

CS155a: E-Commerce

Lecture 13: October 23, 2001

B2B E-Commerce

Electronic Commerce

Definitions

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 businesses.

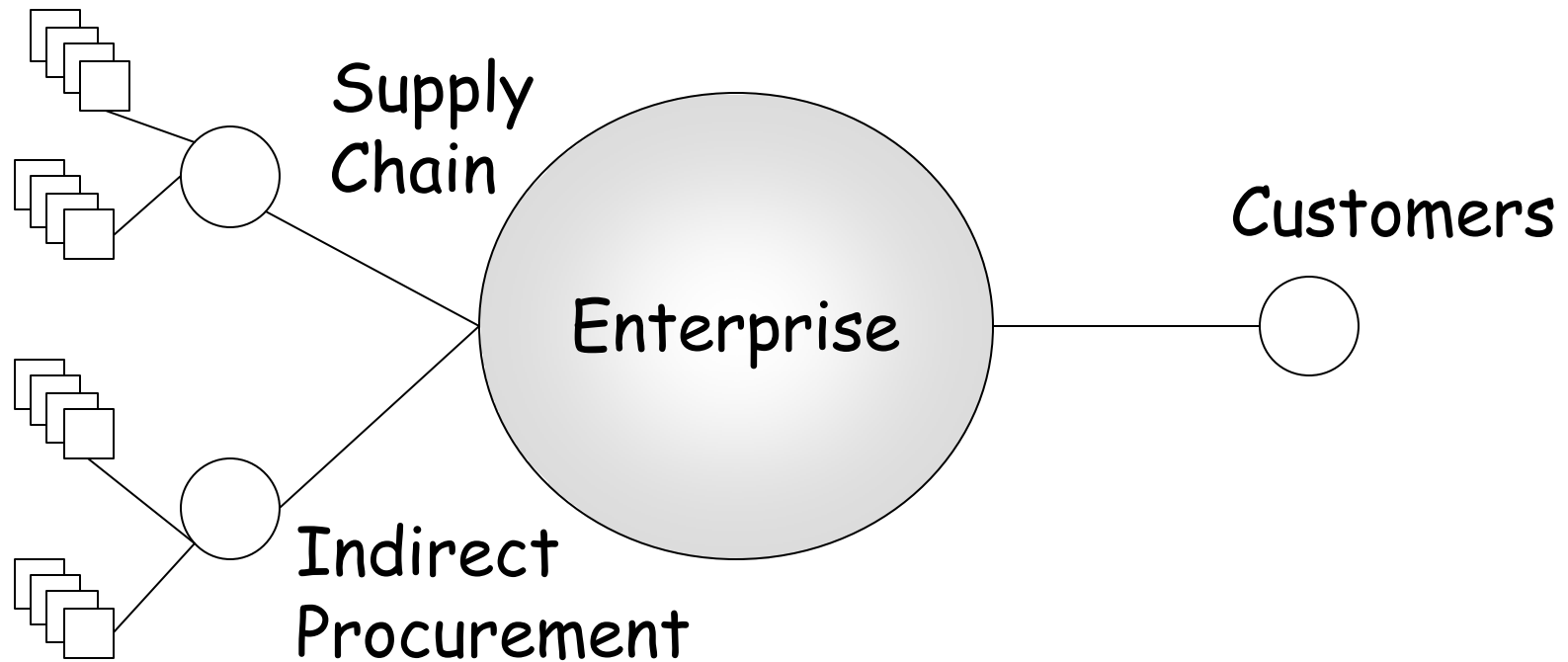
Definitions (continued)

- **B2B Commerce:** "Interactions relating to the purchase and sale of goods and services between businesses." Estimated to be 70% of the US economy!
- **B2B electronic marketplaces ("B2Bs"):** Systems of suppliers, distributors, customers and infrastructure and service providers that use the Internet for communications and transactions.

Business Models for Electronic Commerce

- Stores and malls
- Virtual communities
- Purchasing center
- Auctions and reverse auctions
- ★ Value-chain service provider
- ★ Value-chain integrator
- ★ Collaboration and concurrent engineering
- Information brokerage

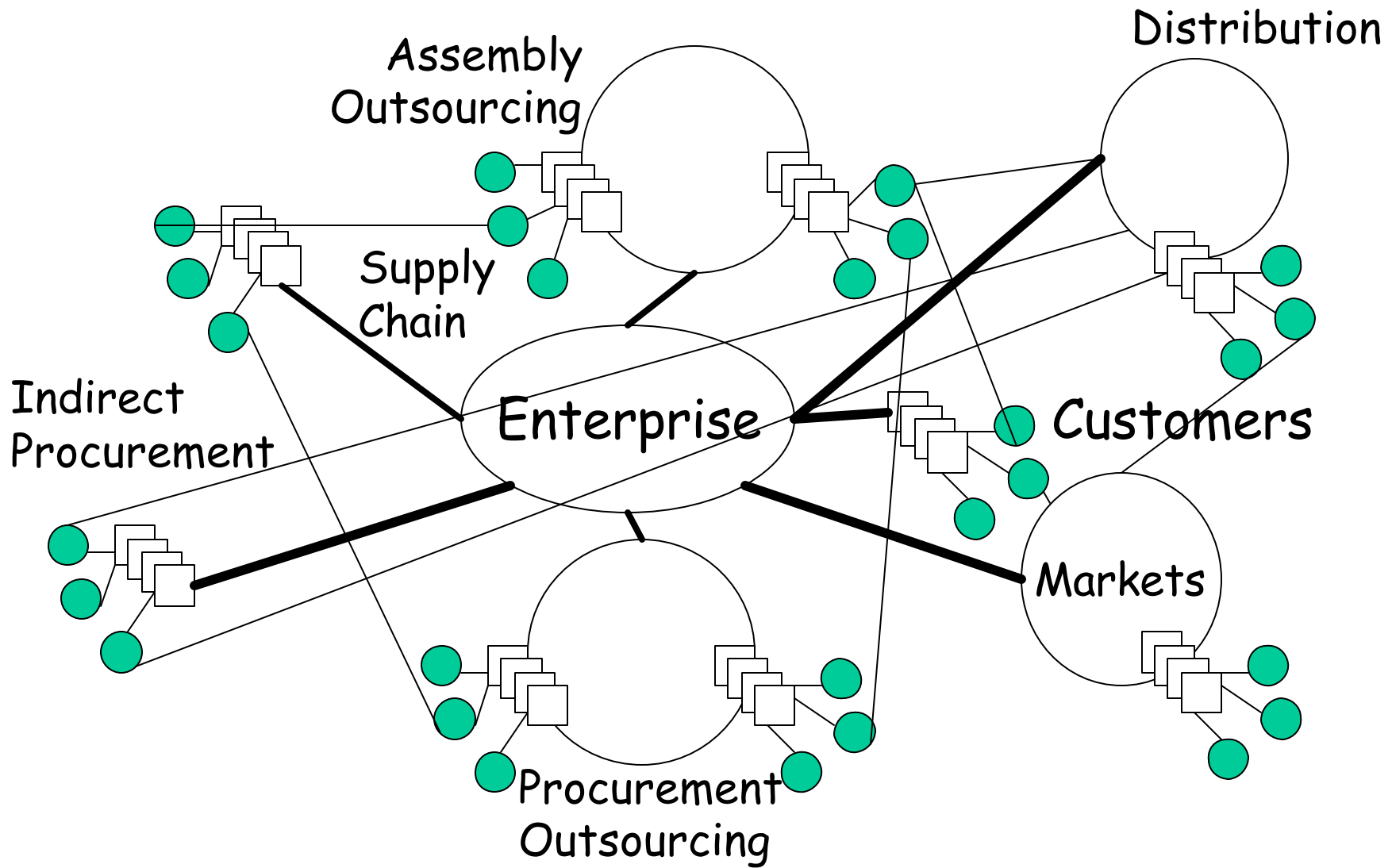
Traditional Enterprise-Centric View



Internet Business Models and Integration Requirements

The Internet enables new models for marketplaces, trading communities, outsourcing, open sourcing, buying consortia, supply chain integration and "virtual enterprises" that are fundamentally different.

Networks of Commerce Communities



Specific B2B Tasks

- Search
- Source
- Specify
- Negotiate and bid
- Order
- Receive goods and services

“Horizontal” B2Bs

- Serve many different industries.
- “Product focus” is broad.
- Examples
 - HotOffTheWire (consumer goods for small and midsized retailers)
 - NTE (National Transportation Exchange, which sells unused trucking capacity to businesses)
 - equalFooting (obtains volume discounts for small businesses through “virtual aggregation”)

"Vertical" B2Bs

- Serve a single industry
- Product focus is on "the supply chain of one product category" or on "expertise and in-depth content knowledge for one industry."
- Examples
 - Covisint (automotive)
 - MetalSite
 - BuyProduce

Revenue Models

- Transaction-related fees
 - Per-transaction
 - Flat (e.g., monthly, yearly)
 - Value-based
- Membership/Subscription fees
- Value-added service fees
 - Logistics (e.g., shipping)
 - Financing
- Advertising and Marketing
- ★ Sales of Data and Information

Participant Ownership

- **Advantages**

- Economies of scale
- Technical expertise and content knowledge
- Incentive to maintain high-volume participation

- **Disadvantages**

- Barriers to niche-player and new-player entry
- ★ Anti-trust Issues

- **Alternatives**

- Ownership by technology firms
- Ownership by 3rd party investors, e.g., venture capitalists

Commerce One

- Full Name: Commerce One, Inc.
- Employees: 3,766 (2000)
- Stock Price (**CMRC**):
 - \$2.53 (as of mid-day 10/22/2001)
 - 52-week range: \$2.09 to \$84.12
- Revenues in 3Q 2001: \$81 mil.
- Business Area: E-Marketplace



Commerce One: Products

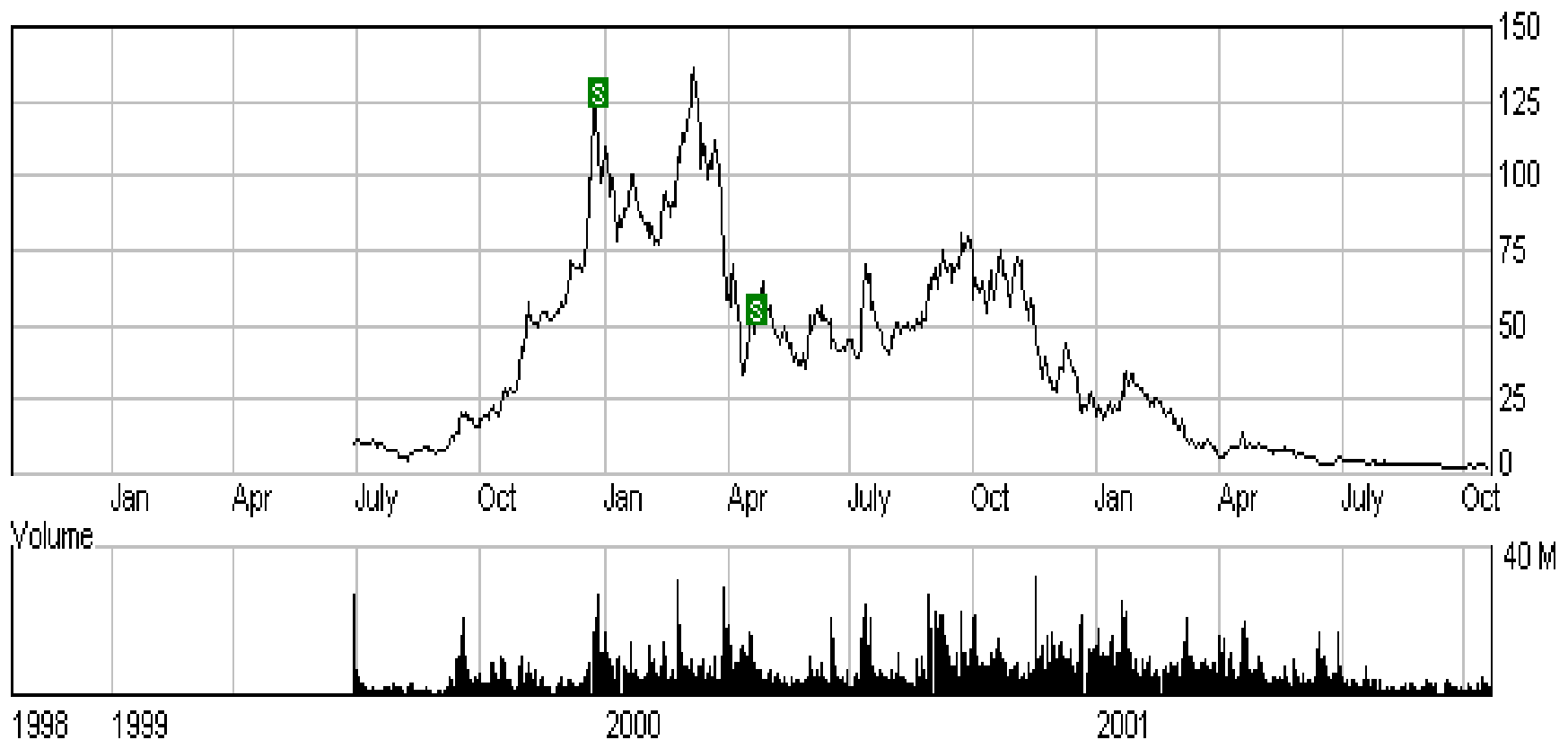
- E-Market Solutions: MarketSet™, MarketSite™, and Net Market Maker
- Enterprise Buyer: Automates the procurement cycle
- Services: Strategy and technology consulting, Integration, Educational Services, etc.
- Customers: Companies (including CitiBank, Compaq, Nokia, and Staples) and Exchanges (including Covisint)

Commerce One: Brief History

- 1994 Founded as DistriVision Development Corporation
- 1997 Re-launched as Commerce One
- July 1999 IPO (\$21/share, pre-split)
- Mar 2000 Historic Peak of Stock Price (\$135.625)
- Q3, 2000 Starts earning money
- Q3, 2001 Net loss of \$0.24/share

Commerce One (CMRC): Stock Price

Traded on NASDAQ; Source: Quicken.com (10/22/2001)

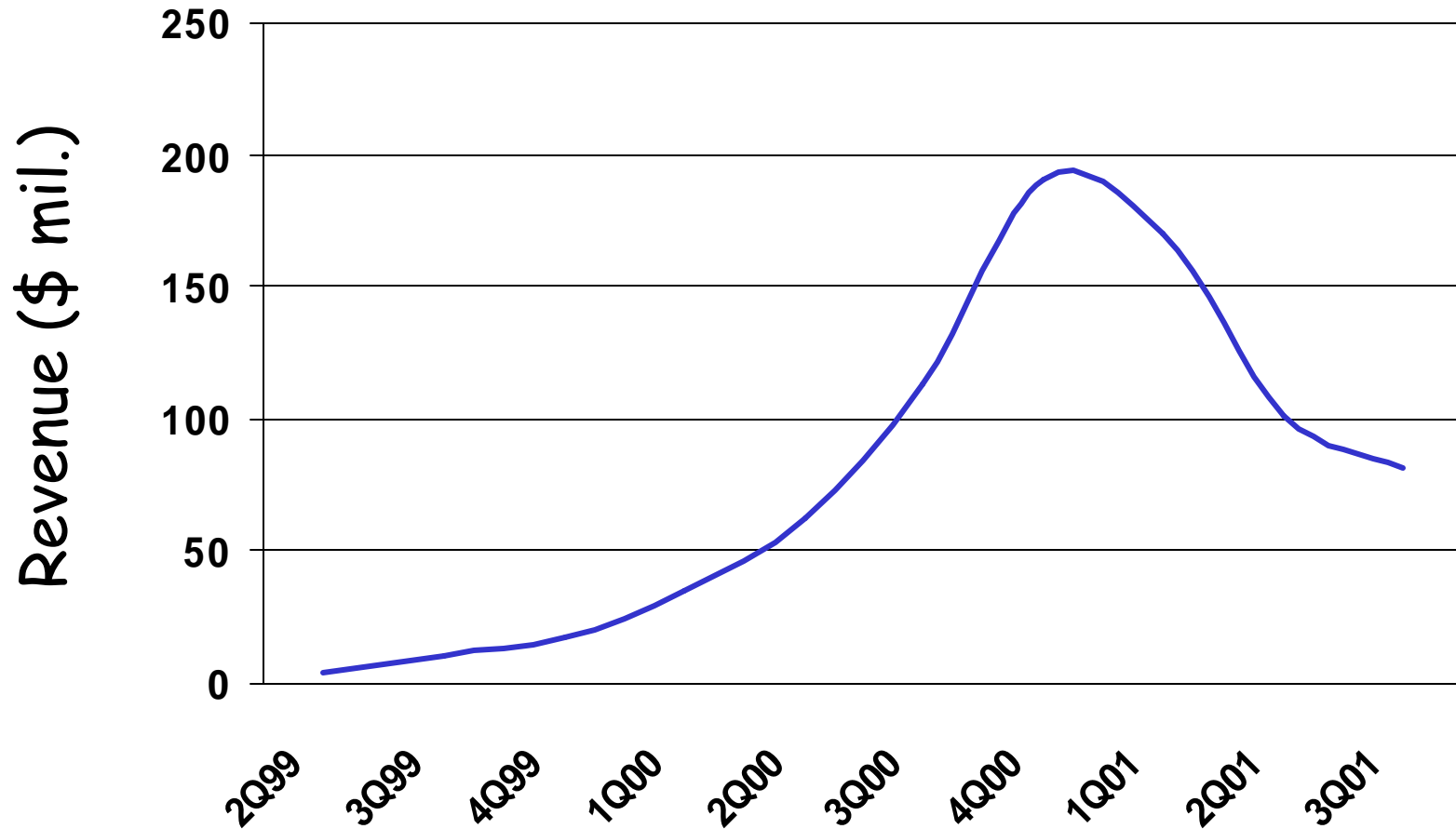


Period : Oct-21-1998 - Oct-21-2001

[S] = Stock Split

Commerce One: Quarterly Revenues

Source: SEC Filings



ARIBA

- Full Name: Ariba, Inc.
- Employees: 1680 (2000)
- Stock Price:
 - \$2.93 (as of mid-day 10/22/2001)
 - 52-week range: \$1.75 to \$173
- Revenues in 3Q 2001: \$85,328,000
- Business Area: integrated commerce solutions and web-based commerce services



Ariba: Products

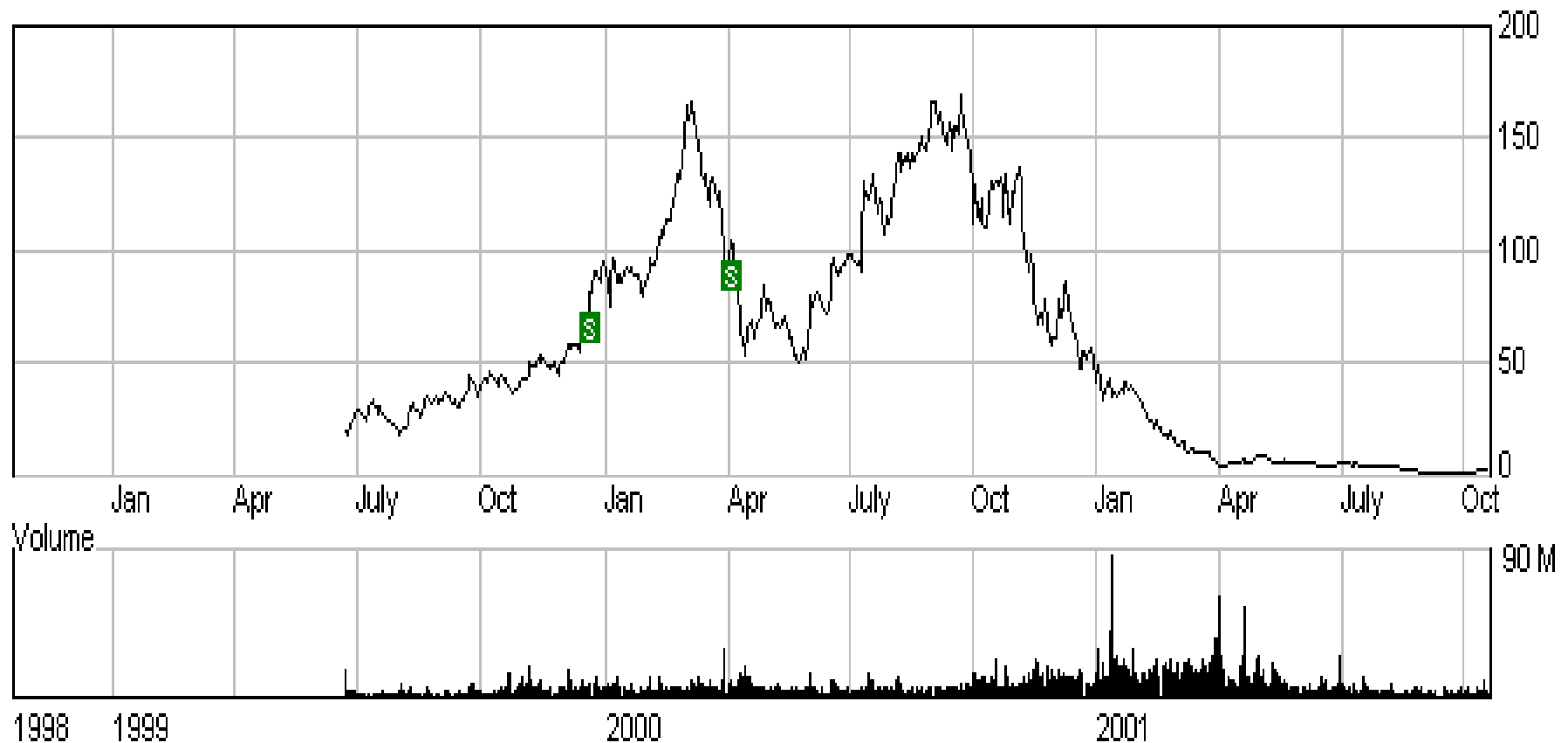
- Procurement systems for managing buying, selling, and marketplace eCommerce processes
- Product series include Ariba Buyer, Ariba Marketplace, Ariba Dynamic Trade, etc.
- About 40% sales from technical support, training, and other related services
- Major clients: DuPont, Federal Express, Chevron, Hewlett-Packard, etc.

Ariba: Brief History

- Sept 1996 Founded
- June 1999 IPO
- Q4, 99-00 Revenue up 687% from same period last year
- Sept 2000 Historic Peak of Stock Price (\$168.75)
- 1Q 2001 Starts earning money (\$0.05/share)
- 3Q 2001 Net loss per share: \$0.10

Ariba (ARBA): Stock Price

Traded on NASDAQ; Source: Quicken.com (10/22/2001)

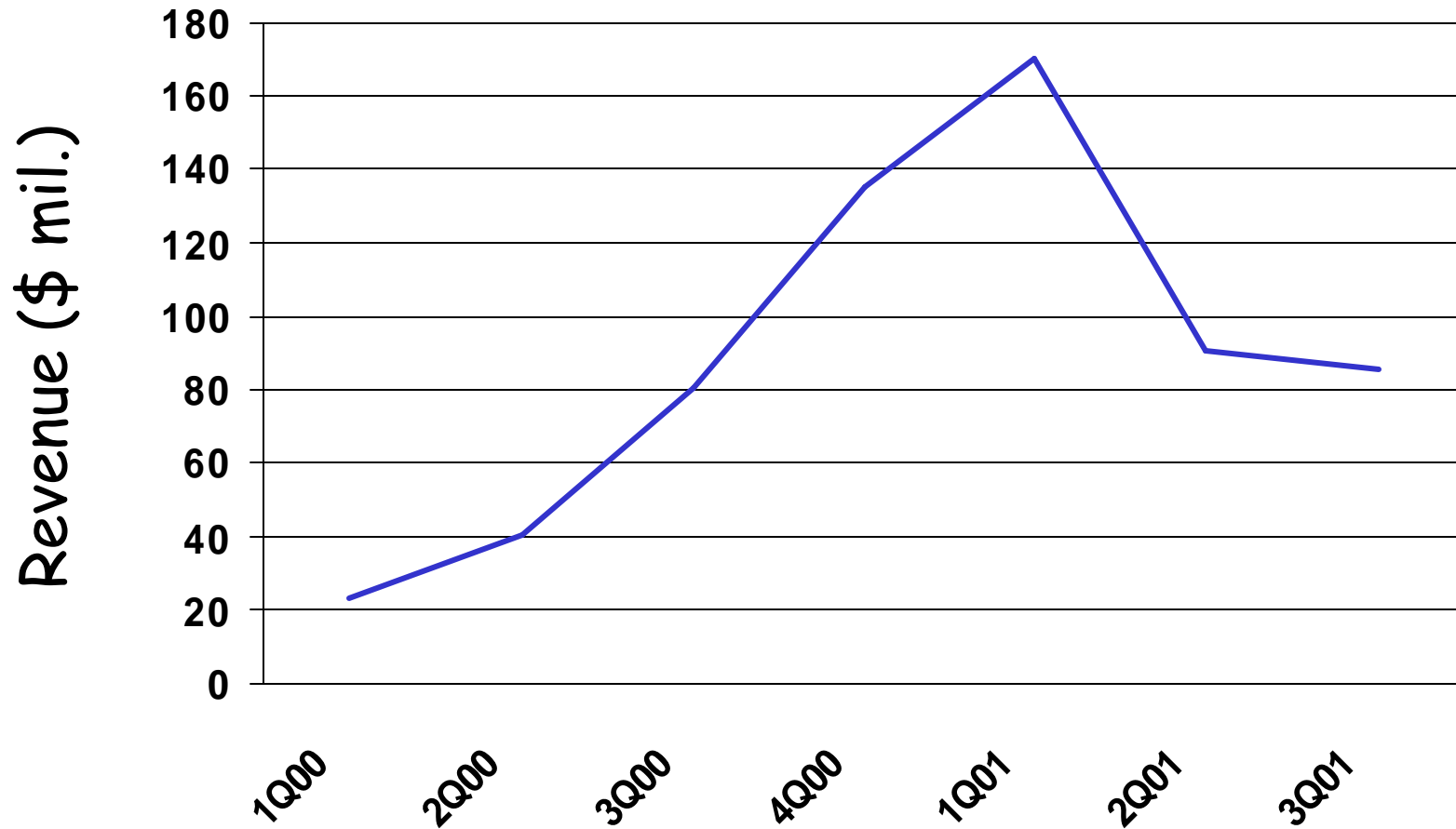


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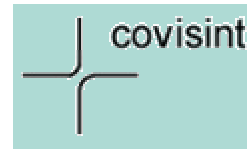
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Ariba: Quarterly Revenues

Source: SEC Filings



Covisint

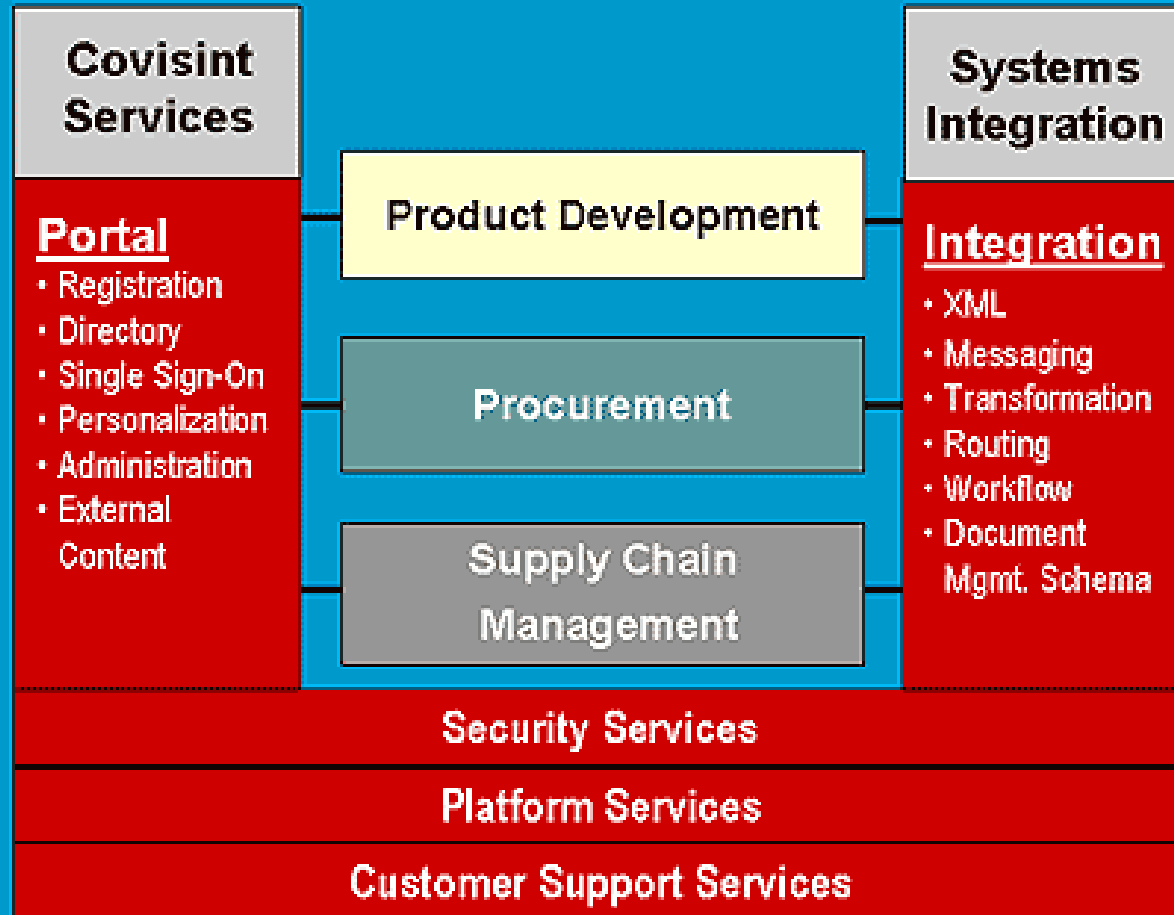


- Founded officially Dec 11, 2000 by Ford, General Motors, Nissan and Renault.
- Started originally as a vision group 12 months earlier.
- B2B e-business exchange allowing automotive original equipment manufacturers (OEMs) and suppliers to speed the flow of material through the supply chain
- If Covisint lives up to its promise, consumers will eventually be able to custom-configure a car -- from engine size to upholstery color -- and drive it home a week after placing their order.

The Exchange

- Virtual Project Workspace
 - Desktop application that allows members to buy and sell automotive parts, supplies, and services
- Procurement
 - Auctions: Seller and Buyer auctions
 - Catalogs: Custom and Community
- Supply
 - SupplyConnect: Access to every step of the supply process
- Quality
 - Advanced Quality Planner: minimizes quality defects by web-enabling management of quality process requirements and deliverables.

integrated solutions



Revenue Model

- One-time licensing fees for members
- Flat transaction fees
- Variable-rate transaction fees
- Additional fees for auctions and catalogs
- Covisint hopes to tap into the \$1.3 trillion of purchased goods and services in the global automotive industry (eventually).

Unresolved Issues

- Initially there won't be transparent, real-time, two-way supply-chain connections between the auto companies and all tiers of suppliers - no real improvement.
- Not all auto companies and suppliers will be signed up.
- Auto companies are the only ones to set the rules for the exchange.
- Rising tensions between software partners as Covisint delays final specs for application development.
- Other similar exchanges are planned by other automotive companies.

Reading Assignment for October 25, 2001

"A Technical Introduction to XML,"
Norman Walsh, on XML.com
(<http://www.xml.com/pub/a/98/10/guide0.html>)