

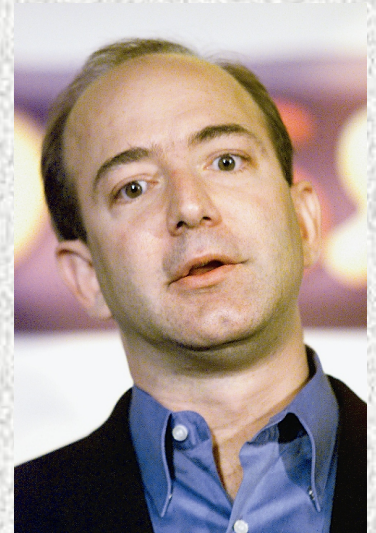


Chapter 13

Electronic Commerce and E-Business

Jeff Bezos Creates a Virtual Mall

- ✓ Jeff Bezos founded Amazon.com, Inc. in 1994.
- ✓ Amazon opened its virtual doors in July 1995.



Jeff Bezos: The Virtual Bookseller

- ✓ In 2000, Amazon has 20 million customers in more than 160 countries that bought \$2.8 billion worth of merchandise.
 - Unfortunately, Amazon also lost \$1.4 billion in the process.
 - In 2005, Amazon had a net income of about \$500 million.
- ✓ In 2009, Amazon's net income was \$902 million.
- ✓ Its total revenue (2009) was \$ 24.5 billions, roughly comparable to what Wal-Mart takes in every three weeks.
Source: <http://finance.yahoo.com/q/is?annual&s=amzn>
- ✓ <http://finance.yahoo.com/q/is?s=WMT+Income+Statement&annual>
- ✓ The latest tally by Bloomberg's Billionaires Index shows Bezos is now worth about \$75.6 over \$80 billion.



Electronic Commerce in Perspective

- ✓ **Electronic commerce (e-commerce):** sharing business information, maintaining business relationships, and conducting business transactions through the use of telecommunications networks
 - Much more than a set of Internet technologies
 - Sometimes used interchangeably with the term *e-business*



Electronic Commerce in Perspective

- ✓ In 2005, E-commerce accounted for about 5 percent of the total U.S. economy.
- ✓ Internet-related revenue growth was about 20 times the growth rate of the overall U.S. economy.
- ✓ Compared with U.S. business overall, a company selling goods and services over the Internet was:
 - 3 times more likely to see expense reductions;
 - 2.5 times more likely to see productivity gains; and
 - more than 2.5 times more likely to see market share growth and penetration of new markets.



Electronic Commerce in Perspective

E-Commerce Models

✓ **Business-to-business (B2B)**

- B2B is an interorganizational information system in which a company handles transactions within its own value chain or with other businesses and organizations.
- The most prevailing form of E-commerce.
- B2B is sometimes referred to as **business-to-employee (B2E)**, when the focus is primarily on handling the activities that take place within an organization.



Electronic Commerce in Perspective

✓ **Business-to-consumer (B2C)**

- Retailing transactions between a company and individual customers are B2C transactions.
- B2C is the most visible aspect of e-commerce from a consumer's point of view.



Electronic Commerce in Perspective

✓ **Consumer-to-consumer (C2C)**

- Individuals selling and buying directly with each other via a Web site are using C2C.
- A well-known example of C2C is eBay.



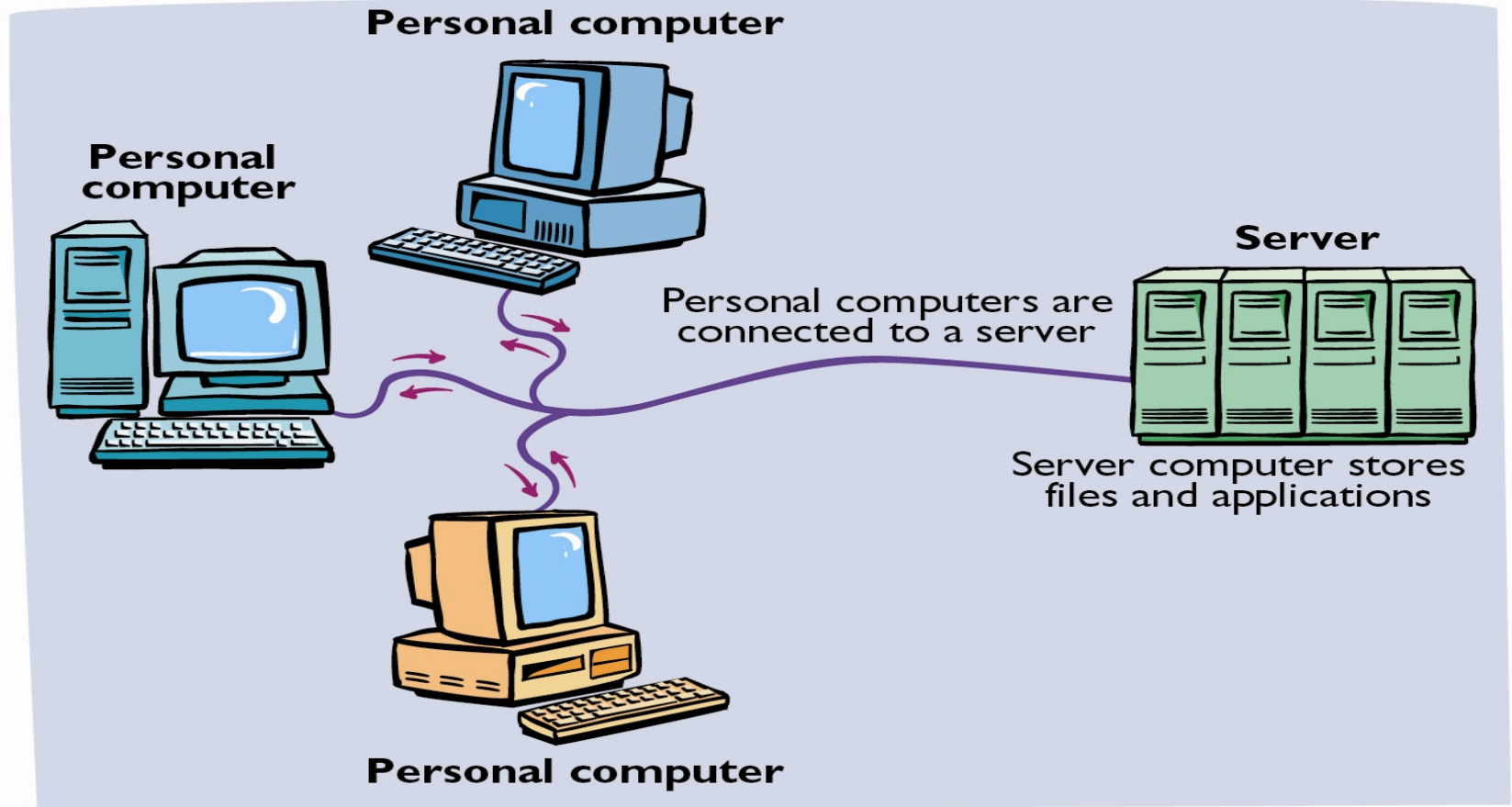
Intranets: E-Commerce to Support Internal Business Processes

Characteristics of a B2E Intranet

- ✓ **Intranet:** an internal information system based on Internet client/server activities between individuals and departments within an organization



Intranets: E-Commerce to Support Internal Business Processes



Intranets: E-Commerce to Support Internal Business Processes

- ✓ Made up of physical technology and information content
- ✓ The physical elements of an intranet are:
 - A network (can be a LAN or WAN)
 - At least one computer with server software installed (including TCP/IP)
 - Additional computers with client software installed (including TCP/IP and Web browsers)



Intranets: E-Commerce to Support Internal Business Processes

- ✓ The communication software for an intranet includes middleware and TCP/IP.
 - **Middleware** handles the actual physical communications connections between the computers, scanners, printers, and other devices on a network.
 - **TCP/IP** handles the intranet communication protocols for messages transferred between the server and client computers.

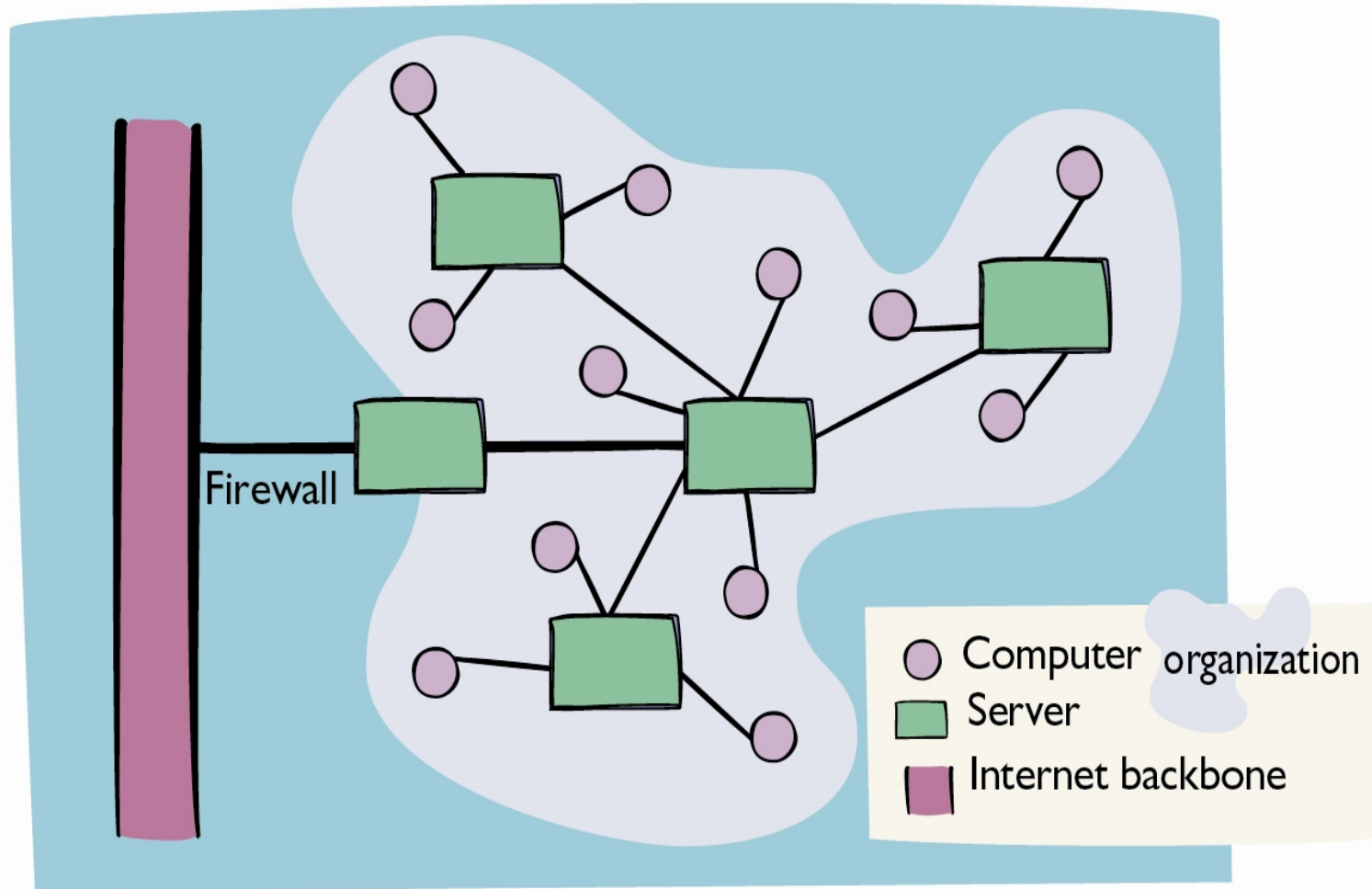


Intranets: E-Commerce to Support Internal Business Processes

- ✓ An intranet also includes firewall software for security.
 - A **firewall** protects an intranet from unauthorized access by users on a network external to the organization.
- ✓ User identification and authentication software, data encryption software, virus protection software, and intrusion-detection software, are also used to protect an intranet.



Intranets: E-Commerce to Support Internal Business Processes



Intranets: E-Commerce to Support Internal Business Processes

- ✓ Collaboration and teamwork in the United States
 - Collaboration and teamwork are becoming the expected ways for people to do work in many organizations.
 - Intranets make possible the easy access and distribution of information in an organization, no matter where employees are located geographically.



Intranets: E-Commerce to Support Internal Business Processes

- ✓ Internal business transactions
 - Employees in many organizations can use Web browsers to conduct actual internal business transactions on an intranet.
 - Having employees work electronically on an intranet increases efficiency, reduces paperwork costs, and increases the speed of updating information.



Extranets to Connect Business Alliances

- ✓ **Extranet:** a private interorganizational information system
 - Connects the intranets of two or more companies in a business alliance
 - Also known as an extended intranet
 - Alliances sometimes referred to as **e-marketplaces**
- ✓ Plays an important role in the global business strategy of many companies
 - Enables them to build alliances with vendors, suppliers, and other organizations internationally



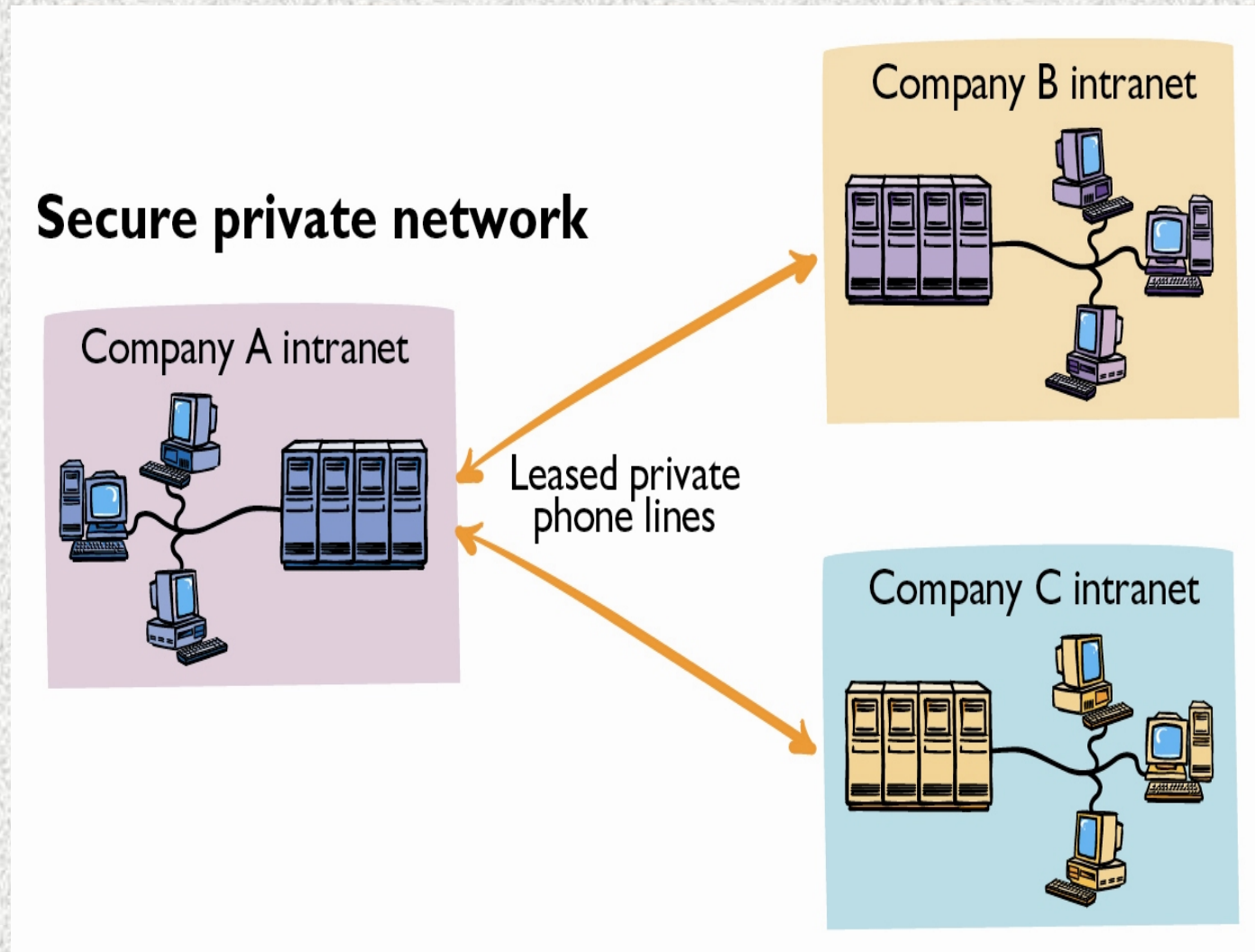
Extranets to Connect Business Alliances

Characteristics of a B2B Extranet

- ✓ Organizations can set up an extranet in one of three ways:
 - Secure private network
 - ❑ A **secure private network** physically attaches intranets with private leased telephone lines.
 - ❑ It's costly.



Extranets to Connect Business Alliances



Extranets to Connect Business Alliances

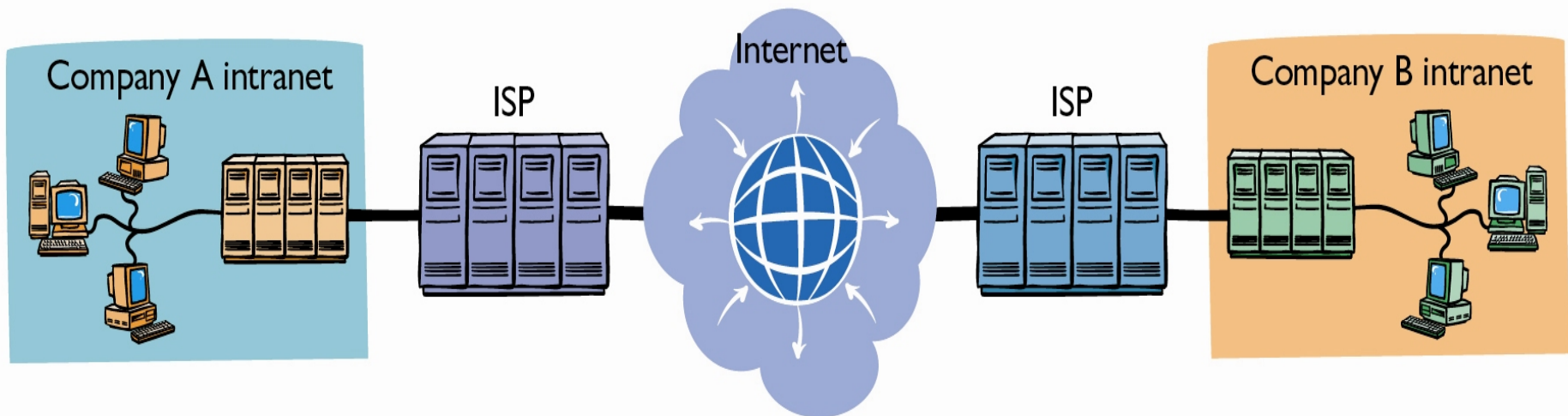
➤ Public network

- ❑ A **public network** uses a public communications network, such as a public utility telecommunication network or the Internet.
- ❑ It's less secure.



Extranets to Connect Business Alliances

Public network



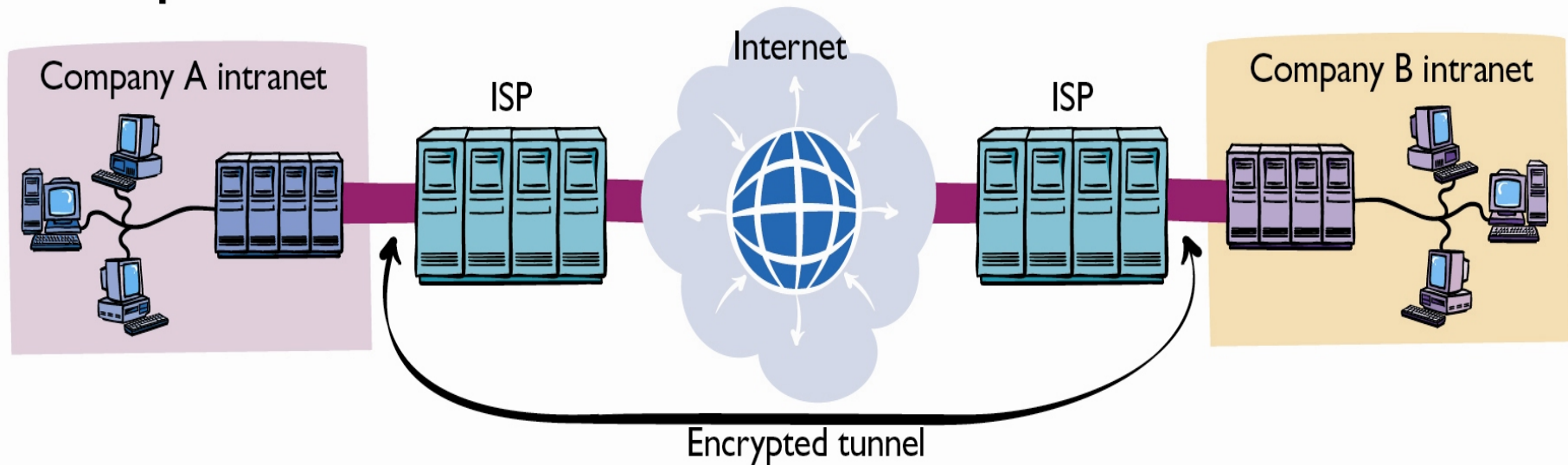
Extranets to Connect Business Alliances

- Virtual private network (VPN)
 - ❑ A **virtual private network (VPN)** uses a public network with special protocols that provide a secure, private “tunnel” across the network between business partners’ intranets.
 - ❑ An extranet is called an **Internet VPN** when the public network used is the Internet.
 - ❑ It's cost-effective **and** secure.



Extranets to Connect Business Alliances

Virtual private network



Extranets to Connect Business Alliances

- ✓ A company can use an extranet successfully through proper planning and collaboration with its business partners.



B2C: The Customer Connection

Customer-Centered Web Design

- ✓ Characteristics of effective B2C Internet sites:
 - Speed of transactions
 - Large, up-to-date product selection
 - Ease of use
 - Secure transactions
 - After-sale features



B2C: The Customer Connection

Customer Relationship Management

- ✓ **Customer relationship management, or CRM**, usually refers to methodologies, software, and Internet capabilities for managing customer relationships in an organized way.
 - It utilizes a **database** that includes such info as: past purchase, customer preferences, service schedules, and customer communications.



B2C: The Customer Connection

Other aspects

✓ Business Analytics

→ Analyzes data in CRM database

✓ Business Intelligence

→ Builds predictive models of consumer behavior, based on the above analyses

✓ Marketing

→ Designs and implements advertising campaigns (via e-mail, direct mail, Internet, and mass media)

Ethical Issues of E-Commerce

- ✓ An organization's code of ethics should include:
 - A clear, explicit statement of the organization's privacy policy
 - A policy statement addressing situations in which a person's permission must be secured before his/her ID, photo, ideas, or communications are used or transmitted
 - A clear policy stating how the company will inform customers of the intended uses of personal information gathered during an online transaction and how the company will secure permission from customers for those uses
 - A statement that addresses issues of ownership with respect to network postings and communications
 - A policy of how the company monitors, or tracks, user behavior on Web sites



Regulatory Issues of E-Commerce

- ✓ E-Commerce is an extremely competitive and productive form of commerce of 21st Century.
- ✓ It's not a co-incidence that Jeff Bezos is one the the two wealthiest individuals of the world.
- ✓ Government regulation (some is needed, e.g., to prevent monopolies) has a tendency to revert the progress in E-Commerce some 50 years back:
 - It imposes central control
 - It stifles freedom of enterprise
 - It imposes bureaucratic burdens (reporting, compliance, audits, etc.)
 - It shifts (some) decision making from business units to the government
 - It is incredibly costly!

