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%
Types of B2B E-Commerce
What & Who are Involved in B2B & EM?

- The Seller
- The Provider of Logistical Services
- The Buyer
- The E-Intermediaries (and the provider)
- The Network Platform
- The Trading Platform (the market environment)
- Payment Services

E-Marketplace

www.monash.edu.au
It is about options too

(Lee, 2002)
What’s Important?

Enterprise applications
- ERP
- SCM

Legacy applications

Interoperability mechanisms
- Business-to-Business framework
- Buyer/supplier
  (i.e., OBI, eCo Framework, ONCE, RosettaNet, B2Business)

Other applications

Supplier

Enterprise applications
- CRM
- SFA

Legacy applications

Other applications

Buyer
B2B Main Activities

- Search
- Source
- Specify
- Negotiate/bid
- Order
- Goods Received
For example:

(www.lostwax.com)

www.monash.edu.au
Benefits of B2B E-Commerce

- **Straight-through processing**
  - ↓ error
  - More efficient & faster processes
  - No paper
- **Reduce costs**
  - ↓ storage cost with JIT inventory mgmt
- **service levels**
- **productivity**
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**
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

Buyers

Choice of suppliers
Choice of products & services
Aggregation of small orders
Volume discounts
Lower products prices, search price, transaction price
Process efficiency, straight through processing

Seller

Expand the market, more buyers
Aggregation of orders
Increased volume of sales
Reduce operational & inventory cost
Process efficiency, straight through processing
Potential Risks for Buyers & Sellers?

**Buyers**
- Poor quality of products & services
- Unreliable source & level of supply
- Unreliable delivery of products & services
- Initial cost may be high
- Technology incompatibility
- Legal issues
- Relationship issues
- Failure in the e-marketplace

**Seller**
- Increased competition
- Price reduction
- Incapable of handling the volume of transactions
- Initial cost may be high
- Technology incompatibility
- Legal issues
- Relationship issues
- Failure in the e-marketplace
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
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

E-Markets

3rd Party Hubs

Industry sponsored

Private exchanges

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 (88% unprofitable – Forrester, 2002)
- Example: Commerce One
  - Originally known as DistriVision Development Corporation
  - e-market solutions, enterprise buyer, tech (e-market) consulting
  - customers: citibank, compaq, nokia, etc. and several major exchanges (i.e., Covisint)
Taxonomies of E-Markets based on Ownership

E-Markets

3rd Party Hubs

Industry sponsored

Private exchanges

Industry Sponsored Exchanges

• A consortium of organisations (commonly the dominant players in the ‘old’ marketplace/economy)
• Aimed to consolidate / combine market share, resources, & expertise
• Can be problematic for SMEs
• Example: Covisint
  • GM, Nissan, Peugeot, Ford, … (50% of automotive production in the world)
  • pre-negotiated prices
    • Auction-based system
Taxonomies of E-Markets based on Ownership

- **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 em 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

- **3rd Party Hubs**

- **Industry sponsored**

- **Private exchanges**
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), MetalSite, 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
Vertical B2Bs
(e.g. Covisint, e-steel, metalsite, neoforma)

Chemicals

Automotive

Steel

Office Supplies, MRO

Procurement

Logistics, Delivery

Horizontal B2Bs
(e.g. MRO.com, NTE)
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
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?

(Forrester, 2001; Forrester, 2002; Gartner Group, 2003)
Remember that in B2B...

“...price is not necessarily the most important feature of business-to-business transactions”

(Knapp, 2003, p. 297)

“Most companies have come to realize that getting supplies at the lowest price may not be in their best economic interest.”

(Wise & Morrison, 2000, p. 88)

If price is not the main issue, than what?
What Matters in B2B Exchanges?

- Quality of products
- Types & Quality of services
- Timing of deliveries
- Customisations
- Buyer – Seller relationships
- Critical Mass
The Emerging B2B Landscape

(Wise & Morrison, 2000)
Suggested Readings


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

Please read chapter 6 & 10 for the next 3 sessions