B2B Exchanges

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Overview

- Context
- The nature of B2B sites
- Building B2B capability
- XML and SOAP
- Exchanges

Introduction

- B2B exchanges are built between organizations that have solid internal structures
  - Match of supply and demand chains
  - Ultimately, DBMS integration must occur
  - Standards are critical to the exchanges and to integration
- While disintermediation is possible, new forms of intermediaries are appearing
  - Aggregators
  - Advisors
  - Value added connectors
- The key is to enter the electronic market at the right time – when there is critical mass – infrastructure and participants

B2B Sites

- Tend to be less visible
  - Focus on DBMS triggers and workflow processing
  - Manifest through email and financial systems
  - Provide personalized view of data stores
  - Allow for data mining and OLAP
- Based on classic business analysis
  - Who are my key suppliers
  - Who are my key customers

The Corporate View

- From the corporate side, a B2B site provides
  - Information for trading partners
    - About products
    - About inventory
    - About ordering and composition
    - About services
  - Information for employees
    - Sales force information
    - Logistics information
    - Personalized DBMS views

Building Corporate B2B Capability

- Begin with key partners
  - Suppliers who provide critical components
  - Key customers (% of business, % of profits)
- Analyze how you can better work with:
  - Your critical suppliers
    - Provide lead time information
    - Allow them to manage inventory
  - Your important customers
    - What information would they like
    - How can you help them anticipate need
    - How can you simplify the ordering process

B2B Tasks – Buy Side

- Requisition management
  - Requisition from the desktop
  - Automate user id info and product selection (click versus type)
- Catalog and supplier management
  - Multi catalog search
  - Control of preferred suppliers
  - Supplier control of catalog and inventory information
- Transaction management
  - Connection to back office system
  - Control of purchase authority and approval routing
  - Connection to delivery and payment

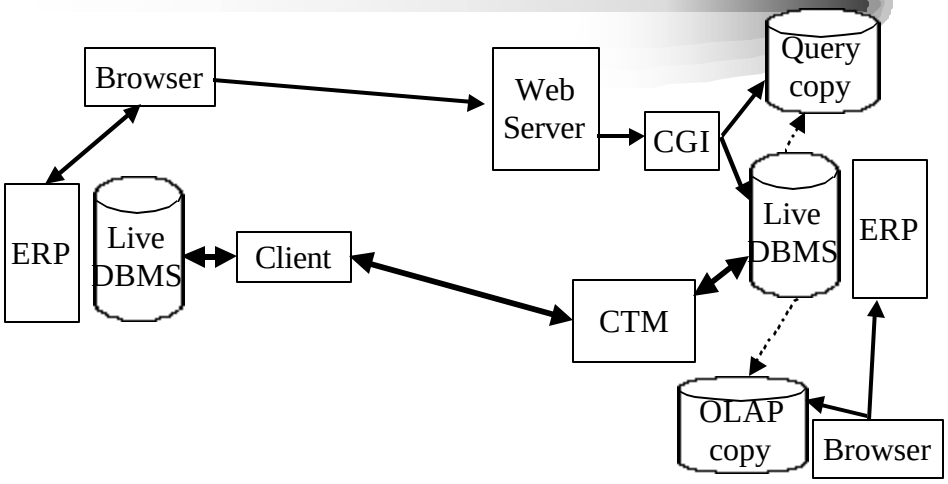
B2B Tasks – Sell Side

- Information to the customer
  - Product availability
  - Manufacturing status
  - Distribution information
- Information to the sales force
  - Ability to sell
  - Ability of configure
  - Ability of make
- Information to management
  - New opportunities
  - Customer satisfaction

Build B2B Interfaces

- Build web interfaces for:
  - DBMS snaphots
  - DBMS input
- Build component interfaces
  - DBMS input
  - DBMS manipulation
- Establish standards for
  - Transactions
  - Dialogs

Conceptualization of B2B Transaction



SOAP

- SOAP is the Simple Object Access Protocol
  - Lightweight XML based protocol
  - Three parts
    - an envelope that defines what is in a message and how to process it
    - encoding rules for expressing instances of application-defined datatypes
    - a convention for representing remote procedure calls and responses.
- SOAP is used in combination with other protocols –HTTP and SMTP.

A Soap Transaction

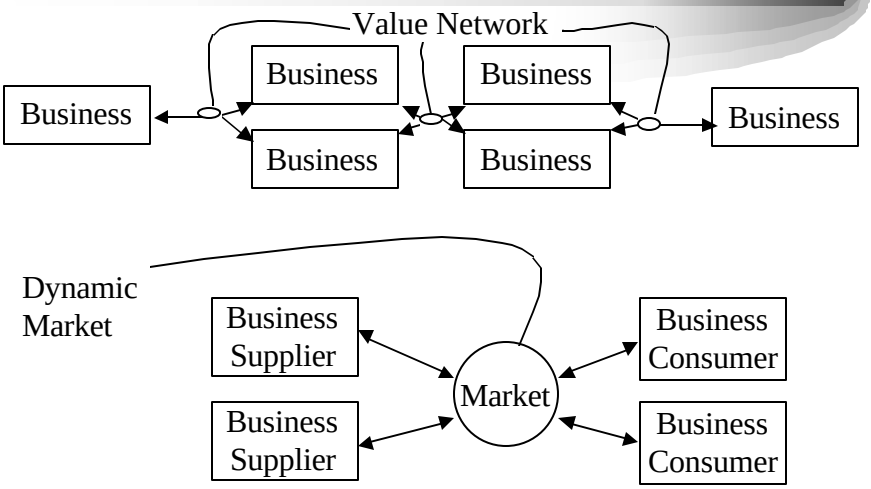
```
POST /StockQuote HTTP/1.1
Host: www.stockquoteserver.com
Content-Type: text/xml;charset="utf-8"
Content-Length: nnnn
SOAPAction: "Some-URI"

<SOAP-ENV:Envelope
xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
SOAP-ENV:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
<SOAP-ENV:Body>
<m:GetLastTradePrice xmlns:m="Some-URI">
<symbol>DIS</symbol>
</m:GetLastTradePrice>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

B2B Exchanges

- Various names are used for these enterprises
  - Hubs
  - Portals
  - Vortals
  - Application Service Providers
- Basically there are two types
  - Value network
  - Dynamic market

Value Networks versus Dynamic Markets



Basic Exchange Functions

- Communication
  - Connection
  - Translation
- Aggregation
  - The potential for new global marketplaces
- "New" transaction forms
  - Collaborative RFI and RFB
  - Buy side aggregation
  - Reverse auctions
  - Collaborative intelligence
- Value chain management

Business plan for the Exchange

- Identify marketplace need
  - Aggregation
  - Cost reduction
  - Transaction speed
  - Choice comparison
  - Value chain management
- Potential goals
  - Focus on an industry group (buy side)
  - Focus on a commodity group (sell side)
  - Focus on an enterprise (value chain)

Exchange Branding and Monetarizing

- Exchanges achieve branding, beyond their primary service, by offering:
  - News
  - Resources
  - Utilities
- They recoup costs by:
  - Advertising products
  - Taking a percentage of the transaction
  - Selling services

Differences between Dynamic Markets & Value Networks

- Dynamic Markets
  - Low commitment
  - Short timescales
  - Many relations
  - Low information sharing
  - Low investment in each relation
  - Exchange standards only
- Value Networks
  - High commitment
  - Long timescale
  - Few relations
  - High information sharing
  - High investment in each relation
  - Exchange standards and data standards

Some Examples of B2B Sites

- www.sciquest.com mediates transactions between participants in the hub – model is aggregation.
- www.e-steel.com is a vertical industry portal for buying and selling that provides access to industry news, information and resources.
- www.onemediaplace.com is a functional hub allowing companies in different industries to do media buying.
- www.paperexchange.com attempts to match of supply and demand for paper.
- www.acdelco.com is a GM initiative to support parts acquisition.