

CPSC156a: The Internet Co-Evolution of Technology and Society

Lecture 7: September 25, 2003
B2C E-Commerce

Acknowledgments: K. Chang, H. Chiang, and
V. Ramachandran

Terminology (1)

Electronic commerce is a set of technologies, applications, and business processes that link business, consumers, and communities

- For buying, selling, and delivering products and services
- For integrating and optimizing processes within and between participant entities

Terminology (2)

- **B2C Commerce**: Interactions relating to the purchase and sale of goods and services between a business and consumer—retail transactions.
- “Novelty” is that retail transaction is done on the Internet, rather than in a “brick and mortar” store location.
 - All the customer needs is a browser!
- Technical evolution of B2C from “brick and mortar” model not new.

A Different Approach to Location Retailing

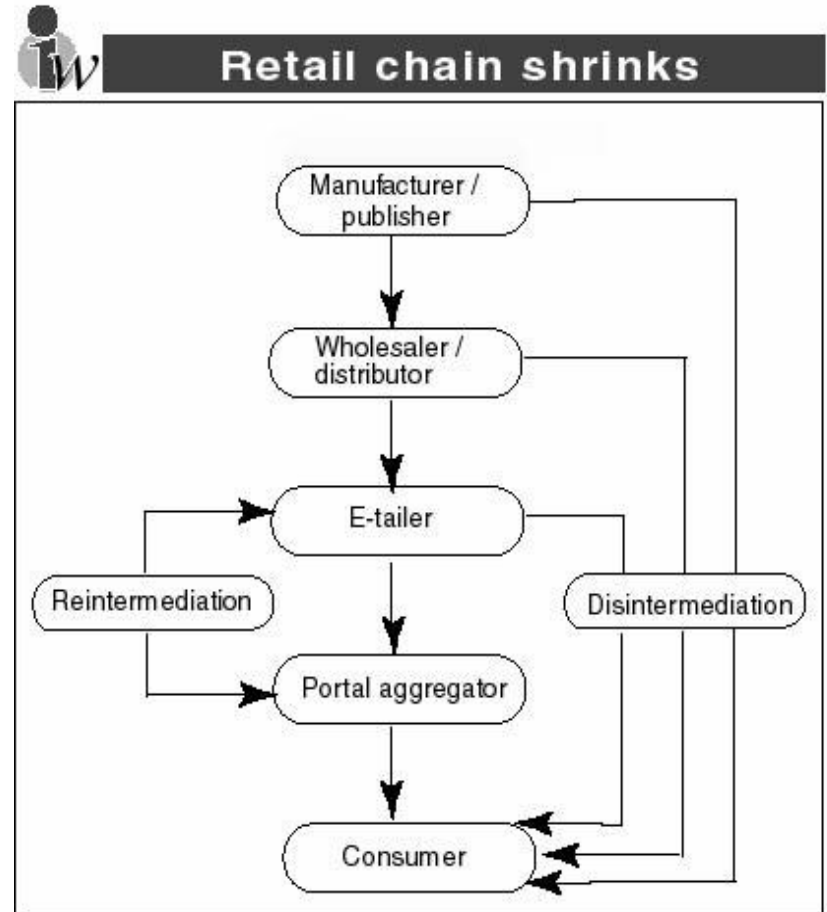
- In 1886, a jeweler unhappy with a shipment of watches refuses to accept them.
- A local telegraphy operator buys the unwanted shipment.
- He **uses the telegraph to sell** all the watches to fellow operators and railroad employees.
- Becomes so successful that he quits his job and started his own enterprise, **specializing in catalog sales**.
- Name: **Richard Sears** of Sears Roebuck

B2C Revenue Models

- Sell goods and services and take a cut (just like B&M retailers).
(e.g., Amazon, E*Trade, Dell)
- Advertising
 - Ads only (original Yahoo)
 - Ads in combination with other sources
- Transaction fees
- Sell digital content through subscription.
(e.g., WSJ online, Economist Intelligence Wire)

First-Generation B2C

- Main Attraction:
Lower Retail Prices
- “B2C Pure Plays” could **eliminate intermediaries**, storefront costs, some distribution costs, *etc.*
- Archetype:
www.amazon.com



Source: Benchmark Capital Group ; The Economist

Amazon.com

- Full Name: Amazon.com, Inc.
- Employees: 7,500
- Stock Price:
 - \$49.61 (at close Sept. 24, 2003)
 - 52-wk Range: \$15.29 to \$50.92
- 2002 Sales \$3.93 B
Sales growth: 26%
- Internet's largest retailer. Best known for books, CDs, DVDs, and Videos.

The Amazon.com logo, featuring the word "amazon.com." in a black, sans-serif font. A curved orange arrow is positioned below the word "amazon", starting under the 'a' and ending under the 'n', pointing to the right.

Main Lines of Business

- Retail
 - Broad product range, from textbooks to household tools
- Shopping Mall
 - Individuals and companies pay Amazon.com to offer their products on its site.
- "Overseeing" other websites
 - Has invested in some of them
 - Broad range of offerings, from prescription drugs to wedding planning
- 2001 Sales mainly in "core businesses"
 - 54% Books, music, video
 - 71% North America

Amazon.com History

- Founded: 1994
- Website launched: July, 1995
- 1997
 - IPO: 3 million shares, \$54.0 million
 - Moves to "cement the Amazon.com brand."
 - Becomes the sole book retailer on America Online's public website and on Netscape's commercial channel.

History (continued)

- 1998: Expansion
 - Launched online CD and video stores.
 - Began selling toys and electronics.
 - Bought online booksellers in the UK and Germany.
 - Bought Internet Movie Database.
 - Expanded online services, buying Junglee (comparison shopping) and PlanetAll (address book, calendar, reminders).
 - Attracted so much attention that its market capitalization equaled the combined values of profitable bricks-and-mortar rivals Barnes & Noble and Borders Group, even though their combined sales were far greater than Amazon's.

History (continued)

- 1999: More Expansion
 - Raised \$1.25 billion in a bond offering.
 - Spending spree with deals to buy all or part of several dot-coms
 - Some have since been sold (HomeGrocer.com), and others have gone out of business or bankrupt (Pets.com, living.com).
 - It also bought the catalog businesses of Back to Basics and Tool Crib of the North.
 - Began conducting online auctions and partnered with Sotheby's.
 - Added distribution facilities, including one each in England and Germany.

History (continued)

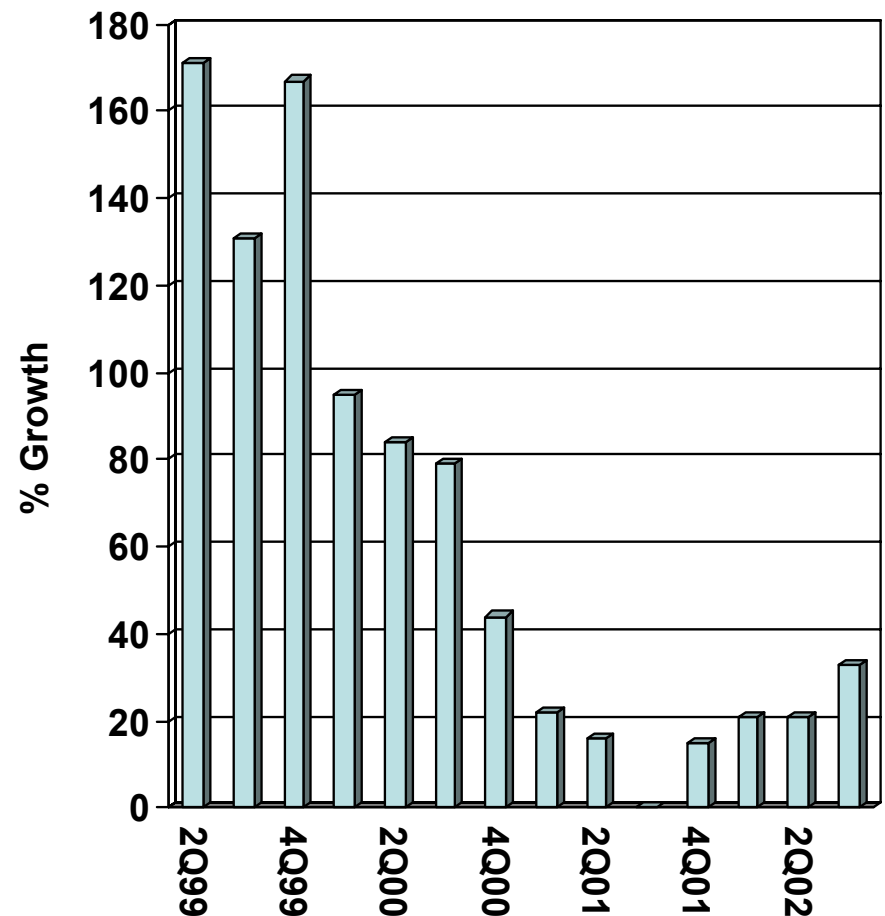
- 2000: Yet More Expansion
 - Placed a link to drugstore.com on its homepage; drugstore.com paid more than \$100 million for that access.
 - 10-year deal with toysrus.com to set up a co-branded toy and video game store.
 - Added foreign-language sites for France and Japan.

2001: End of the Beginning

- Investors demand **profits!**
- Amazon announces plans to restructure and layoff of 15% of its workforce.
- Takes a \$150 million charge.
- Announces a deal with Borders to provide inventory, fulfillment, content, and customer service for borders.com

Percent Growth From
Same Quarter Previous Year

Source: SEC Filings



2002: Growth Renewal

- Sales growth is accelerating again.
- New segments (*e.g.*, apparel & accessories)
- International markets (*e.g.*, Europe marketplace, Japan, Canada)
- New services (*e.g.*, wedding registry)
- Strengthening partnerships (including services for other retailers, *e.g.*, Target)

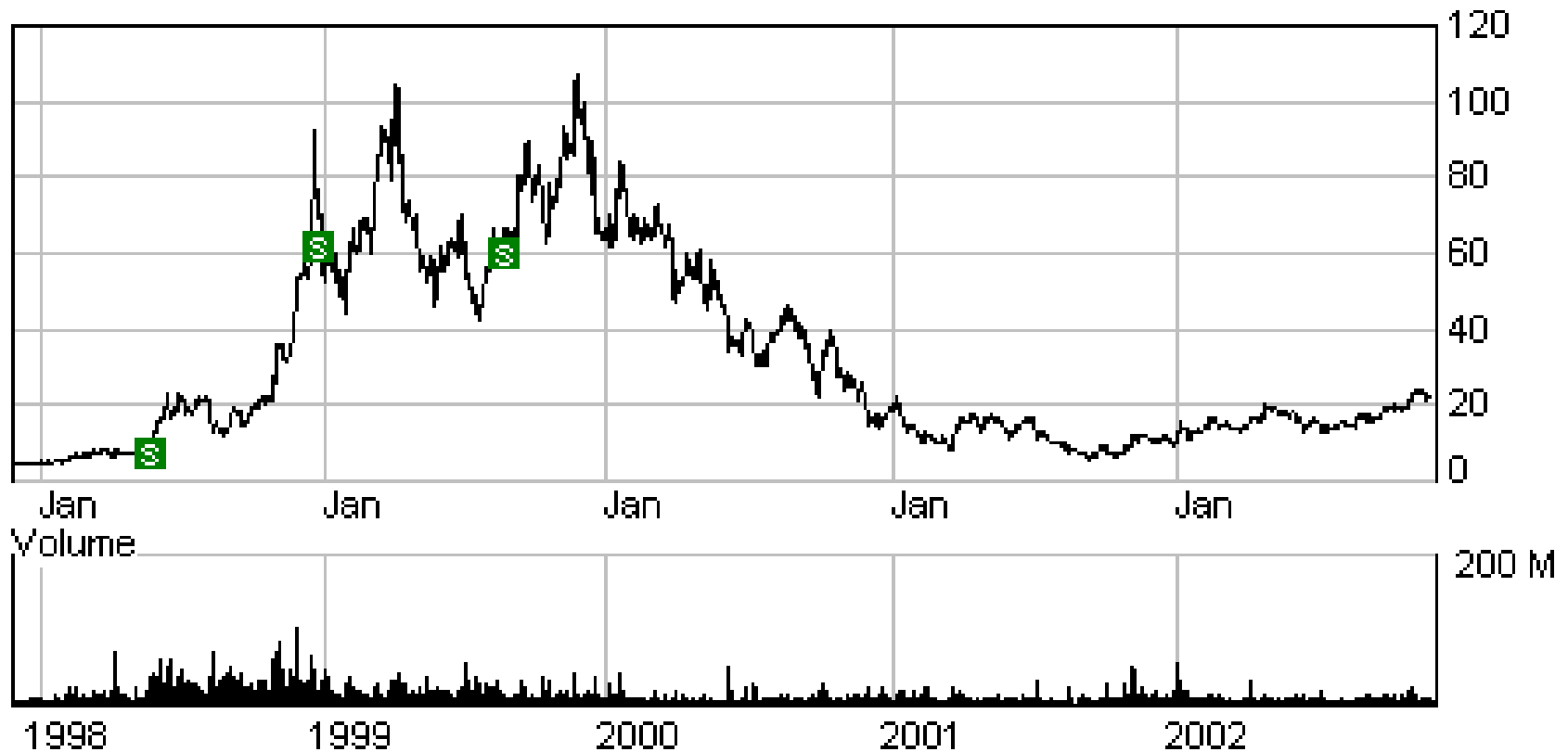
Amazon Makes a Profit!

- In the Last quarter of 2002, Amazon reports a **net Income of \$2.6 M!**
- But it hasn't made a quarterly profit since.

Amazon.com, Inc.

Stock Quotes (**AMZN**)

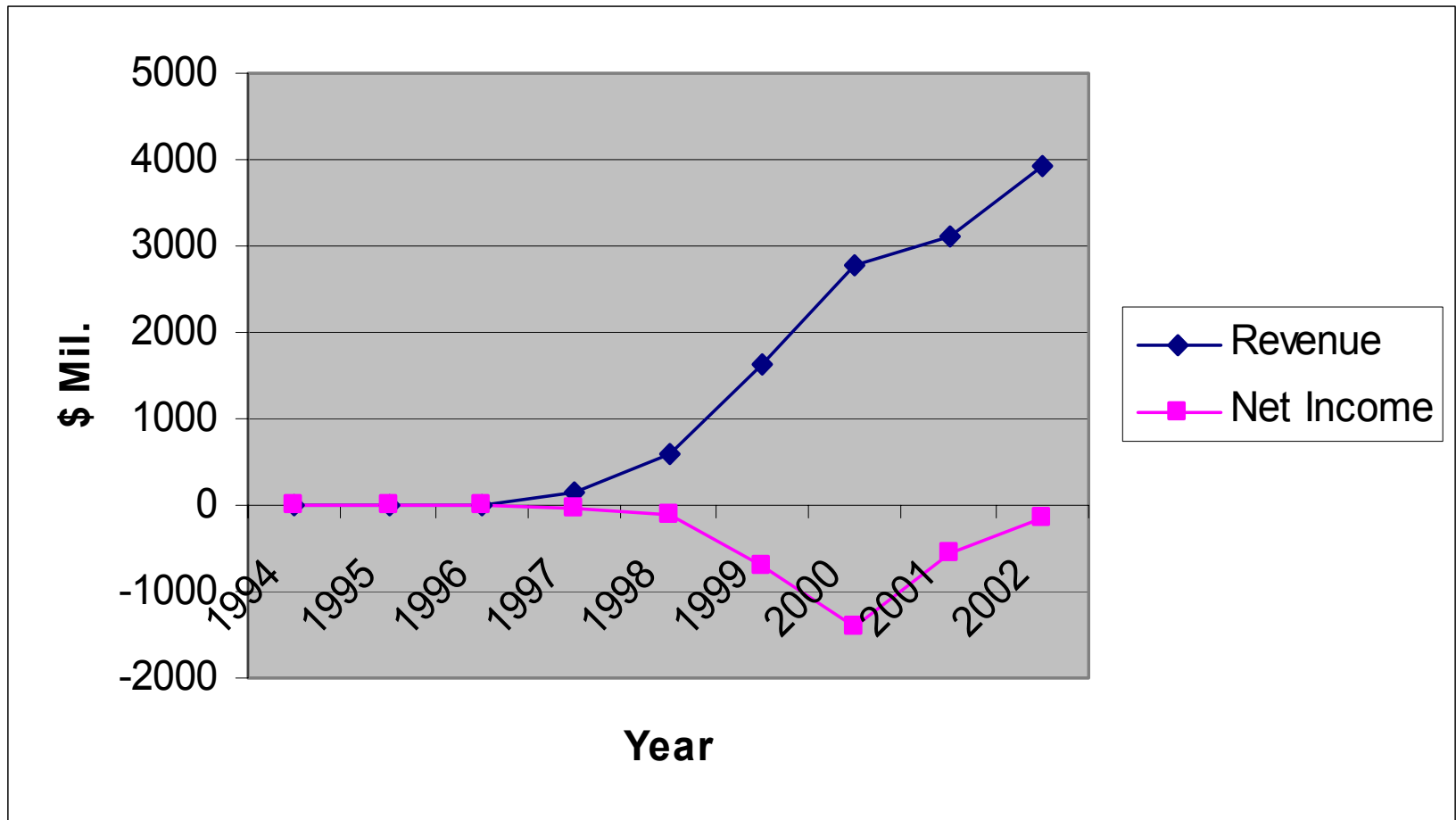
Source: Quicken.com (12/18/2002)



Period : Dec-17-1997 - Dec-17-2002

[S] = Stock Split

Amazon.com, Inc. Financials



Financials and Employees ("Long March to Profitability")

Source: Hoovers and SEC Filings

Year	Revenue (\$mil.)	Net Income (\$mil.)	Employees
2002	3,932.9	-149.1	7500
2001	3,122.4	-567.3	
2000	2,762.0	-1,411.3	9000
1999	1,639.8	-720.0	7600
1998	610.0	-124.5	2100
1997	147.8	-27.6	614
1996	15.7	-5.8	151
1995	0.5	-0.3	33
1994	0.0	-0.1	

Barnes & Noble.com

- Employees: 990
- Closing Stock price Sept 23 2003: 2.56
- 52-week High: 3.00
- 52-week Low: .43
- 2002 Revenue \$422.83 M
- Revenue Growth: 4.5 %
- 2002 Net Income: \$-15.66 M

B&N.com

- Retailer of books, music, DVD/video and online courses.
- 14.4 Million Customers in more than 230 countries since opening website in 1997.
- Currently 9th most trafficked internet shopping site.

Infant History

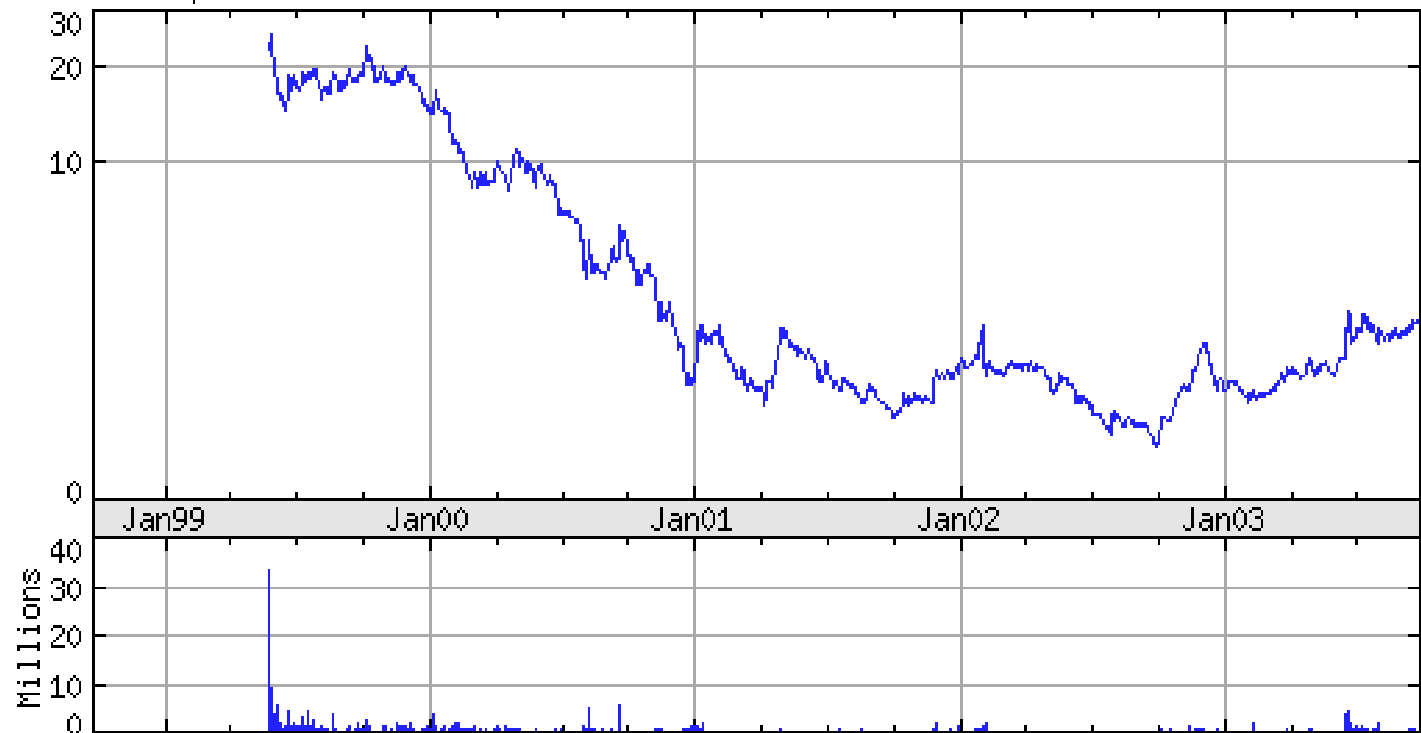
- Website Launched by Barnes and Noble Inc (they own the physical stores) in 1997.
- IPO of B&N.com completed in May, 1999
- Initially sold for \$18.00 a share, for a total of \$486 M (after commission and expenses)
- At the time was largest internet IPO.

Current Structure

- Barnes & Noble inc owns 38% economic interest in B&N.com, 48% voting interest
- Bertlesman A.G. (a media company) owns 37% economic, 48% voting interest in B&N.com
- B&N.com gains from its association with the brand of B&N inc, as well as its company infrastructure, like distribution facilities.

Stock Trends

BARNESANDNOBLE.COM INC
as of 23-Sep-2003



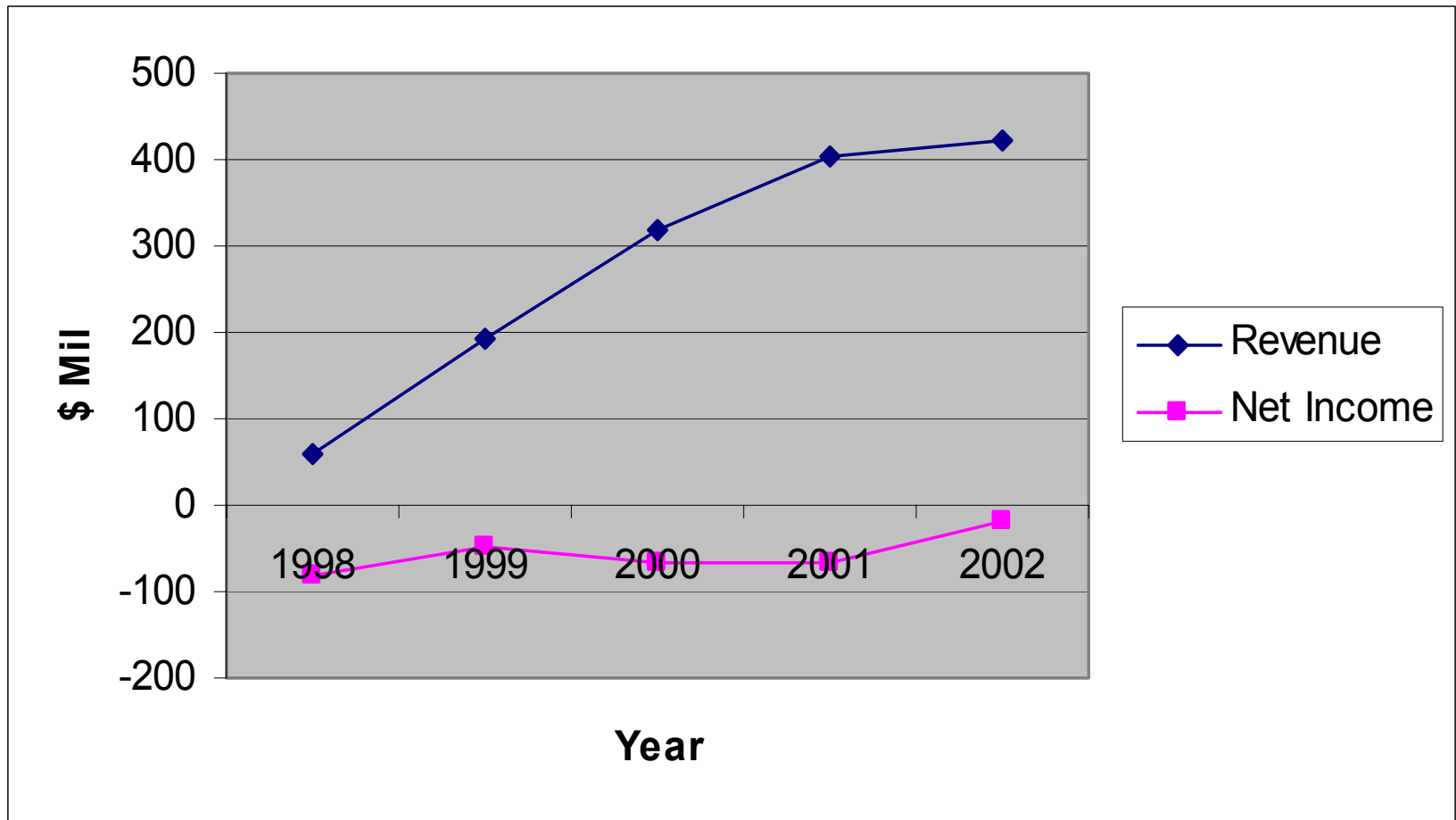
Copyright 2003 Yahoo! Inc.

<http://finance.yahoo.com/>

Revenue and Profits

Year	Revenue (\$mil)	Net Income (\$ mil)
2002	422	-20
2001	404	-67
2000	320	-65
1999	193	-48
1998	61	-83

Graphic of Revenue and Income



Many Failed B2C Pure Plays

eToys.com, pets.com, webvan.com,...

See <http://disobey.com/ghostsites>.

"Here's a radical thought: The future of the online grocer market belongs to grocery stores. They know the business, they can mix (sales) channels, and they can take their time."

W. Andrews (Gartner), 7/9/01,
commenting on the webvan.com
bankruptcy.

“Multi-Channel” Retail (B2C w/ B&M)

- Exploit multiple marketing and distribution channels simultaneously
 - B&M (“bricks and mortar”) stores: Customers browse on the web before going to the store.
 - Catalog sales, telephone, tv advertising,...
- In 2002, multi-channel retailers (*i.e.*, B&Ms or traditional catalog companies that also sell online) made up 69% (estimate) of B2C e-commerce. Mostly high-margin sales, *e.g.*, computers, travel, and automotive.
- Multi-channel retailers are more profitable, on average, than web-based and store-based retailers.

(source: Boston Consulting Group)

Advantages of Multi-Channel Retail

- Leverage existing brands.
- Biggest B&M retailers have huge clout.
(Walmart's annual sales are \$245B, much more than all e-tailers' combined.)
- Profits from existing channels can subsidize e-tail start-up. No need to quit when VCs lose interest.
- Use established distribution and fulfillment infrastructure (e.g., LL Bean, Land's End, ...).
- Cross-marketing and cross-datamining.

Revenue Models for Online Ads

- "Number of Impressions"
(How many times does the user cause the advertiser's content to be displayed?)
- "Click Through"
(How many times does the user click on the ad to go to the advertiser's site?)
- "Pay-per-sale"
(How many times does the user click through and then buy something?)

Inherent Difficulty with Online Ads

- Downward Spiral
 - Banner ads easy to ignore
 - Average click through has fallen to less than 1 in 200
 - Leads to creation of more obnoxious ads, *e.g.*, "pop-ups"
- Entertaining?
 - Getting the "right" ads requires time, effort, and money.
 - Internet market not large enough to justify it.
 - 5 of the world's top 10 advertisers each spent less than \$1 million on online ads in 2001.

Inherent Difficulty (continued)

- Accountability: Advertisers can tell immediately whether their ads "work."
- High Expectations: "Well-targeted" ads cost up to 100 times as much as generic ads. But how precisely can one target?

Discussion Point: Does the interactive way that people use it make the Internet inherently unsuitable as an advertising channel?