high-level customer attributes should be maintained and/or replicated in the new system with cross reference IDs to all downstream systems
- There should be a real-time EAI call to fetch required information from downstream using the cross references. This on-demand data would be presented on the CAF (GUI) side along with the information already maintained in the new system
- Keep information synchronized between all heterogeneous business systems

## Other Challenges

- Sarbanes–Oxley (SOX) Compliant
- Domestic & International customers have different business rules
- Application Globalization
- Card issuance & re-issuance orders should be placed at the vendor
- A workflow based solution was desired Dashboard Reporting and, scorecards
- are required for Executive management
- Solution should have the ability to check customer credit using web service interfaces with credit agencies & Duns & Bradstreet
- Implement Organization's security matrix for the application

## SOLUTIONS

- Analyzed & Created 12 complex business processes using webMethods

BPM. Key features were:

- Multi Process Correlation - Acknowledgment / Callback model
  - Process Auditing
  - Data Push to Downstream
  - Business Rules (including complex taxation rules)
  - Management Escalation capability in all Business processes
  - 3L support capability
- Created EAI interfaces with 16 different systems utilizing WM EAI capabilities
    - JMS adapters
    - EJB adapters
    - JDBC adapters
    - EDI feeds - 210, 810, 850
  - Developed a GUI-rich Ajax based Task Inbox. Key characteristics are:
    - 'Saved Search capability' with multi criteria
    - Task priority
    - Displaying important task details on the Inbox
  - Leveraged Publish/Subscribe model and Service-Oriented architecture
  - Multi screen wizards on the UI (Task screens)
  - A live view of associated processes instances was accessible on the UI
  - Dashboard reports & KPI were implemented to captures different task & business metrics
  - Role based access control was implemented throughout the application

## TECHNOLOGY

### webMethods 7.1.X

- Integration Server 7.0
- BPM (Workflows) 7.1.2
- Composite Application Framework 7.1.2 (JSF & Portlet – JSR 168)

- BAM (KPI, Process Optimization & Dashboard)
- Trading Network (Business Partner integration)

## IMPACTED LINES OF BUSINESS

- Operations
  - Customer Service & Collections
  - Customer Administrative Services
  - Customer Discount & Credit Cards
  - Global Retail arm
- Revenue Operations
- Point of Sale
- New Initiatives
- Product Development
- Sales & Marketing
- E-commerce
- Taxation
- Legal
- Audit & Compliance

## FACTS

### Production

- Roll out: 2008
- Number of Accounts Created/BPM workflow Executed: 380K
- Avg. Daily Volume of Workflows spawned: 1430
- Number of Tasks Completed: 570K
- Number of Accounts Maintained: 2.1 Million
- Number of Customer Cards Issued: 4.8 Million
- Number of Users: 110 (Concurrent: 80)

### Development

- Project Duration: 15 months
- Effort: 78,000 Hours
- Code counts:
  - Data Services Developed: 670
  - EAI Services Developed: 308
  - Downstream System Interfaces: 16
  - CAF/UI screens: 80+
  - Dashboard Reports: 60

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