IBM AIM Industry Software

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Retail Integration

SOA & Connectivity Summit 2014
Agenda

Retail Landscape

Integration in Retail
Growth in retail channels presents new opportunities

Retail Channels proliferate
• Physical store
• Catalogue
• Call Centre
• eCommerce
• Mobile
• Social ....

Differentiation between B2B and B2C is blurring
Multi channel retail is complex

Implementation has been on a per channel basis
  • Allows channels of interaction to be added with little impact on existing channels
  • Result is a rigid infrastructure unsuitable for rapid change
How people use their mobile devices is rapidly evolving

Information

Personalization

Convenience

Richer, faster, & more complex mobile features

Access to information held in back office systems

Social media preferences change rapidly
Seismic shift in focus for the Retail Industry

New demands and changing needs make integration more important than ever

1. **Customers are defining the shopping experience**
   - Consumer touch points continue to proliferate
   - Customers start/stop and switch channels at will
   - Expectations of a brand experience continue to grow
   - Consumers expect an integrated digital/physical shopping experience

2. **Expanding scope of integration projects**
   - Need broad, universal integration technology
   - Integrating the channel silos – eCommerce, physical stores, enterprise, mobile, telephone sales …..
   - Connecting explosion of endpoints – mobile, cloud, sensors
   - Integrating across more diverse retail environments

3. **Innovation enables more flexibility**
   - Advancements in creating embeddable technology
   - Enabling development of modular integration capabilities
   - Can make integration technology flex to address multiple use cases
Building the single brand experience

Improving in store experience

Building analytical capability for personalised marketing and smarter inventory management

Enhancing supplier relationships for direct delivery to store/customer

Improve the eCommerce experience

Engage with the customer using mobile and social media
Integration is the cornerstone of omni-channel
Three approaches

Cloud PoS/Integration

IIB Retail Pack

Store Controller File Transfer

In Store Processor IIB Retail Pack
Cloud integration

Direct connection to the cloud
- Minimal in store computing
  - Backup capabilities to hold PoS data
- Robust broadband connection required
- Cloud to Head Office integration
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Cloud Integration – WebSphere Cast Iron

Rapid Connectivity
- IBM Cast Iron Live
- Physical Appliances
- Virtual Appliances

Complete Flexibility
- Connector Development Kit
- TIP Exchange
- TIP Development Kit

Simple User Experience
- CDK
- TIP Community

For All Types of Projects
- Data Migration
- Process Integration
- UI Mashups
Cloud PoS/Integration

Connection from Store to Head Office
- Minimal in store computing
- Batch or trickle feed to head office
- File transfer to store
  - Loyalty
  - Pricing

This diagram is for reference purposes only
WebSphere MQ in Retail

- Retail’s most widely deployed messaging middleware
- Inherent reliable delivery and transaction control
- High-speed handling of any type of message or file
- End to end advanced security
- Managed File Transfer
  - Reliable, secure and traceable
- MQTT Server
  - Lightweight capabilities for supporting remote devices and sensors
Integration in store
- Enhances use of in-store applications
- Enables use cases where greater store capability is required
What can IIB do for Retailers?

- Integrating the Channel Siloes
  - **Rapid time to value:** Quickly implement cross channel integration using existing systems
  - **Reduce costs:** Avoid rework and simplify maintenance by reducing expensive tight coupling
  - **Flexibility:** Add, replace or upgrade systems easily due to anonymity between producers and consumers
What are IBM Integration Bus Industry Packs?

An IIB Industry Pack provides industry-specific development accelerators to solve common industry integration problems.

Built on and leveraging the proven runtime of IBM Integration Bus.

IIB Industry Pack content is structured around four delivery pillars:
- Patterns provide development and deployment accelerators using IIB best practice.
- Industry specific connectors.
- Schemas to provide ease of use for Industry standard message models.
- Extensions to the operational monitoring for integration flows and business monitoring to take advantage of industry data flowing across the integrations.

**Integration Patterns**

- Commerce Web/Service Information
- Sterling HTTP Integration
- Sterling Order Queue
- Sterling Response Queue
- Heartbeat configuration
- Journaling

**Connectors**

**Industry Standard Message Models**

- ARTS
  - Operational Data Model
- OAGIS
  - Open Applications Group Integration Specification

**Operational & Business Monitoring**
IBM Integration Bus Retail Pack

WebSphere Commerce and Sterling Order Management Integration Pattern
- Add Item to cart
- Remove Item from Cart
- Submit order

TLog to POSLog Pattern
- Transformation of TLOG data to ARTS POSLog
- Flexible input and output options allowing integration with multiple POS vendors and enterprise applications

Web-based operational and business monitoring
Mobile in Retail

In store promotion – using app in store
Provided by retailer or 3rd parties via APIs
Engage and draw in to the brand
Responsive design allows appropriate interaction
Mobile enabled employees

Customer facing
• Endless aisle
• Mobile point of sale
• Inventory check
• Location awareness alert

Workforce Management
• Task management
Integration is the cornerstone of omni-channel
Thank You