# Successes and Failures in E-Commerce in the United States: Lessons to be Learned

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Hale and Dorr LLP
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#### Preface

- I am not a securities analyst or investment advisor
- I am commenting on the current state of e-commerce as I see it, from my perspective as an attorney working with clients in the area. These comments do not reflect the opinions of Hale and Dorr LLP.
- As this presentation is a summary and has been prepared in order to highlight only a few selected issues or factors, and as those issues and factors are subject to change, it should be not be relied upon without independent investigation of the issues or factors referred to herein or other factors which you may consider relevant HALE AND DORR LLP

#### Overview

- Definition of E-Commerce
- Current Status of E-Commerce in the United States
- Some Successes
- Some Failures
- Future Developments
- Seven Lessons to be Learned

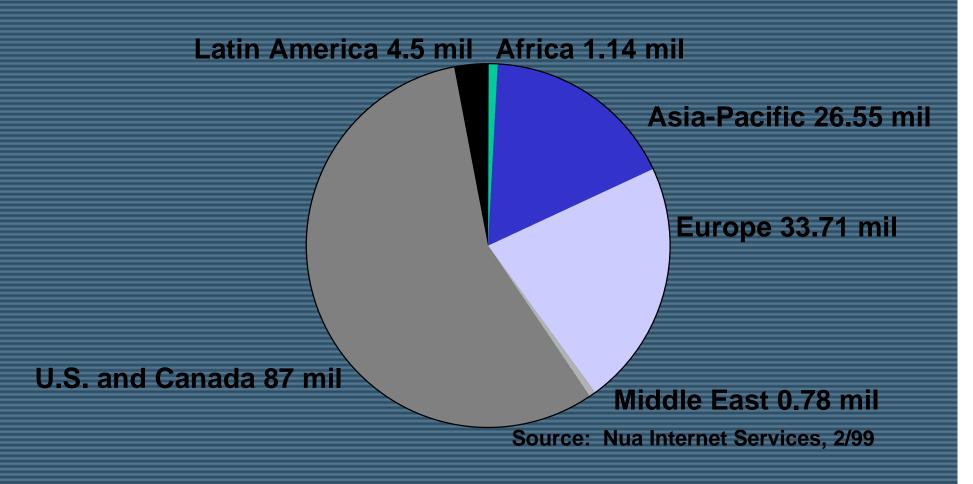
#### Definition of E-Commerce

- Electronic Commerce refers to the conduct of business transactions (whether with consumers or between businesses) using the Internet or other computer networks.
- Examples:
  - Retail transactions
  - Business-to-business transactions
  - Electronic cash (beyond scope of this talk)

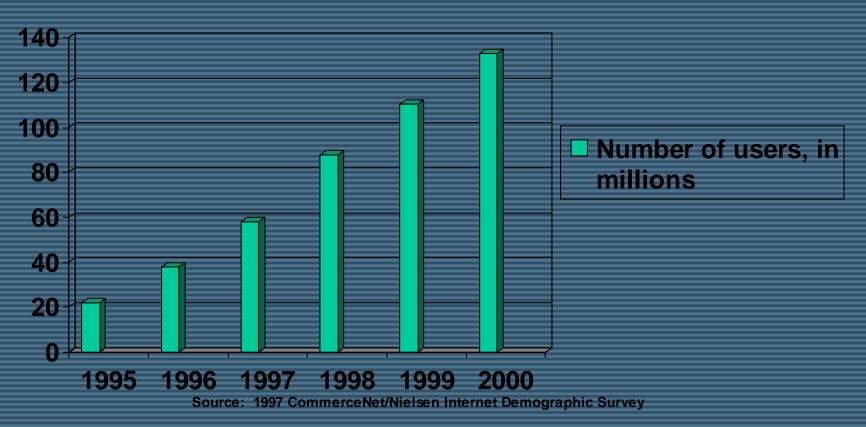
### Growth of E-Commerce in the United States

- Growth of Internet Population
- User Demographics
- Retail Products Purchased by U.S. Internet Users
- Internet Use by U.S. Businesses

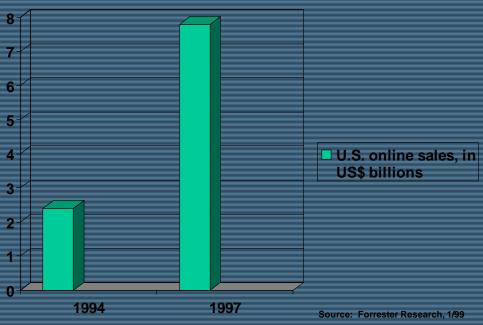
### Estimated Geographic Distribution of 153.5 Million Online Users



### Growth of Internet Population in the United States and Canada

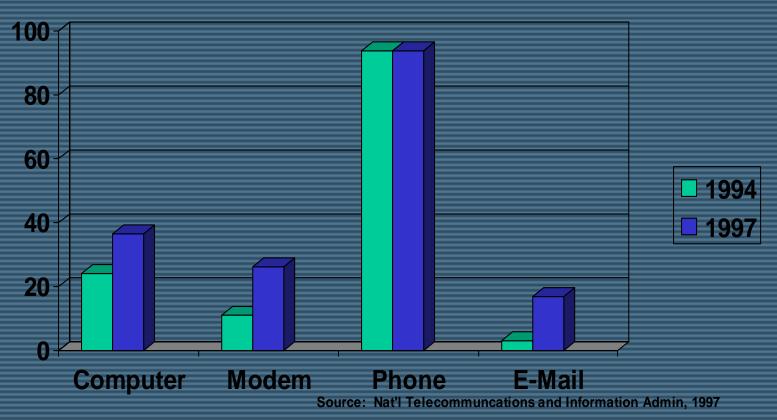


#### Volume of U.S. Online Sales

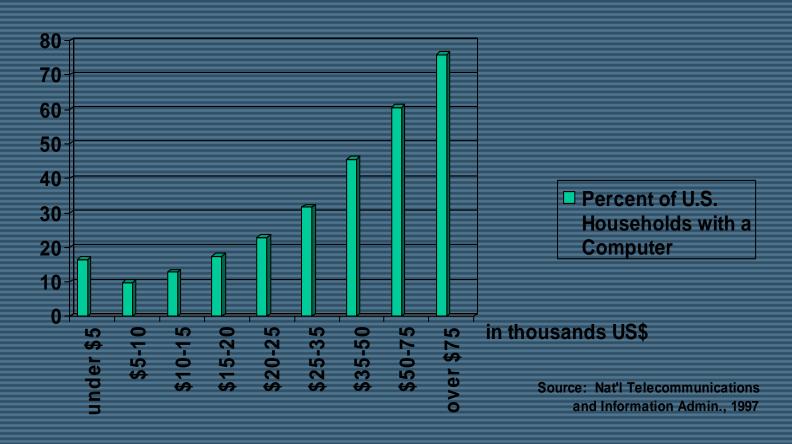


- 1994: US\$2.4 billion
- 1997: US\$7.8 billion
- 2003(est): \$US103 billion

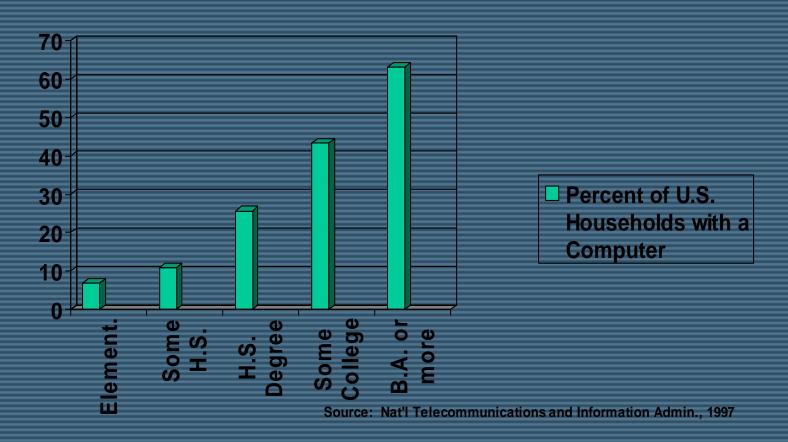
# Percent of U.S. Households with Computer, Modem, Telephone and E-Mail



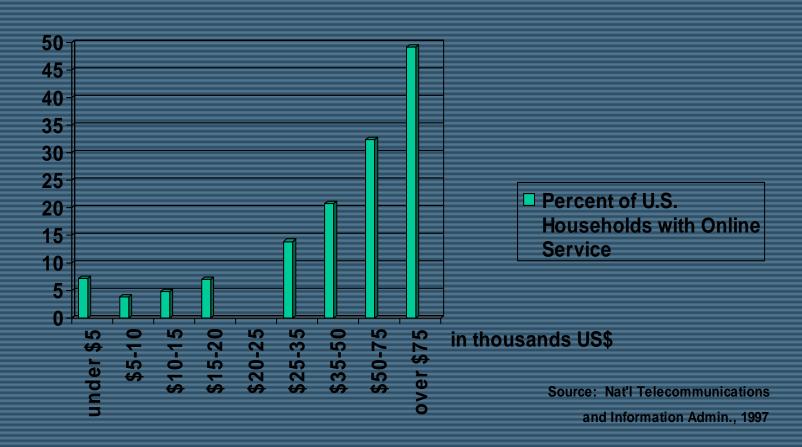
# Percent of U.S Households with a Computer, by Income



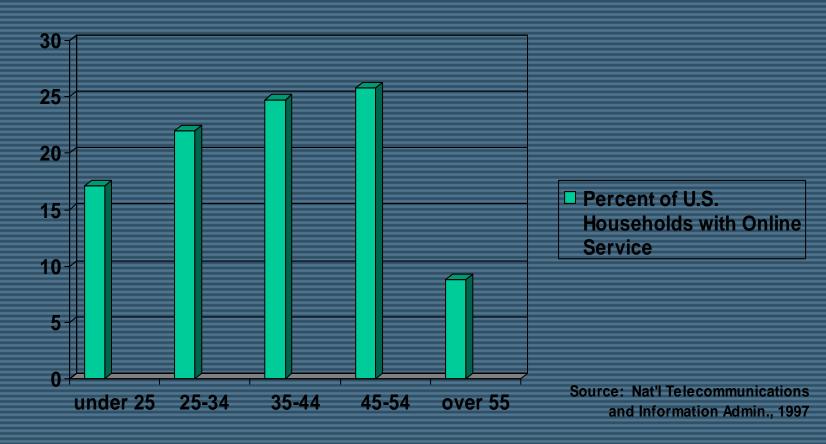
# Percent of U.S Households with a Computer, by Education



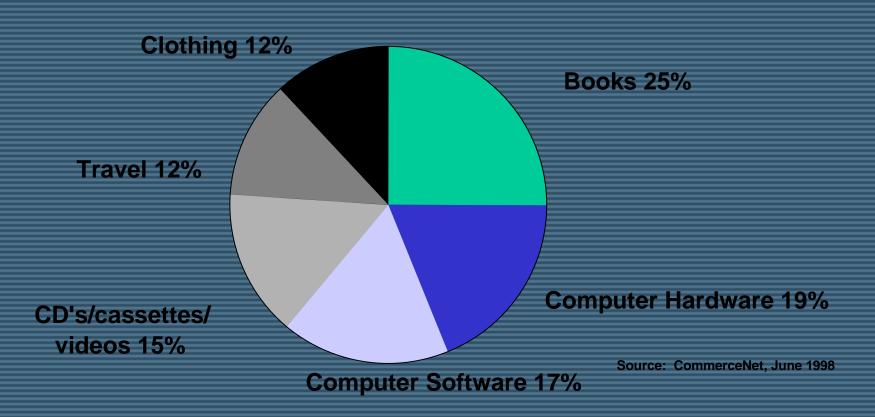
### Percent of U.S Households with Online Service, by Income



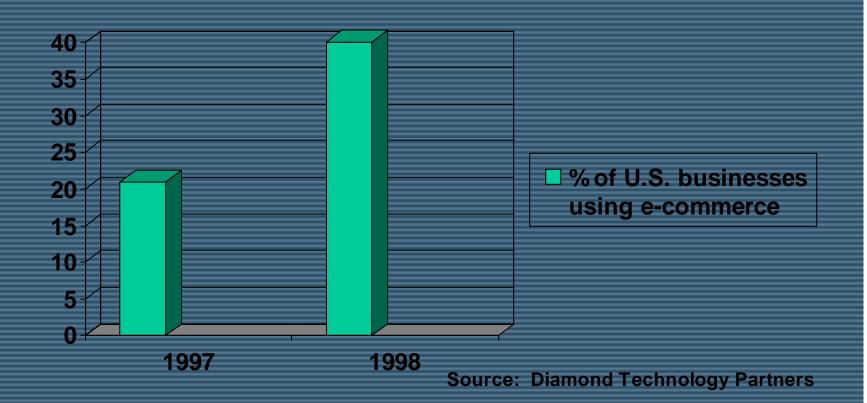
# Percent of U.S Households with Online Service, by Age



### Types of Retail Products Purchased by U.S. Internet Users



# Percentage of U.S. Businesses Using e-Commerce



### Some Factors Driving ecommerce

#### Retail

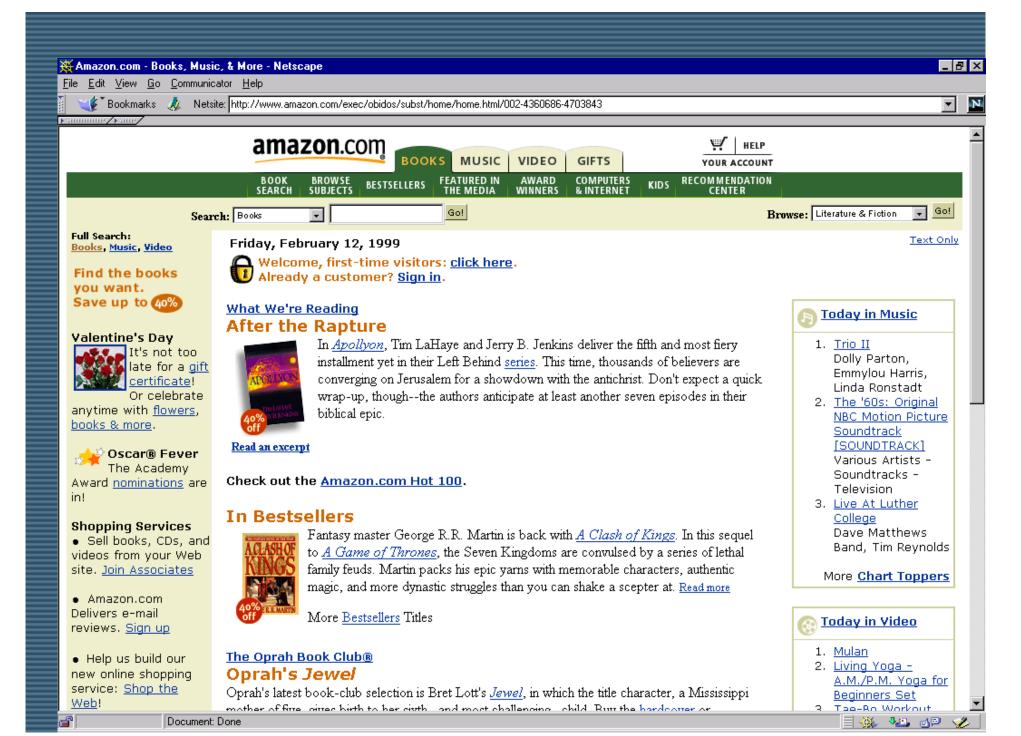
- Customer convenience: compare products and buy from home
- Retailer savings: cheaper than maintaining retail stores; centralized distribution
- Business-to-business
  - lower sales costs
  - centralized order processing and billing
  - centralized distribution

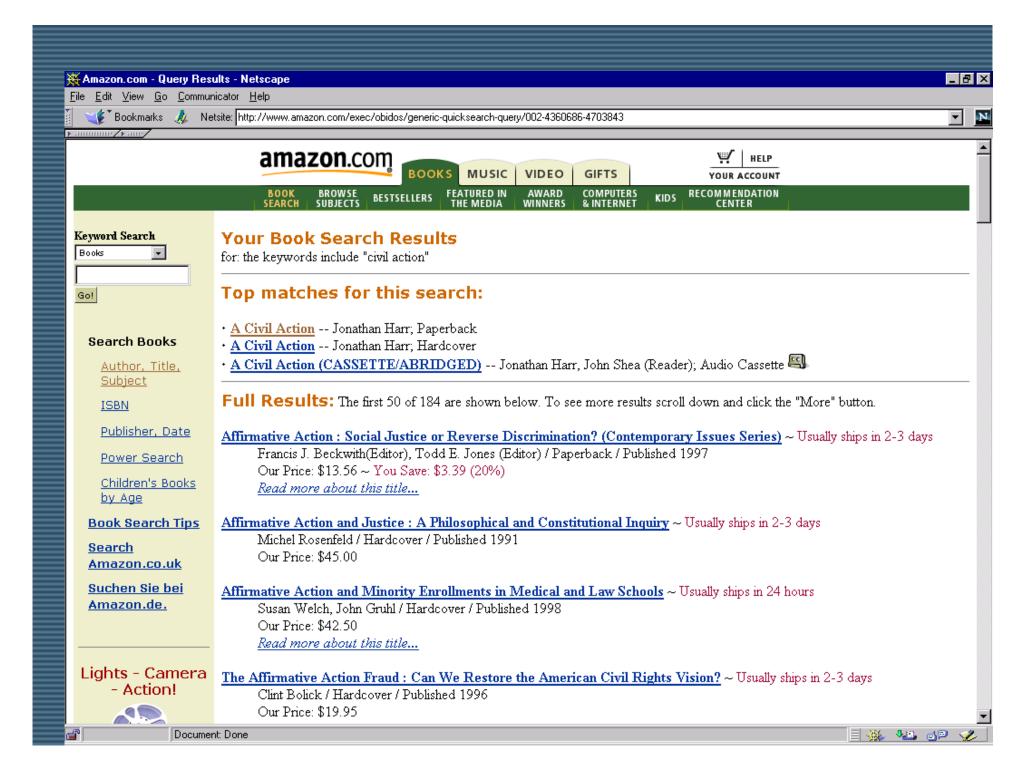
#### Some Successes

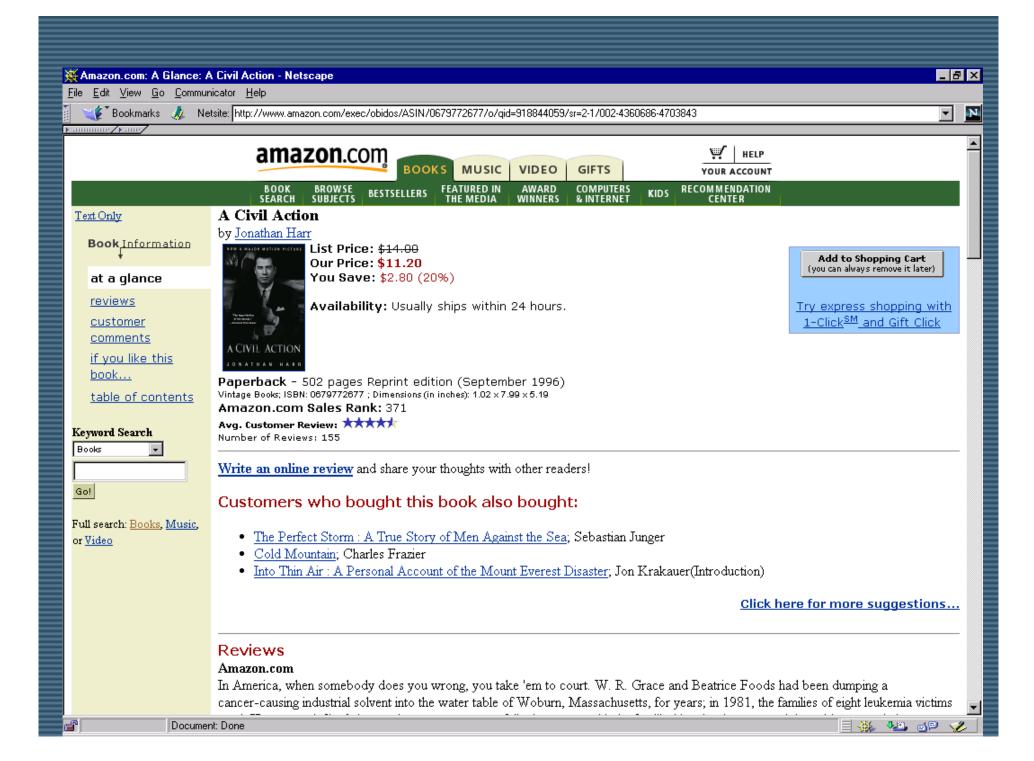
- RETAIL
  - amazon.com
  - eBay
  - E\*Trade
- BUSINESS-TO-BUSINESS
  - Cisco

#### amazon.com

- On-line revenues increased 51% from US\$1,429 million for FY 97 to US\$2,161 million for FY 98 (ending 6-30-98)
- Advertising and electronic commerce fees increased 159% from US\$98 million for FY 1997 to US\$254 for FY 98
- amazon.com is an online book, CD and video retailer and soon . . . prescription drugs
- offers more than 4.7 million books, music HALE AND DORR LLP CD, video, DVD and computer games.

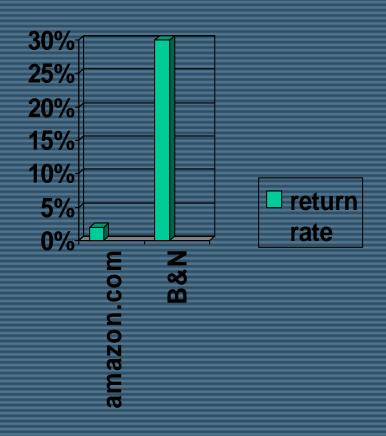






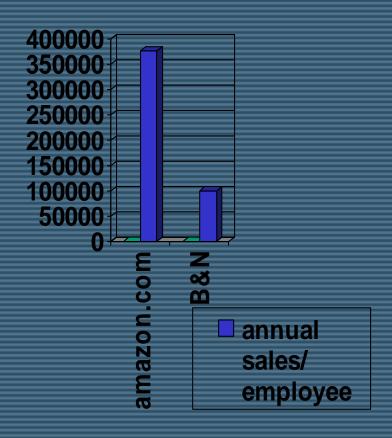
### amazon.com vs. Barnes & Noble: Book Return Rate

- amazon.com has a 2% book return rate
- Barnes & Noble has a
   30% book return rate



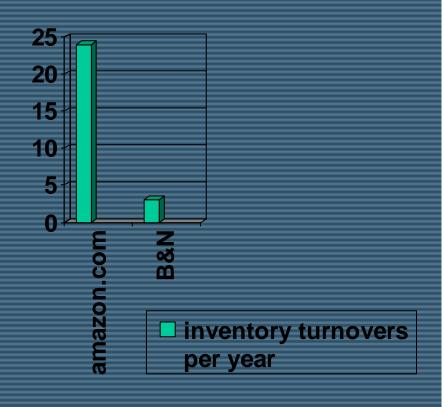
### Amazon.com vs. Barnes & Noble: Annual Sales per Employee

- Amazon.com has US\$375,000 annual sales per employee
- Barnes & Noble has US\$100,000 annual sales per employee



# Amazon.com vs. Barnes & Noble Inventory Turnover per Year

- amazon.com turns over its inventory 24 times each year
- Barnes & Noble turns over its inventory only 3 times each year

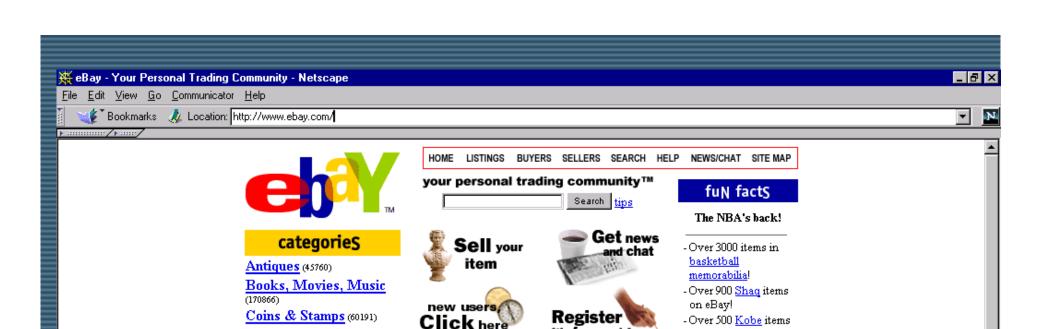


#### eBay

- Operates an online person-to-person exchange in an auction format to trade personal items such as antiques, coins, collectibles, computers, dolls, jewelry and other items.
- Hosts live, on-line bidding for high-exposure items
  - January 1999 -- hosted auction with Guernseys to sell Mark McGwire home run balls

### eBay

- 2.1 million registered users
- over 800,000 online auctions per day, over 140 million hits per week (Source: Wired)
- 72% increase in registered users from September 1998 to December 1998
- stock rose from initial offering price of US\$18 in September 23, 1998 to US\$231 as of February 16, 1999
- market capitalization was US\$9.5 billion as of February 16, 1999



#### featurEd

Collectibles (506355)

Computers (55734)

(51717)

(198028)

Dolls, Figures (34447)

Jewelry, Gemstones

Pottery & Glass (99543)

Toys & Beanies® (194917)

Sports Memorabilia

Miscellaneous (104052)

all categories...

Singing Macarena Gorilla - Must see!

Titanic~Heart~Of~Th e~Ocean~~keychain!```~New Photo & Electronics (24891) Epson SC 200/400/500/600/700 Black Cartridges

It's free and fun

New Digital Pager & Service \$29 Visa/MC

Your Photo Here, Hilarious Cd Rom look!

Ibm Thinkpad 390 New

#### fun sTuff



on eBay!

Read about your eBay community. Check out the

new February issue!

other happenings...

About eBay | SafeHarbor | Bookmarks | eBay Store | Jobs

Go Globall | Canada | UK

Last updated: 02/12/99, 21:06:39 PST

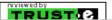


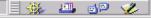
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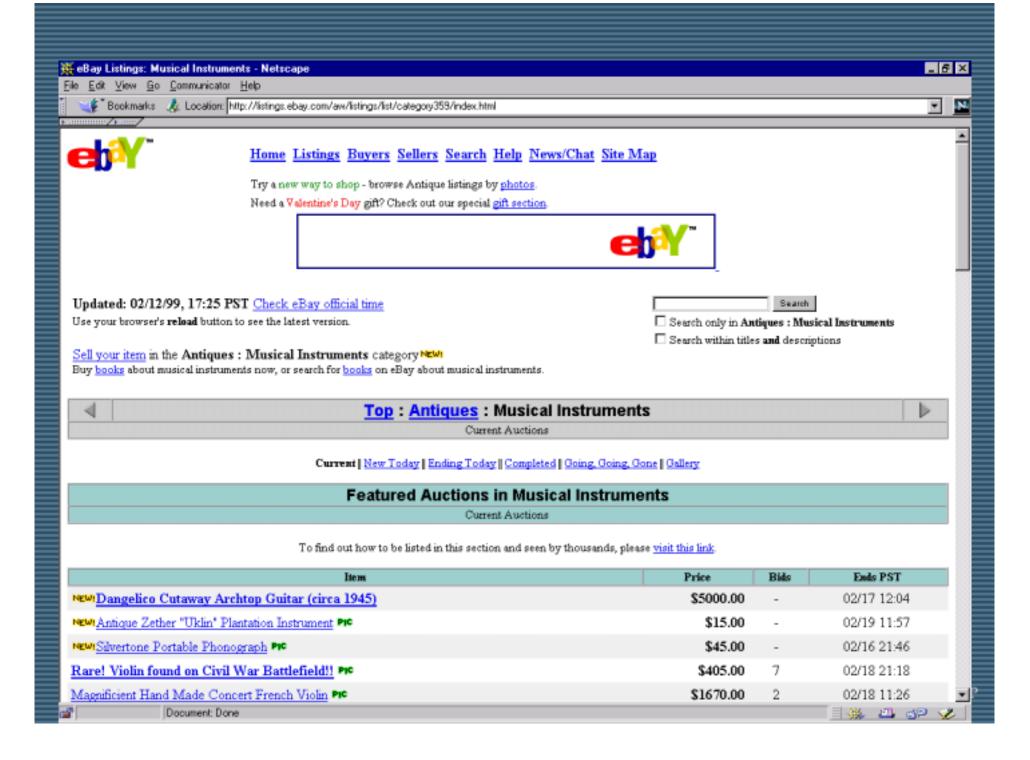


more featured...











Seller

Featured Category Auction

drdcando4u (24) 🔅 🚾

(view seller's feedback) (view seller's other auctions) (ask seller a question)

High bid dpgallo@snet.net (0)

Money Order/Cashiers Checks, Personal Checks, See item description for payment methods accepted Payment Shipping Seller pays for shipping, Seller ships internationally, See item description for shipping charges

Seller assumes all responsibility for listing this item. You should contact the seller to resolve any questions before bidding. Currency is U.S. dollars (US\$) unless otherwise noted.

#### Description



Use your mouse to stop the Midi file if so desire.

I'm not sure where I should begin, so I'll begin with the story.

This violin was found on a civil war battlefield in Virginia by my great great uncle during the war. It has been in the family ever since! I used to play 

### eBay's competition

- Yahoo! Auctions, working with Butterfield & Butterfield
  - movie memorabilia and O.J. Simpson possessions
  - free to users (vs. eBay's charge of 25¢ to US\$2.00,
     plus percentage of sales price to sellers)
- Sotheby's
- Others: Millionaire.com, 2TheMarket.com, Onsale, Auction Universe, First Auction

### eBay's response

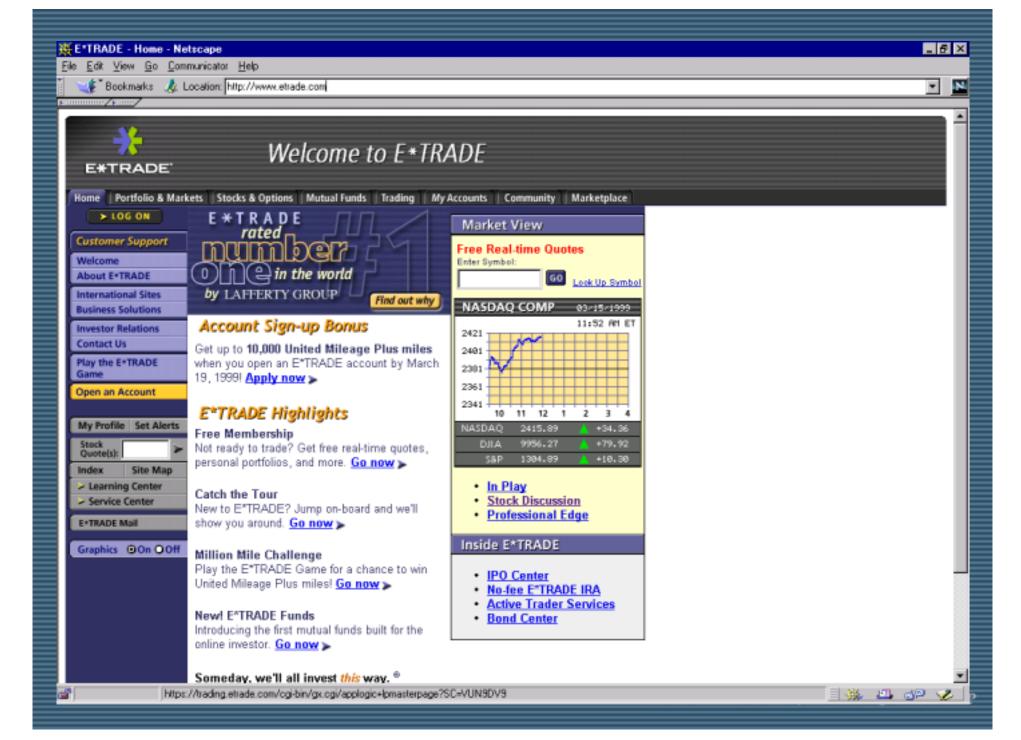
- Improving user's experience
  - offer additional services: payments, shipping and customs clearance
- Investing in infrastructure
  - add icon from Equifax to verify the identity of users
  - insure products worth US\$25 to US\$200 through Lloyd's of London
  - offer access to escrow services
- expanding internationally
  - launched country-specific auctions in the United Kingdom and Canada

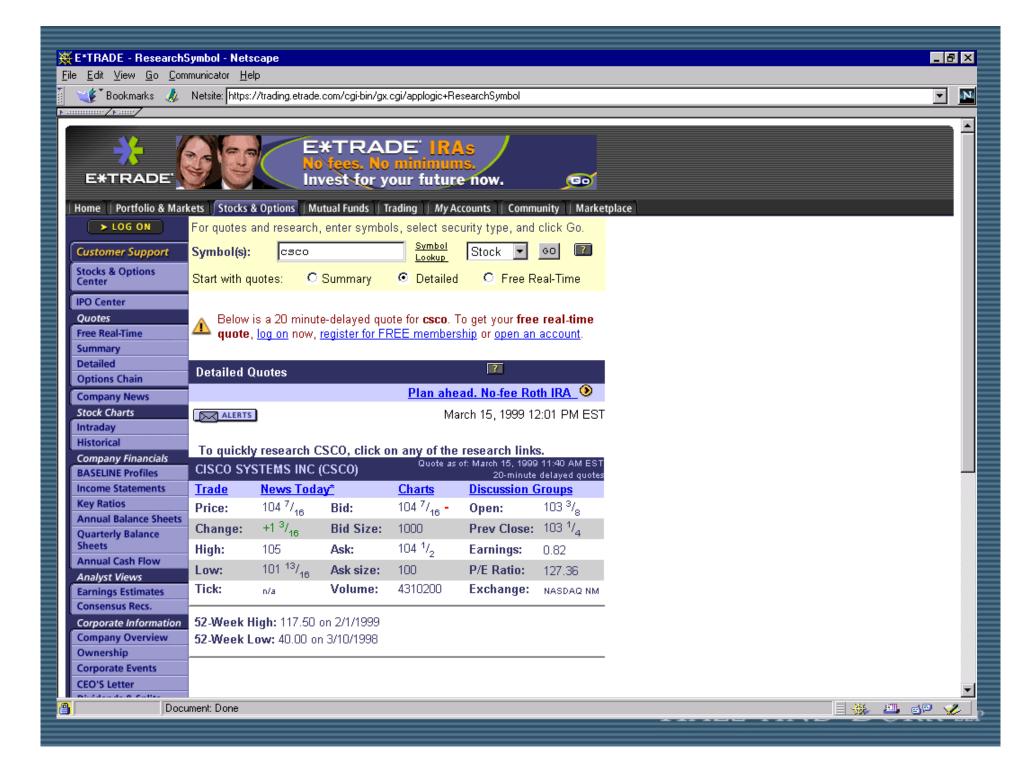
### eBay's response (continued)

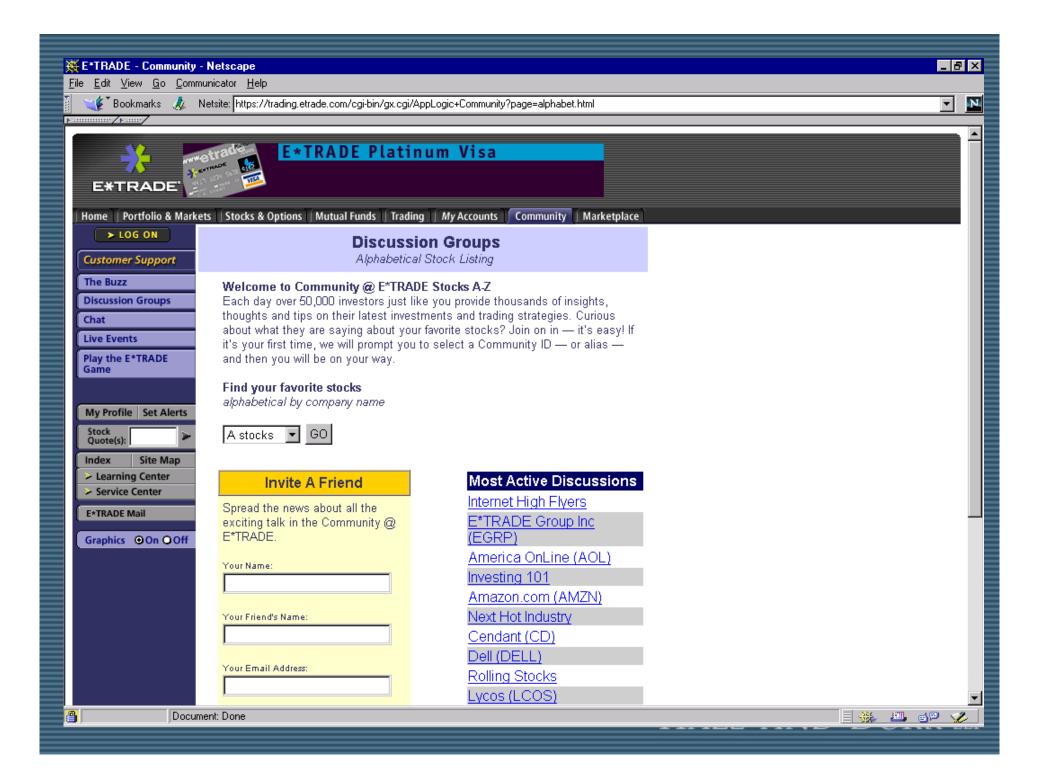
- Boosting "fun factor"
  - publishing on-line newsltr; adding 18 chat rooms
- addressing concerns about fraud
  - tougher rules for deadbeats; clarify policies on auctioning illegal items; closer coordination with law enforcement
  - NYC Dept. of Consumer Affairs investigation for fraud (multiple sales of one-of-a-kind items)
- Spend more on promotion through AOL and Netscape's Netcenter portal (offer most popular Internet resources through a single site)

#### E\*Trade

- Provides on-line investing services: automated stock, bond and mutual fund order placement at low commission rates; portfolio tracking; real-time market commentary and analysis 7x24
- Revenues for FY 1998 (ending 9/30/98) were US\$245.3 million, up 57%
- market capitalization increased from US\$2.7sbillion as of 12/31/98tq US\$5.43borr







### E\*Trade's Alliances

- America Online -- part of AOL's Personal Financial Channel
- BancBoston Robertson Stephens users have access to proprietary research and recommendations available only to large investors and institutions
- CNNfn -- significant branded presence
- Scudder Kemper Investments-- offers more than 30 no-load Scudder Funds online
- E\*Trade is the exclusive retail broker for a number of high profile Internet IPQ's, AND DORR LLP

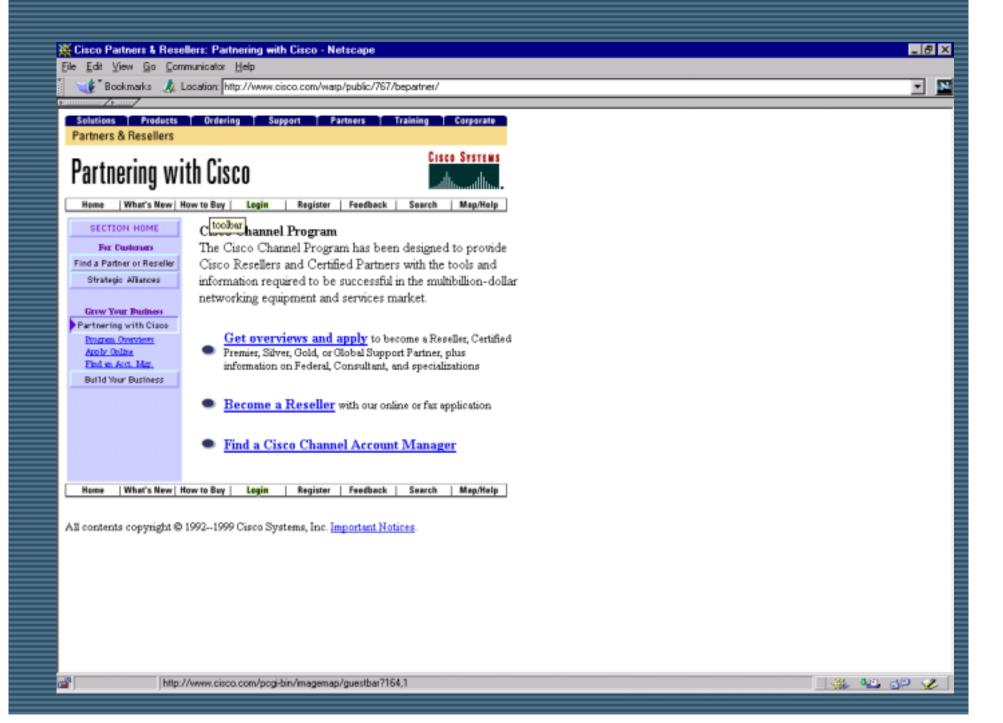
## BUSINESS-TO-BUSINESS: Cisco

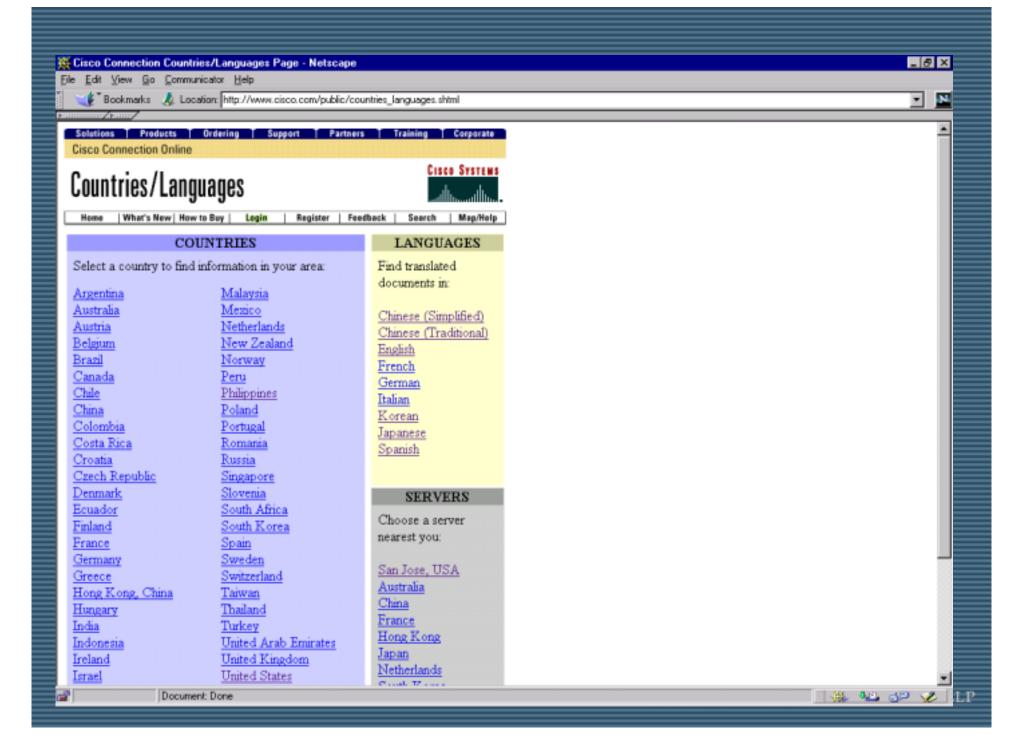
- 1998 revenues of US\$8.5 billion; market capitalization of US\$165 billion (3/99)
- Sells Internet routers and network switches; software that resides on customer's Intranet and provide ordering tracking and other functions
- By providing Internet based technical support, the company is resolving 200,000 calls per day without human intervention HALE AND DORR LLP



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### Some Failures

- IBM's World Avenue Mall
- MCI's 1-800 Music Now

### IBM's World Avenue Mall

- on-line mall offering a variety of consumer products
- July 1997: shut down after a year of subpar revenue
- according to CNNfn, merchants criticized IBM for lack of promotions relating to World Avenue
- IBM will not be a "traffic-generator"
  - conceded that on-line mall requires major retailer or consumer packaged-goods company CRR LLP

## MCI's 1-800 Music Now

- MCI Communications abandoned in December 1996 its 1-800 Music Now service, just one year after launching the venture to sell CD's over both phone lines and its on-line shopping mall
- MCI spent US\$10 million developing and promoting the service on TV, radio and print media.
- According to the <u>Washington Post</u>, 1-800 Music Now failed due to three major obstacles:
  - wrong product at wrong time-- 1995-96 music sales overall had a slow year; other retailers offered deep discounts
  - did not offer an easy-to-use site for consumers; easier to buy from traditional record store

    HALE AND DORR LLP
  - prices were relatively high (vs. retail stores)

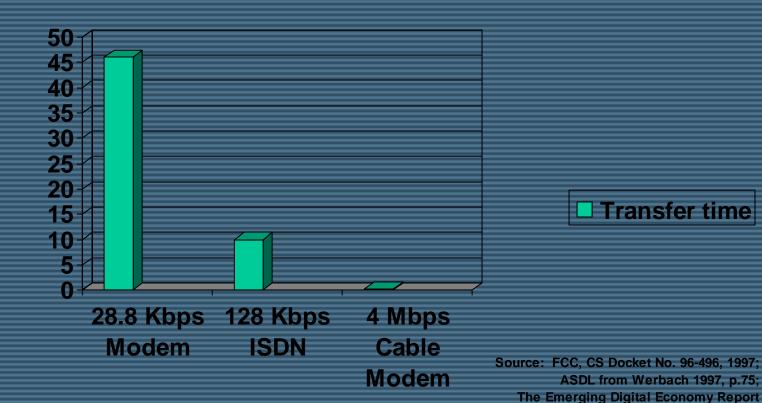
## Future Developments

- Technological breakthroughs will make ecommerce easier and more accessible to larger audiences
- Problems ahead -- bumps in the road

## Technological Breakthroughs

- increased use of digital certificates
- development of higher capacity media for video and audio recordings
- use of new technologies to provide singleuse or limited-use copies
- increasing consumer demand for faster Internet access (service through cable TV box)
  - as of 1/99, 67% of US households subscribe to cable; 96.56% of U.S. homes passed by cable ORR LLP

## Internet Access Speeds: Time to Download 3.5 Min. Video Clip



## Bumps in the Road

- Possible governmental charges for Internet access
- Government efforts to collect sales and use taxes
- Internet patents: threat to fluid structures of WWW
  - Microsoft's patent covering aspects of cascading style sheets
  - conflict between innovation and collaboration
- Resistance from traditional "brick-and-mortar" retailers
  - Compaq announced on 2/23/99 that it had revoked the ability of Internet-only retailers to sell its computers for a 90-day evaluation period
  - response to growing sale by both on-line retailers and traditional retailers opening cyber outlets, although ban does not affect the latter
- Efforts to increase security meeting resistance HALE AND DORI
  - computers with specific serial numbers (Pentium®

# Perhaps Biggest Bump in Road: Privacy

- European Union's Data Privacy Directive
- receiving increasing attention from U.S. Federal Trade
   Commission
  - as of 3/98, of 1,400 websites reviewed by FTC, only 14% informed visitors of their information-collection practices
  - only 28 of those sites posted "comprehensive" privacy statements
- cookies or Cookie Monster?
  - remembers account information
  - remembers where user left off in site
  - potential of tracking usage of site and developing user
     profile in order to direct other information
     HALE AND DORR LLP





questions answered.

The Cookie Controversy.

An insight into the controversial use of cookies on the web. By Lori Eichelberger M.L.I.S







Site Information



What Went Wrong?

If cookies are so much of a nuisance why were they developed in the first place?



## Bump or Launching Ramp?

- Consumers seem not to be concerned by loss of privacy
- Free-PC gives away 10,000 free computers, in exchange for permission to target advertising messages directly to customer's desktop
  - marketing companies pay US\$1,000 per user
     for such information
  - cost of state-of-the-art Compaq Presario has dropped to US\$800
  - received 1,200,000 visits on weblsite on ND DORR LLP



#### Free-PC

- messages sent based on detailed information provided by customer
  - age, income, family status, personal tastes and interests
- Advertisements will appear in frame surrounding working area -- and cannot be removed
  - agreement with Cybergold, which represents
     Disney, ESPN, credit-card issuer MBNA and
     AOL 53
     HALE AND DORR LLP



### Seven Lessons to be Learned

- #1 Copying is the highest form of flattery ... so expect to be flattered
- #2 Ease of access: establish a close, hopefully unique, relationship with a portal to increase traffic through your website
- #3 Ease of use: make the site easy, fast and perhaps even fun
  - successes: amazon.com, eBay, E\*Trade, Cisco
  - failures: 1-800 Music Now

#### Seven Lessons to be Learned

- #4 Convenience is not enough; offer competitive prices as well
- #5 Multi-industry on-line malls will probably be controlled by a few major companies with patience and deep pockets
  - IBM was not patient and was not willing to dig deep enough into its pockets
- #6 Follow Cisco's lead: do business for the Internet and through the Internet
- #7 Future = next month