ICT332
Electronic Commerce and Virtual Organisations

Topic 9
Retailing on the Web

Ref: Laudon & Traver “E-commerce” Ch 10

Blue Nile Sparkles For Your Cleopatra
Class Discussion

• Why is selling (or buying) diamonds over the Internet so difficult?
• How has BlueNile built its supply chain to keep costs low?
• How has BlueNile reduced consumer anxiety over online diamond purchases?
• What are some vulnerabilities facing BlueNile?
• Would you buy a $5,000 engagement ring at BlueNile?

Major Trends in Online Retail, 2006

See also Table 10.1, Page 575.

• Online retail increasingly profitable
• Buying online becomes normal, mainstream experience
• Selection of goods online increases, including customized goods
• Average annual amount of purchases increases
• Specialty retail sites show most rapid growth
• Increased emphasis on improved shopping experience
Major Trends in Online Retail, 2006
- Increased use of interactive multimedia marketing
- Retail intermediaries strengthen in many areas
- Retailers increasingly efficient at integrating multiple channels
- Customized goods, especially in apparel, become financially successful, and begin to spread to many sites beyond specialty retailers.
- Online shopping becomes more multi-seasonal
- Most online shopping occurs at work, evenings at home

The Retail Sector
- Most important theme in online retailing is effort to integrate online and offline operations
- U.S. retail market accounts for over $7.7 trillion of total GDP (2/3rds of all economic activity)
- Retail industry can be divided in segments, each of which offers opportunities for online retail

The Retail Sector
- Biggest opportunities for online retail sales: Those segments that sell small ticket items (specialty stores, general merchandisers, mail-order catalogs, groceries)
- Mail order/telephone order (MOTO) sector most similar to online retail sector

Composition of the U.S. Retail Industry
Figure 10.1, Page 576

Online Retailing: The Vision
- Greatly reduced search costs on the Internet would encourage consumers to abandon traditional marketplaces in order to find lower prices for goods
- Market entry costs would be much lower than those for physical storefronts, and online merchants would be more efficient than offline competitors
- Traditional offline physical store merchants would be forced out of business

Online Retailing: The Vision
- Some industries would become disintermediated as manufacturers built direct relationship with consumer
- Ultimately, few of the above assumptions proved to be correct, and structure of retail marketplace in the U.S. has not be revolutionized
The Online Retail Sector Today

- Online retailing segment, although smallest segment of retail industry, is growing at exceptionally fast rate
- Online retail revenues: $85 billion, 115 million consumers estimated for 2005
- Primary beneficiaries of growing consumer support: Established offline retailers with an online presence

### Table 10.2

<table>
<thead>
<tr>
<th>NAME</th>
<th>2002 REVENUES (IN BILLIONS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Wal-Mart</td>
<td>$244.534</td>
</tr>
<tr>
<td>2. Target</td>
<td>$ 43,917</td>
</tr>
<tr>
<td>3. Sears</td>
<td>$ 41,386</td>
</tr>
<tr>
<td>4. Costco</td>
<td>$ 38,762</td>
</tr>
<tr>
<td>5. JCPenney</td>
<td>$ 32,347</td>
</tr>
<tr>
<td>6. Kmart</td>
<td>$ 30,762</td>
</tr>
<tr>
<td>7. Federated Department Stores</td>
<td>$ 15,435</td>
</tr>
<tr>
<td>8. May Department Stores</td>
<td>$ 13,401</td>
</tr>
<tr>
<td>9. Kohl’s</td>
<td>$ 9,120</td>
</tr>
<tr>
<td>10. Dillard’s</td>
<td>$ 7,911</td>
</tr>
</tbody>
</table>

**SOURCE:** Hoover’s Online, 2003a.

### Table 10.3

<table>
<thead>
<tr>
<th>NAME</th>
<th>2002 REVENUES (IN MILLIONS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. COW</td>
<td>$4,264,600</td>
</tr>
<tr>
<td>2. Spiegel Group</td>
<td>$2,280,000</td>
</tr>
<tr>
<td>3. Mica Warehouse</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>4. Lands’ End</td>
<td>$1,569,10</td>
</tr>
<tr>
<td>5. PC Connection</td>
<td>$1,390,50</td>
</tr>
<tr>
<td>6. LLBean</td>
<td>$1,100,00</td>
</tr>
<tr>
<td>7. School Specialty</td>
<td>$ 762,40</td>
</tr>
<tr>
<td>8. Blair Corporation</td>
<td>$ 568,50</td>
</tr>
<tr>
<td>9. ValueVisionMedia</td>
<td>$ 554,90</td>
</tr>
<tr>
<td>10. Bear Creek Corporation</td>
<td>$ 489,00</td>
</tr>
</tbody>
</table>

**SOURCE:** Hoover’s Online, 2003a.
Insight on Business: Merlot by Mail

• Why is eVineyard one of the few online surviving wine retailers?
• What was the key to eVineyard’s success?
• How will changes in state laws open up online wine sales?
• How did the Supreme Court decision affect wine retailing and wineries in the United States?

Analyzing the Viability of Online Firms: Strategic Analysis

• Strategic analysis of economic viability of a firm focuses on both industry as a whole and firm
• Key industry strategic factors:
  - Barriers to entry
  - Power of suppliers
  - Power of customers
  - Existence of substitute products
  - Industry value chain
  - Nature of intra-industry competition

Analyzing the Viability of Online Firms: Strategic Analysis (cont’d)

• Strategic factors that pertain to firm include:
  - Firm value chain
  - Core competencies
  - Synergies
  - Technology
  - Social and legal challenges

Analyzing the Viability of Online Firms: Financial Analysis

• Financial analysis helps us understand how a firm is performing
• Includes two main parts: Statement of Operations and Balance Sheet
  - Statement of Operations: Tells us how much income or loss a firm is achieving based on current sales and costs
  - Balance sheet: Provides a financial snapshot of a company’s assets and liabilities
Analyzing the Viability of Online Firms: Financial Analysis (cont’d)

• Factors to look for when assessing Statements of Operations
  - Revenues: growing and at what rate?
  - Cost of sales: compared to revenues
  - Gross margin (gross profit divided by net sales): increasing or decreasing?
  - Operating expenses: What are they, increasing or decreasing?
  - Operating margin: Indication of company’s ability to turn sales into pre-tax profit after operating expenses are deducted
  - Net margin (net income or loss divided by net sales or revenue): increasing or decreasing?

Analyzing the Viability of Online Firms: Financial Analysis (cont’d)

• Factors to look for when assessing a Balance Sheet:
  - Current assets
  - Current liabilities
  - Ratio of current assets to liabilities (working capital)
  - Long-term debt

E-tailing Business Models

• Four main types of online retail business models:
  - Virtual merchant
  - Bricks-and-clicks
  - Catalog merchant
  - Manufacturer direct

Virtual Merchants

• Single channel Web firms that generate almost all revenues from online sales
• Example: Amazon.com

E-commerce in Action: Amazon.com

• Vision: Earth’s biggest selection, most customer-centric
• Business Model: Virtual merchant that sells merchandise owned by Amazon, online storefronts for other merchants, merchandise owned by individuals; e-commerce services
• Financial Analysis: Greatly improved overall operational position, but not yet consistently profitable

E-commerce in Action: Amazon.com

• Strategic Analysis: Business strategy: Maximize revenue while cutting costs
• Strategic Analysis: Competition: General merchandisers who are both offline and/or online
• Strategic Analysis: Technology: Largest, most sophisticated collection of online retailing technologies available
• Strategic Analysis: Social, Legal: Securities, anti-trust lawsuits
• Future Prospects: Long-term profitability still uncertain
Multi-channel Merchants: Bricks and Clicks

- Companies that have a network of physical stores as primary retail channel, but also online offerings
- Examples: Wal-Mart, J.C. Penney, Sears

Catalog Merchants

- Established companies that have a national offline catalog operation as largest retail channel, but also have online capabilities
- Examples: Lands’ End, L.L. Bean, Eddie Bauer, Victoria’s Secret, Lillian Vernon
Manufacturer-Direct

- Single or multi-channel manufacturers who sell directly online to consumers without intervention of retailers
- Example: Dell

Insight on Society: Internet Taxation: The Tax Man is Coming

- Why should online retailers collect state sales taxes?
- What is the Streamlined Sales Tax Project and how will it potentially affect the collection of online sales taxes?
- Why do some major online stores like Wal-Mart collect sales taxes?

Distribution of Online Retail Sales by Type of Merchant

SOURCE: Based on data from Internet Retailer, 2005.

Common Themes in Online Retailing

- Online retail fastest growing channel, has fastest growing consumer base, growing penetration rate across many categories of goods
- Many online retail firms have begun to raise prices
- Disintermediation has not occurred, and most manufacturers use Web primarily as an informational resource
- Most significant online growth has been that of offline giants who are focusing on extending brand to online channel
- Second area of rapid growth: specialty merchants

Insight on Technology: Using the Web to Shop ‘Till You Drop

- What do shopping bots and comparison sites offer consumers?
- Why are shopping bots more successful with hard goods than soft goods?
- What is the strategy of Become.com?
- How can shopping bots compare luxury goods?
- How will adding content to comparison sites help consumers?
Online Service Industries

Ref: Laudon & Traver “E-commerce” Ch 11

NetBank and the Future of Branchless Banking

• What is the value proposition of online banks?
• Why have stand-alone online banks in the United States not done well?
• What were the key ingredients of NetBank’s business model that made it successful?
• Why do most Americans still prefer to use their local branch bank?

The Service Sector: Offline and Online

• Service sector: Largest and most rapidly expanding part of economies of advanced industrial nations
• In the United States, services plus fire, insurance, real estate sector employs about 42% of labor force; accounts for $4.2 trillion of GDP in 2005

What are Services?

• **Service occupations:** Are “concerned with performing tasks” in and around households, business firms, and institutions
• **Service industries:** “Domestic establishments providing services to consumers, businesses, governments, and other organizations”

The Major Service Industry Groups
Categorizing Service Industries

- Within service industry groups, can be further categorized into:
  - Transaction brokers
  - Hands-on service provider
- Services industry features:
  - Knowledge- and information-intense, which makes them uniquely suited to e-commerce applications
  - Amount of personalization and customization required differs depending on type of service

Online Financial Services

- Online financial services sector an example of an e-commerce success story, but success is somewhat different from what had been predicted
- Pure online financial services firms in general are not yet consistently profitable
- Multi-channel established financial services firms are showing fastest growth and strongest prospects

Financial Service Industry Trends

- Financial services industry provides four generic kinds of services:
  - Storage of and access to funds
  - Protection of assets
  - Means to grow assets
  - Movement of funds
- Two important global trends
  - Industry consolidation (Financial Reform Act of 1998 amended Glass-Steagall Act and allows banks, brokerages, and insurance firms to merge)
  - Movement toward integrated financial services (financial supermarket model)

Industry Consolidation and Integrated Financial Services

Online Financial Consumer Behavior

- Consumers attracted to online financial services because of desire to save time and access information rather than save money
- Most online consumers use financial services firms for mundane financial management
- Greatest deterrents are fears about security and confidentiality
Online Banking

- Online banking pioneered by NetBank and WingSpan
- Established brand name national banks have taken a substantial lead in market share
- Over 50 million people use online banking, and around 40 million households
- Movement toward online banking is global

Online Brokerage

- Early online brokerage leaders, such as E*Trade and Ameritrade have been displaced at top by established firms (Fidelity and Charles Schwab)
- Number of online investor accounts has increased to over 37 million

Multi-channel vs. Pure Online Financial Service Firms

- Online consumers have made it known that they prefer multi-channel firms with physical presence
- Multi-channel firms have lower customer acquisition, conversion, and retention costs
- However, users of pure online firms utilize them more intensively

Online Banking Penetration in Various Countries (2002, As a Percentage of Total Banking)

<table>
<thead>
<tr>
<th>Country</th>
<th>Penetration (2002)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norway</td>
<td>47%</td>
</tr>
<tr>
<td>Finland</td>
<td>40%</td>
</tr>
<tr>
<td>South Korea</td>
<td>40%</td>
</tr>
<tr>
<td>Sweden</td>
<td>37%</td>
</tr>
<tr>
<td>Canada</td>
<td>25%</td>
</tr>
<tr>
<td>US</td>
<td>20%</td>
</tr>
<tr>
<td>Germany</td>
<td>12%</td>
</tr>
<tr>
<td>France</td>
<td>11%</td>
</tr>
<tr>
<td>Italy</td>
<td>11%</td>
</tr>
<tr>
<td>Japan</td>
<td>8%</td>
</tr>
</tbody>
</table>

Online Banking Penetration in Various Countries (2002, As a Percentage of Total Banking)

<table>
<thead>
<tr>
<th>Year</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>16%</td>
<td>22%</td>
<td>28%</td>
<td>33%</td>
<td>38%</td>
<td>43%</td>
<td>49%</td>
<td>50%</td>
<td>51%</td>
<td>52%</td>
<td>53%</td>
</tr>
</tbody>
</table>

The Growth of Online Banking, 2000–2010

Figure 11.3, Page 628

SOURCE: Based on data from eMarketer, Inc., 2005a.

Online Consumers' Financial Activities (2002, As a Percentage of Online Consumers)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Track investment performance</td>
<td>49%</td>
</tr>
<tr>
<td>Search for interest rates for loans/credit cards</td>
<td>41%</td>
</tr>
<tr>
<td>Check balance/transactions on accounts</td>
<td>40%</td>
</tr>
<tr>
<td>Obtain interest rates on deposit products</td>
<td>34%</td>
</tr>
<tr>
<td>Transactions between bank accounts</td>
<td>23%</td>
</tr>
<tr>
<td>Find financial product to buy</td>
<td>19%</td>
</tr>
<tr>
<td>Pay bills online</td>
<td>18%</td>
</tr>
<tr>
<td>Work through financial planning session</td>
<td>14%</td>
</tr>
<tr>
<td>Apply for mortgage home equity loan</td>
<td>6%</td>
</tr>
<tr>
<td>Apply for car loan</td>
<td>5%</td>
</tr>
</tbody>
</table>

E-commerce in Action: E*Trade

- E*Trade: 4.3 million online customers; offers online brokerage, banking, lending, corporate financial services
  - Discounted commissions on stock trades, free online information, online order entry, more efficient order execution, and better customer service
- Online brokerage industry growth torrid 1998 - 2000; has slowed somewhat since

E-commerce in Action: E*Trade

- However, despite extraordinary growth and success, not consistently profitable; collapse of stock market and its impact on E*Trade demonstrated fragility of its reliance on pure online domestic brokerage
- Has since been seeking to expand physical presence and diversify revenue streams

Financial Portals

- Financial portals: Provide comparison shopping services, independent financial advice and financial planning
  - Examples: Yahoo! Finance, Quicken.com, MSN Money, AOL’s Money and Finance channel

Account Aggregators

- Account aggregation: Process of pulling together all of a customer’s financial (and even non-financial) data at a single personalized Web site
  - Yodlee, a leading provider of account aggregation technology; used by Merrill Lynch, Citigroup, Chase, others
  - Raises issues about privacy and control of personal data, security, etc.
Insight on Technology: Should You Aggregate and Have Your Screen Scraped?

- What is “account aggregation” and what benefits does it offer consumers?
- What is “screen scraping”?
- Why would merchants allow account aggregators to take customer information from their Web sites?
- What are some of the dangers of account aggregation for consumers and businesses?

Online Mortgage and Lending Services

- Early entrants envisioned a market in which mortgage value chain would be simplified and loan closing process speeded up, with resulting cost savings passed on to consumer
- However, many of early-entry, pure online firms failed (e.g., Mortgage.com) due to difficulties of developing brand and simplifying mortgage generation process

Online Mortgage Originations as Percentage of Total Mortgages

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent of Mortgages Originating Online</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>2.0%</td>
</tr>
<tr>
<td>2002</td>
<td>3.0%</td>
</tr>
<tr>
<td>2003</td>
<td>4.0%</td>
</tr>
<tr>
<td>2004</td>
<td>5.0%</td>
</tr>
<tr>
<td>2005</td>
<td>6.0%</td>
</tr>
<tr>
<td>2006</td>
<td>7.0%</td>
</tr>
<tr>
<td>2007</td>
<td>8.0%</td>
</tr>
<tr>
<td>2008</td>
<td>9.0%</td>
</tr>
</tbody>
</table>

SOURCE: Based on data from E-Loan, 2005; Gatti, 2004; eMarketer, Inc., 2003; authors’ estimates.
Online Insurance Services

- Online insurance industry affected by fact that industry is regulated at state as opposed to federal level; also impacted by channel conflict
- Leading players include InsWeb.com, Progressive.com and Insure.com

Online Real Estate Services

- Early visions (that the historically local, complex, and agent-driven real estate industry would be transformed into a disintermediated marketplace where buyers and sellers would transact directly) has not been realized
- However, what has transpired has in fact been beneficial to buyers, sellers, and real estate agents

Online Real Estate Services

- Major impact is influencing of purchases offline
- Despite revolution in available information, there has not been a revolution in the industry value chain

Online Insurance Services

- Online term life insurance: one of few product groups in which Internet actually lowered search costs, increased price comparison, and resulted in lower prices to consumers
- However, in other insurance product lines, Web has offered insurance companies new opportunities for product and service differentiation and price discrimination
Insight on Society: Turf Wars—Antitrust and the Online Real Estate Market

- What is a Multiple Listing Service (MLS) and how does the National Association of Realtors maintain a monopoly over this service?
- Why does the Department of Justice believe the NAR’s policies are anti-competitive?
- Why can’t online real estate firms develop alternatives to local multiple listing services?
- Would you buy a home using eBay or Craigslist?

Online Travel Services

- Arguably, the single most successful B2C e-commerce segment; attracts single largest audience, and largest slice of B2C revenues
- Internet becoming most common channel used to research travel and book reservations
- 2005: $80 billion in revenue, expected to grow to $150 billion by 2009
- Popular because they offer consumers more convenience (one stop; offers content, commerce, community, customer service) than traditional travel agents
- For suppliers, offers a singular, focused customer pool that can be efficiently reached

Travel as the Ideal Internet Product/Service

- An information-intensive product
- An electronic product in the sense that travel arrangements can be accomplished for the most part online
- Does not require inventory
- Suppliers are always looking for customers to fill excess capacity
- Do not require an expensive multi-channel presence

Online Travel Services Components

- Airline reservations the largest single component ($38.5 billion in 2005; $60 billion in 2009)
- Hotel reservations ($20.5 billion in 2002, $40 billion in 2009)
- Car reservations ($2.7 billion in 2005, $5.2 billion in 2009)
Online Travel Services Components

- Cruise/tour reservations: fairly slow growth since not as well suited for online environment
- Major segments:
  - Leisure
  - Business travel – expected to be a major growth area as corporations seek better control of corporate travel expenses

Projected Growth of Online Travel Market Components

- Figure 11.6, Page 653
- SOURCE: Based on data from eMarketer, Inc., 2004; Forrester Research, 2004; Jupiter Media Metrix, 2001b, authors’ estimates.

Projected Growth of Leisure/Unmanaged Business and Managed Business Travel

- Figure 11.7, Page 654
- The Travel Services Value Chain

Online Travel Industry Dynamics

- Competition among online providers is intense
- Industry is going through a period of consolidation as stronger, offline established firms purchase weaker and relatively inexpensive online firms
- Suppliers (the large national airlines, hotel chains, auto rental companies, etc.) are attempting to eliminate the intermediaries such as the global distribution systems and travel agencies, using the Web as a means

Insight on Business: Zipcars

- What is the Zipcar business model? How does it make money?
- How does Zipcar use the Internet?
- Does Zipcar compete with traditional car rental firms?
- Would Zipcar work only in urban markets? Could it expand to the suburbs?
E-commerce in Action: Expedia.com

- Online travel services company that provides access to information about and sales of travel arrangements
- Originally started by Microsoft, subsequently purchased by InterActiveCorp, then spun-off into separate public company in 2005
- One of top players in online travel services, generating revenues of $2.1 billion in 2005

Online Career Services

- Next to travel services, one of Internet’s most successful online services.
- Dominated by Monster.com (owned by Monster Worldwide), CareerBuilder.com, and HotJobs.com (owned by Yahoo)
- Online recruiting provides a more efficient and cost-effective method of linking employers and potential employees, while reducing total time-to-hire

Why are Job Sites So Popular?

- Saves time and money for both job hunters and employers
- For employers: Expand geographic reach of search, lower cost, and result in faster hiring decisions
- For job seekers: Make resumes more widely available, and provides a variety of related job-hunting services
- One of most important functions: Ability to establish market prices and terms (online national marketplace)
Recruitment Market Segments

- Three major segments
  - **General job recruitment:** Largest segment and primary focus
  - **Executive search:** highest revenue potential
  - **Specialized job placement services:** often run by professional societies

Online Recruitment Industry Dynamics

- Four major trends:
  - **Consolidation:** Monster, CareerBuilder, and HotJobs together constitute 90% of market
  - **Diversification** of product line: niche sites
  - **Localization:** Local boards compete with local newspapers; Craigslist
  - **Job search engines** “scrape” listings: Indeed.com, SimplyJobs, JobCentral