B2B E-Commerce

- The use of digital technologies to support inter-firm relationships
- Organisations doing business with other organisations electronically
- Related to the exchange of products, services, or information from one business to another

Importance & Significance of B2B EC

- US$7 trillion - US$10 trillion (projection for 2005)
- Projected growth 2000-2005 (Internet based B2B): 2.1% to 10%

It is about options too
What’s Important?

Enterprise applications
- ERP
- SCM
- CRM
- SFA

Legacy applications

Interoperability
- Buyer/supplier framework

Other applications (i.e., OBI, eCo Framework, ONCE, RosettaNet, B2Business)

Benefits of B2B E-Commerce

- **Straight-through processing**
  - Fewer errors
  - More efficient & faster processes
  - No paper
- **Reduce costs**
  - Storage cost with JIT inventory mgmt
- **Service levels**
- **Productivity**

B2B Main Activities

- Search
- Source
- Specify
- Negotiate/bid
- Order
- Goods
- Received

What about E-Marketplace?

- **Lower & transparent prices**
  - Automated procurement process
  - Reduce processing, operational, transaction cost
- **Access to more choices** (i.e., suppliers, buyers, goods & services)
- Reaching for critical mass
- Acting as virtual distributor / wholesaler

For example:

- Lost Wax e-Commerce Platform

E-marketplace a.k.a

- E-markets
- E-commerce hubs
- Net markets
- B2B exchanges
- Digital marketplace
E-Marketplace

Some predictions

- E-marketplace transaction volume will reach US$1.4 trillion by 2004 (Forrester Research 2000)
- 53% B2B transaction of the coming five years will be processed through e-marketplace (Forrester Research 2000)
- 37% B2B transactions will be processed through e-marketplace by 2004 (Gartner Group)

Potential Benefits for Buyers & Sellers

<table>
<thead>
<tr>
<th>Buyers</th>
<th>Seller</th>
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<tbody>
<tr>
<td>Choice of suppliers</td>
<td>Expand the market, more buyers</td>
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<tr>
<td>Choice of products &amp; services</td>
<td>Aggregation of orders</td>
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<td>Agreement of small orders</td>
<td>Volume discounts</td>
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<tr>
<td>Volume discounts</td>
<td>Reduce operational &amp; inventory cost</td>
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<tr>
<td>Lower product prices, search price transaction price</td>
<td>Process efficiency, straight through processing</td>
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<td>Process efficiency, straight through processing</td>
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Remember the costs…

- **One-time cost**
  - Registration, implementation, content (data) conversion, training, infrastructure
- **Recurring cost**
  - Membership fee, subscription fee, content management fee, transaction fee, infrastructure maintenance & upgrades, training

Potential Risks for Buyers & Sellers

<table>
<thead>
<tr>
<th>Buyers</th>
<th>Seller</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor quality of products &amp; services</td>
<td>Increased competition</td>
</tr>
<tr>
<td>Unreliable source &amp; level of supply</td>
<td>Price reduction</td>
</tr>
<tr>
<td>Unreliable delivery of products &amp; services</td>
<td>Incapable of handling the volume of transactions</td>
</tr>
<tr>
<td>Initial cost may be high</td>
<td>Initial cost may be high</td>
</tr>
<tr>
<td>Technology incompatibility</td>
<td>Technology incompatibility</td>
</tr>
<tr>
<td>Legal issues</td>
<td>Legal issues</td>
</tr>
<tr>
<td>Relationship issues</td>
<td>Relationship issues</td>
</tr>
<tr>
<td>Failure in the marketplace</td>
<td>Failure in the marketplace</td>
</tr>
</tbody>
</table>

Remember the potential risks…

- Joining a non-bonafide e-marketplace
- Uncertainty of the business partners
- Too many competitors in the same marketplace
- Legal issues

Taxonomies of E-Markets based on Ownership

- **3rd Party Exchange**
  - Independently owned & operated
  - Based on alliances with industry sponsored marketplace
  - Ensure that no parties dominate the market
  - The number of 3rd party exchanges has been decreased significantly (Forrester, 2000)
  - Example: Commerce One
    - Originally known as Distribution Development Corporation
    - e-market solutions, enterprise buyer, tech, on market consulting
    - Customers include: General Electric, IBM, Ford, IBM, Toyota, US Steel, etc.

- **Industry sponsored**

- **Private exchanges**
Taxonomies of E-Markets based on Ownership

E-Markets

3rd Party Hubs

PRIVATE EXCHANGES

Industry sponsored

Private exchanges

Industry Sponsored Exchanges
- A consortium of organisations (commonly the dominant players in the old marketplace/industry)
- Aimed to consolidate/combine market share, resources, expertise
- Can be problematic for SMEs
- Example: Covisint
  - GM, Mazda, Peugeot, Ford, … (50% of automotive production in the world)
  - Pre-negotiated prices
  - Auction-based system

PRIVATE EXCHANGES

- Developed by a single large buyer or provider
- May "require" business partners/clients to be "e" enabled & join its marketplace to gain special privileges
- Typically, provide more complex capabilities, require en systems to be integrated with back-office systems, may require some sort of ERP systems for all players
- Example: GE
  - Internet-based electronic market
  - E-catalogue based
  - Pre-negotiated prices
  - Auction-based system

The Current Status of e-Marketplace

- Independent public markets (i.e., 3rd party hubs) are struggling
- Upwards trends for private exchanges with sophisticated services and capabilities
- The industry sponsored (consortium based) e-marketplaces are still somewhat at an immature stage
- There is a realisation to constantly updating and refining value proposition by the key players of e-marketplace

Do you know what 'vertical' and 'horizontal' B2B?

“Vertical” B2Bs
- Catered for / specific to a single industry
- Expertise & in-depth content knowledge for one industry
- Product focus is on the supply chain of one product category
- Typical characteristics:
  - Large base of transactions
  - Many fragmented buyers and/or sellers
- Look at Covisint (automotive), MetaSite, Neoforma (healthcare)

“Horizontal” B2B
- Aims to serve many different industries
- Broad product focus
- Services across multiple vertical industries
- Look at NTE (National Transportation Exchange), Chemunity, GEMS
Some Problems with E-Marketplace…

• Too techno-centric
• Technology immaturity
• No understanding of the industry
• Competitions
• Scarce VC market (late 1999 onwards)
• Standardisation
• Not many B2B exchanges/e-marketplace could reach critical mass

What Matters in B2B Exchanges?

• Quality of products
• Types & Quality of services
• Timing of deliveries
• Customisations
• Buyer – Seller relationships
• Critical Mass

Did You Know?

• ~ 1500 B2B exchanges in 2001
• < 700 in July 2002
• More than 80% of B2B exchange providers exited via failure or acquisition

What about 2003 & 2004 & 2005?

(The Forrester, 2001; Forrester, 2002; Gartner Group, 2003)
Suggested Readings


Please read chapter 4 of the Jelassi & Ender textbook for this week’s lecture.

Please read chapter 6 & 10 for the next 3 sessions.