

# Chapter 4

B2B E-Commerce

CIS 579 – Technology of E-Business

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# Learning Objectives

1. Describe the B2B field.
2. Describe the major types of B2B models.
3. Discuss the models and characteristics of the sell-side marketplace, including auctions.
4. Describe the sell-side intermediaries.
5. Describe the characteristics of the buy-side marketplace and e-procurement.
6. Explain how reverse auctions work in B2B.
7. Describe B2B aggregation and group purchasing models.

# Learning Objectives

8. Describe other procurement methods.
9. Define exchanges and describe their major types.
10. Describe B2B portals.
11. Describe third-party exchanges.
12. Describe how B2B can benefit from social networking and Web 2.0.
13. Describe Internet marketing in B2B, including organizational buyer behavior.



# Concepts, Characteristics, and Models of B2B E-Commerce

## □ **business-to-business e-commerce (B2B EC)**

Transactions between businesses conducted electronically over the Internet, extranets, intranets, or private networks; also known as eB2B (electronic B2B) or just B2B

# Concepts, Characteristics, and Models of B2B E-Commerce

## ☐ **THE BASIC TYPES OF B2B TRANSACTIONS AND ACTIVITIES**

- ☐ **Sell-side**
- ☐ **Buy-side**
- ☐ **Exchanges**
- ☐ **Supply chain improvements and collaborative commerce**



# Concepts, Characteristics, and Models of B2B E-Commerce

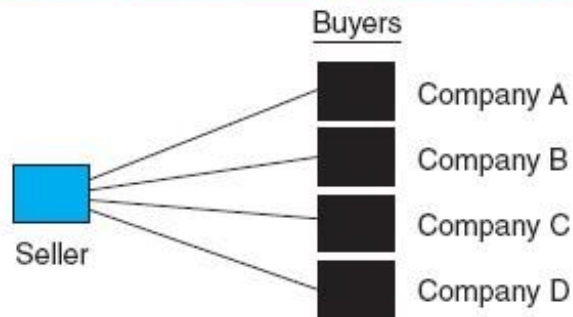
## □ THE BASIC TYPES OF B2B E-MARKETPLACES AND SERVICES

### □ One-to-Many and Many-to-One: Private E Marketplaces

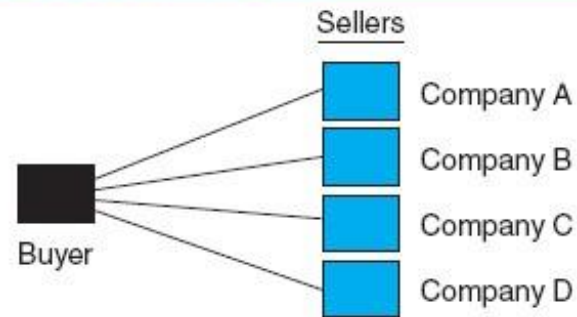
#### □ company-centric EC

E-commerce that focuses on a single company's buying needs (many-to- one, or buy-side) or selling needs (one-to- many, or sell-side)

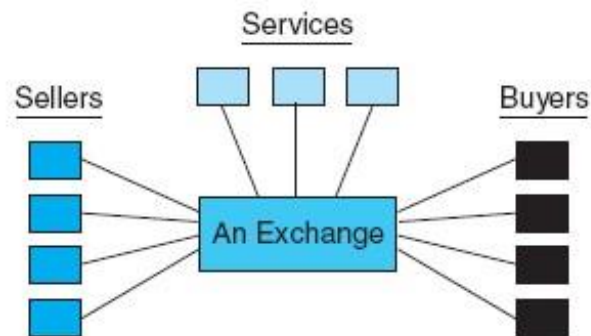
## EXHIBIT 4.1 Types of B2B E-Commerce



(a) Sell-Side B2B



(b) Buy-Side B2B



(c) Electronic Exchange



(d) Supply Chain Improvements and Collaborative Commerce



# Concepts, Characteristics, and Models of B2B E-Commerce

## □ **Many-to-Many: Public Exchanges**

### □ **exchanges (trading communities or trading exchanges)**

Many-to-many e-marketplaces, usually owned and run by a third party or a consortium, in which many buyers and many sellers meet electronically to trade with each other

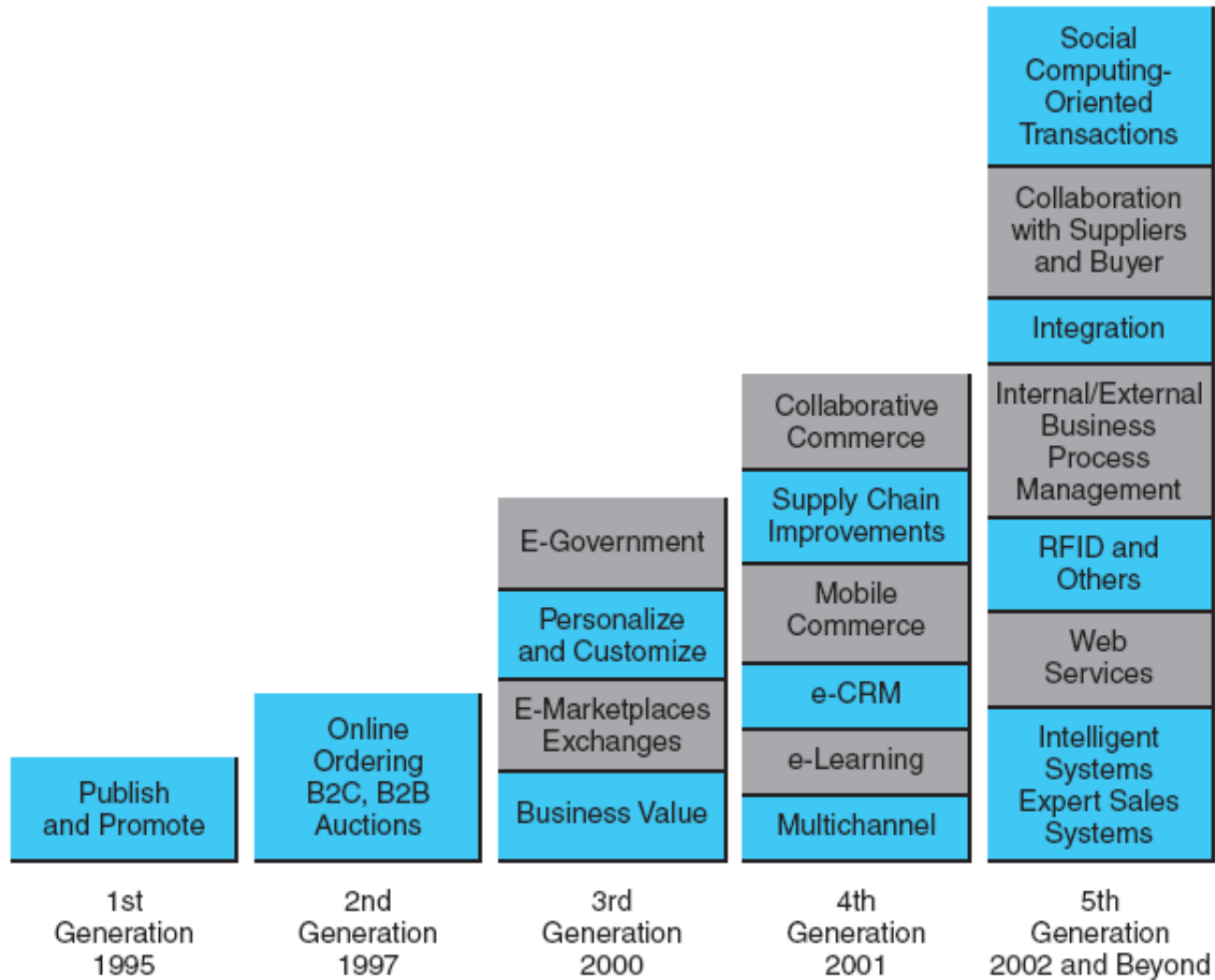
### □ **public e-marketplaces**

Third-party exchanges open to all interested parties (sellers and buyers)

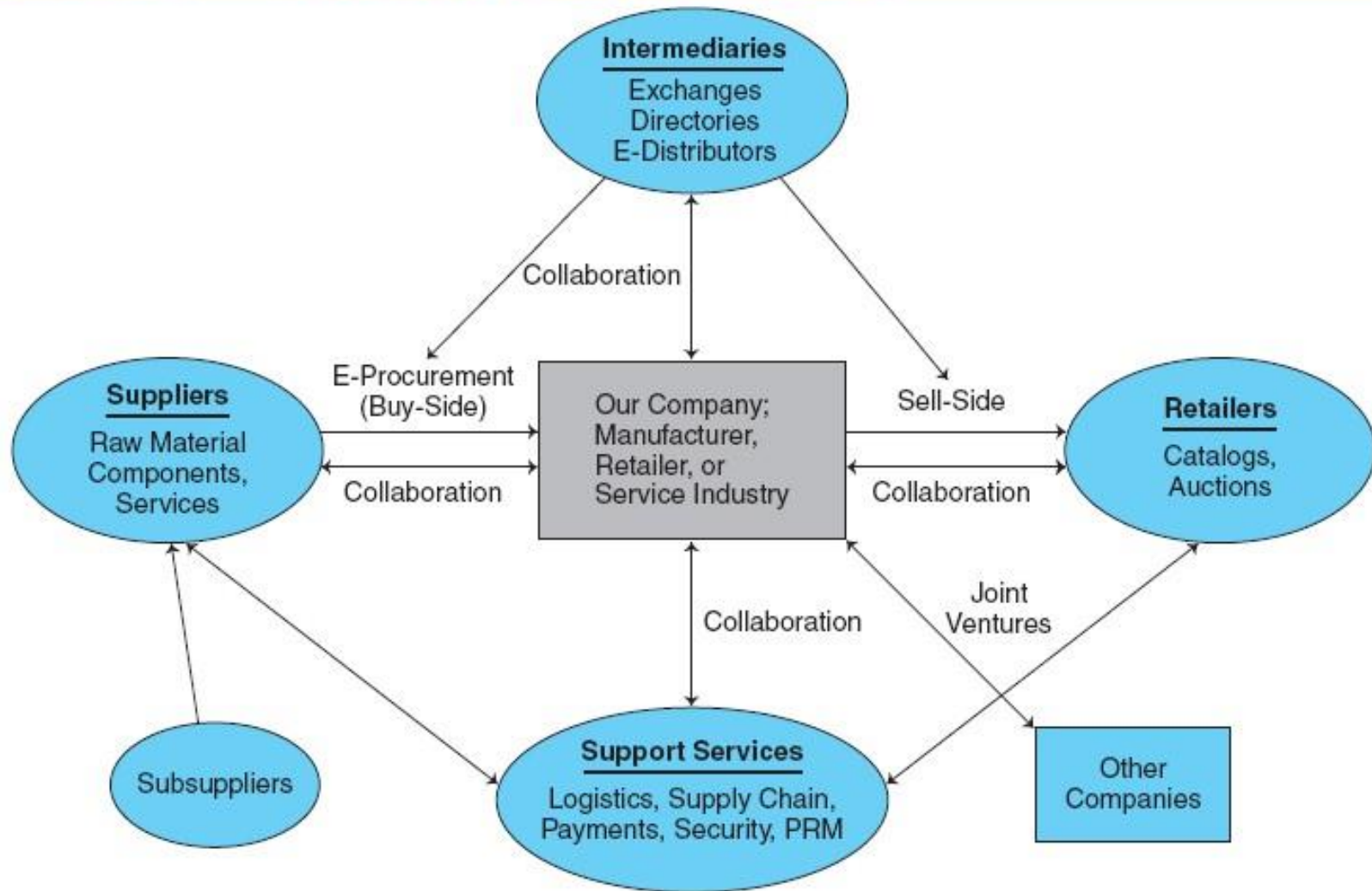
## □ **Supply Chain Improvers and Collaborative Commerce**



## EXHIBIT 4.2 Generations of B2B E-Commerce



## EXHIBIT 4.3 The Components of B2B



# Concepts, Characteristics, and Models of B2B E-Commerce

## □ **B 2 B CHARACTERISTICS**

### □ **Parties to the Transaction: Sellers, Buyers, and Intermediaries**

#### □ **online intermediary**

An online third party that brokers a transaction online between a buyer and a seller; may be virtual or click-and-mortar



# Concepts, Characteristics, and Models of B2B E-Commerce

## □ **Types of B2B Transactions: How Do Firms Buy?**

### □ **spot buying**

The purchase of goods and services as they are needed, usually at prevailing market prices

### □ **strategic (systematic) sourcing**

Purchases involving long-term contracts that usually are based on private negotiations between sellers and buyers

# Concepts, Characteristics, and Models of B2B E-Commerce

## □ **Types of Materials Traded: What Do Firms Buy?**

### □ **direct materials**

Materials used in the production of a product (e.g., steel in a car or paper in a book)

### □ **indirect materials**

Materials used to support production (e.g., office supplies or light bulbs)

### □ **MRO (maintenance, repair, and operation)**

Indirect materials used in activities that support production



# Concepts, Characteristics, and Models of B2B E-Commerce

## □ **The Direction of the Trades**

### □ **vertical marketplaces**

Markets that deal with one industry or industry segment (e.g., steel, chemicals)

### □ **horizontal marketplaces**

Markets that concentrate on a service, material, or a product that is used in all types of industries (e.g., office supplies, PCs)



# Concepts, Characteristics, and Models of B2B E-Commerce

- **SUPPLY CHAIN RELATIONSHIPS IN B2B**
- **SERVICE INDUSTRIES ONLINE IN B2B**
- **PARTNER AND SUPPLIER RELATIONSHIP MANAGEMENT**

- **partner relationship management (PRM)**

Business strategy that focuses on providing comprehensive quality service to business partners

- **supplier relationship management (SRM)**

A comprehensive approach to managing an enterprise's interactions with the organizations that supply the goods and services it uses.

- **THE BENEFITS AND LIMITATIONS OF B2B**

# One-to-Many: Sell-Side E-Marketplaces

## ☐ **sell-side e-marketplace**

A Web-based marketplace in which one company sells to many business buyers from e-catalogs or auctions, frequently over an extranet

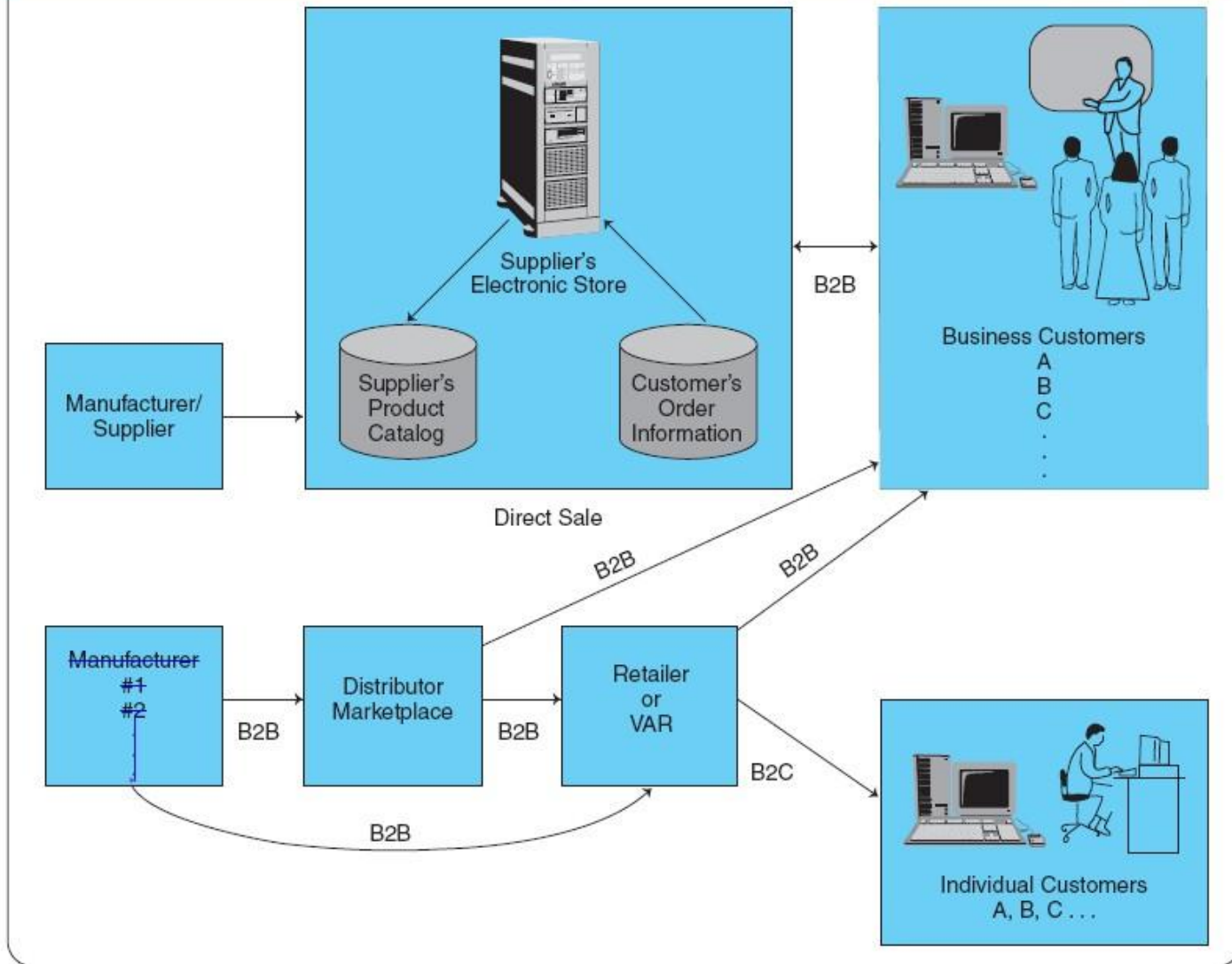
- ☐ **B2B Sellers**

- ☐ **Customer Service**



# EXHIBIT 4.5

# Sell-Side Configuration Intermediations in B2B





# One-to-Many: Sell-Side E-Marketplaces

- **SALES FROM CATALOGS: STOREFRONT**
  - **Customization and Self-Configuration**
  - **Benefits and Limitations of Online Sales from Catalogs**
- **COMPREHENSIVE SELL-SIDE SYSTEMS**

# Selling Via Distributors and Other Intermediaries

- Manufacturers can sell directly to businesses, and they do so if the customers are large buyers.
- Frequently they use intermediaries to distribute their products to a large number of smaller buyers.
- The intermediaries buy products from many manufacturers and aggregate them into one catalog from which they sell to customers or to retailers.



# Selling Via E-Auctions

## ☐ **USING AUCTIONS ON THE SELL SIDE**

- ☐ Revenue generation
- ☐ Cost savings
- ☐ Increased “stickiness”
- ☐ Member acquisition and retention

## ☐ **AUCTIONING FROM THE COMPANY’S OWN SITE**

## ☐ **USING INTERMEDIARIES IN AUCTIONS**

## ☐ **EXAMPLES OF B2B FORWARD AUCTIONS**



# One-from-Many: E-Procurement at Buy-Side E-Marketplaces

## ☐ **buy-side e-marketplace**

A corporate-based acquisition site that uses reverse auctions, negotiations, group purchasing, or any other e-procurement method

# One-from-Many: E-Procurement at Buy-Side E-Marketplaces

## □ **INEFFICIENCIES IN TRADITIONAL PROCUREMENT MANAGEMENT**

### □ **procurement management**

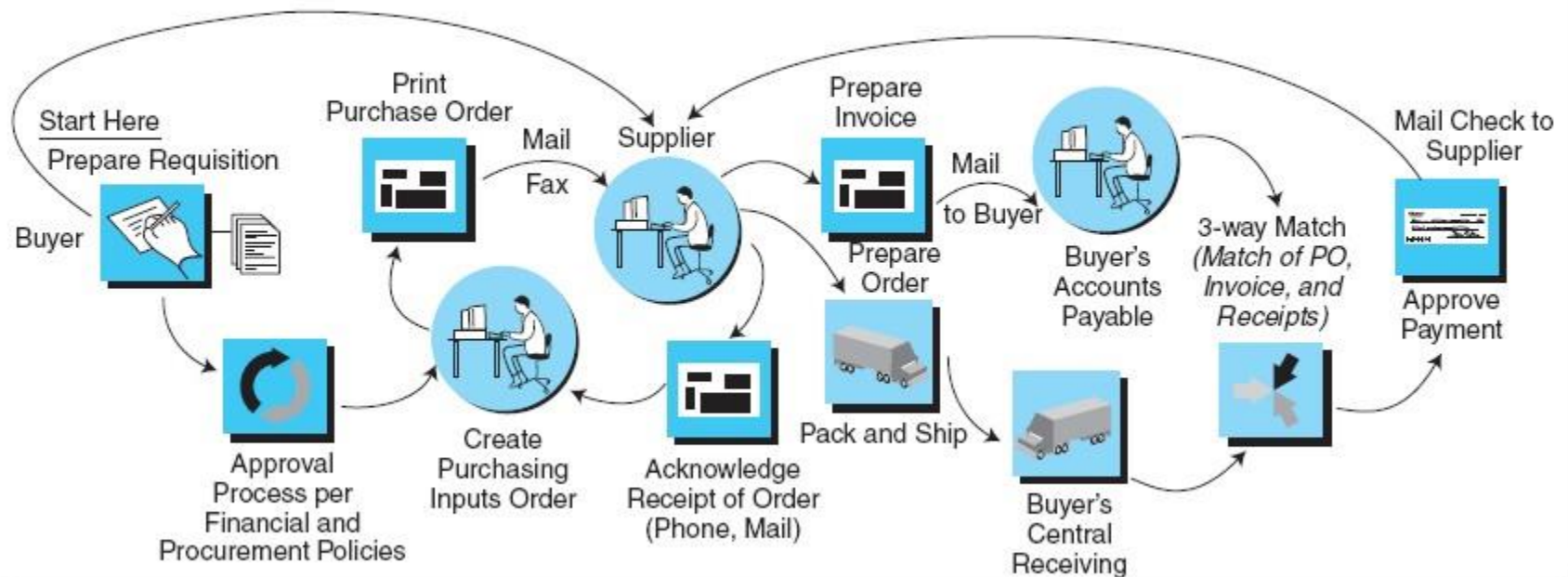
The planning, organizing, and coordinating of all the activities relating to purchasing goods and services needed to accomplish the organization's mission

### □ **maverick buying**

Unplanned purchases of items needed quickly, often at non-prenegotiated higher prices



## EXHIBIT 4.6 A Traditional Procurement Process





# One-from-Many: E-Procurement at Buy-Side E-Marketplaces

## ☐ **e-procurement (electronic procurement)**

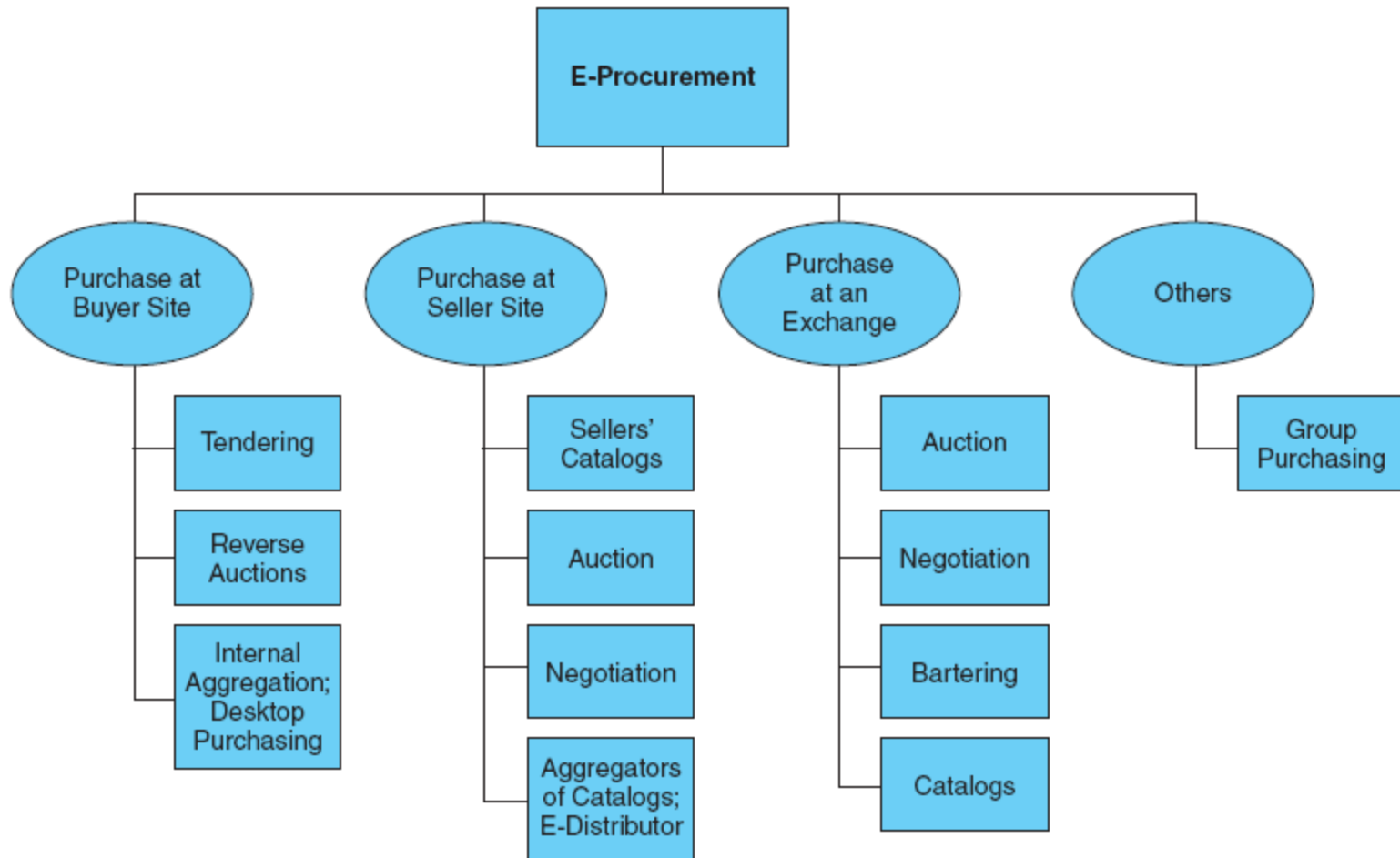
The electronic acquisition of goods and services for organizations via the Internet, EDI, etc.

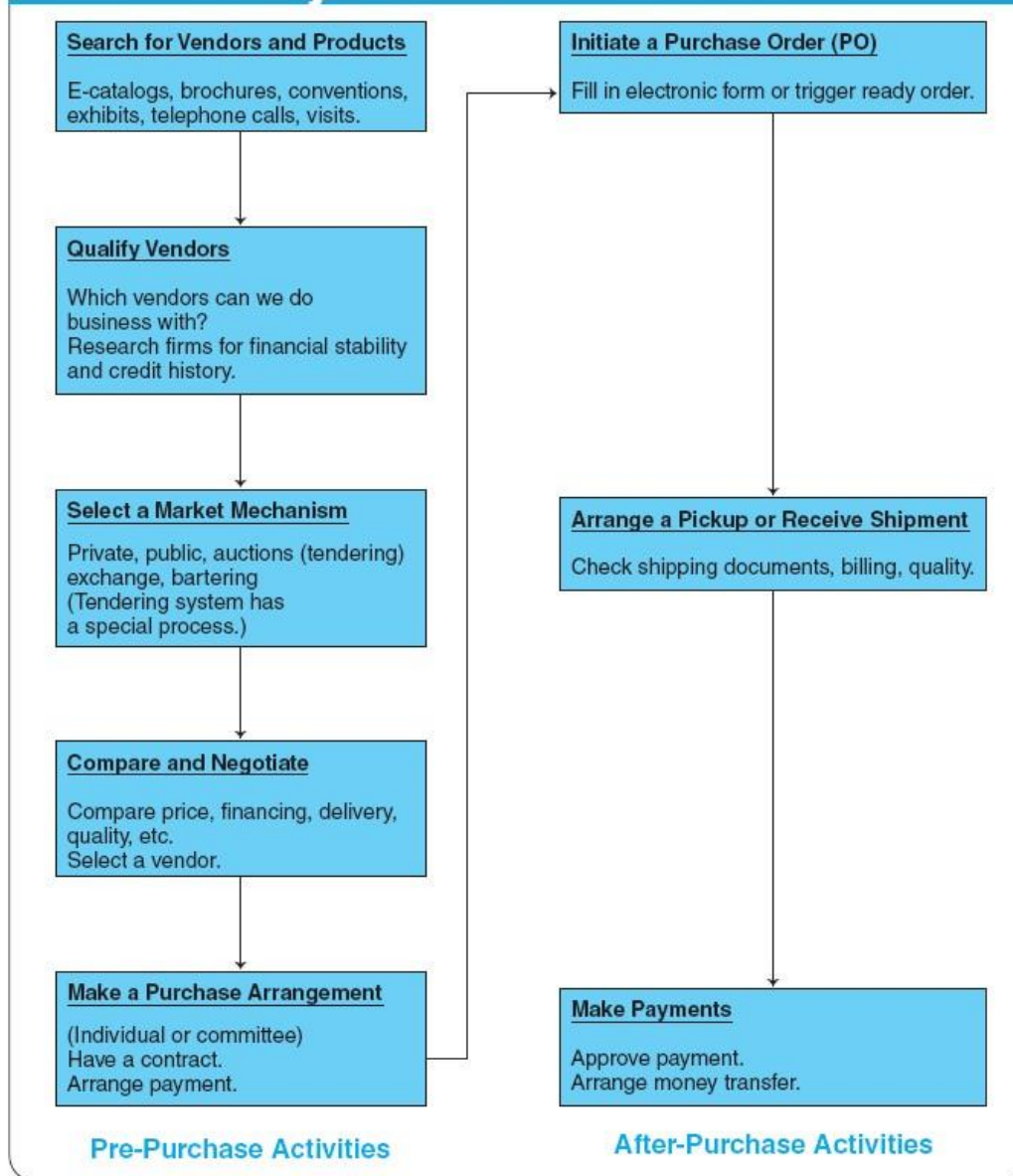
## ☐ **THE GOALS AND PROCESS OF E-PROCUREMENT**

### ☐ **Types of E-Procurement**

- ☐ E-sourcing
- ☐ E-tendering
- ☐ E-reverse auctioning
- ☐ E-informing
- ☐ Web-based ERP
- ☐ E-market sites
- ☐ E-MRO

## EXHIBIT 4.7 E-Procurement Methods



**EXHIBIT 4.8****The E-Procurement Process: The Buyer's View**



# One-from-Many: E-Procurement at Buy-Side E-Marketplaces

## ☐ THE BENEFITS AND LIMITATIONS OF E PROCUREMENT

- ☐ The Benefits of E-Procurement

- ☐ The Limitations and Challenges of E-Procurement

# Reverse Auctions at Buy-Side E-Marketplaces

- **request for quote (RFQ)**

The “invitation” to participate in a tendering (bidding) system

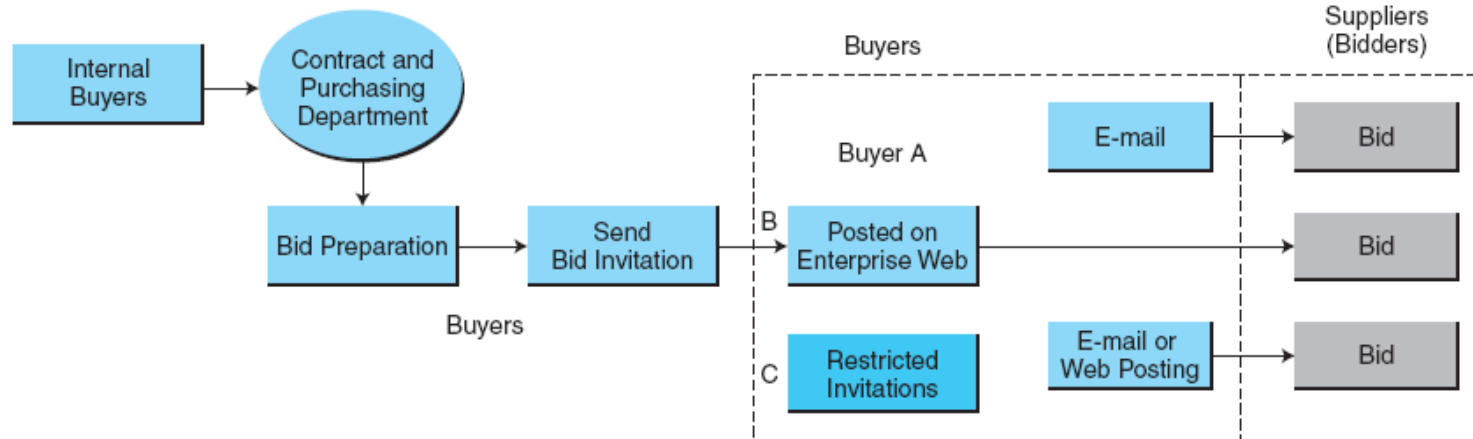
- **CONDUCTING REVERSEAUCTIONS**

  - **E-Tendering by Governments**

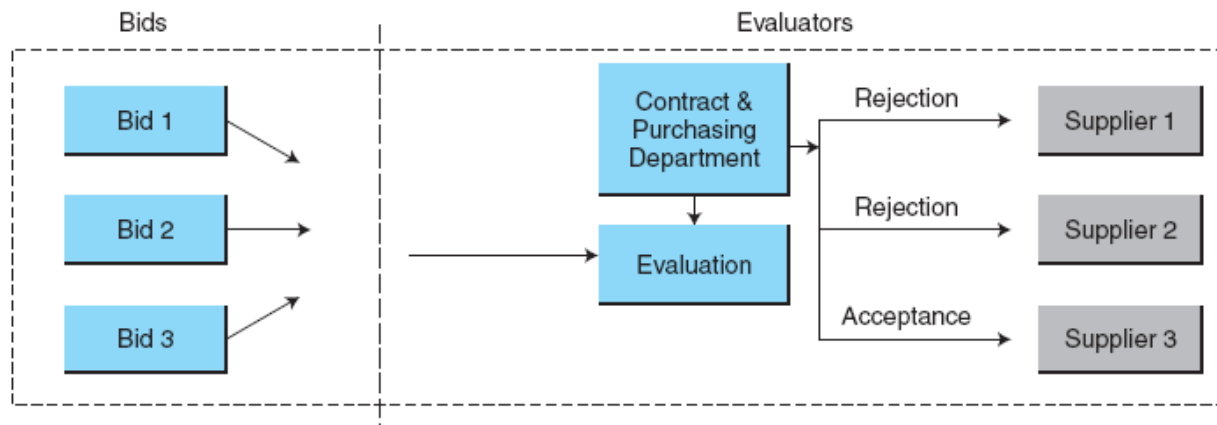
- **GROUP REVERSEAUCTIONS**

## EXHIBIT 4.9 The Reverse Auction Process

### Step I Posting Bid Invitations



### Step II Evaluation of Bids by Buyer





# Other E-Procurement Methods

## ☐ **internal procurement marketplace**

The aggregated catalogs of all approved suppliers combined into a single internal electronic catalog

### ☐ **Benefits of Internal Aggregated Catalogs**

## ☐ **desktop purchasing**

Direct purchasing from internal marketplaces without the approval of supervisors and without the intervention of a procurement department

# Other E-Procurement Methods

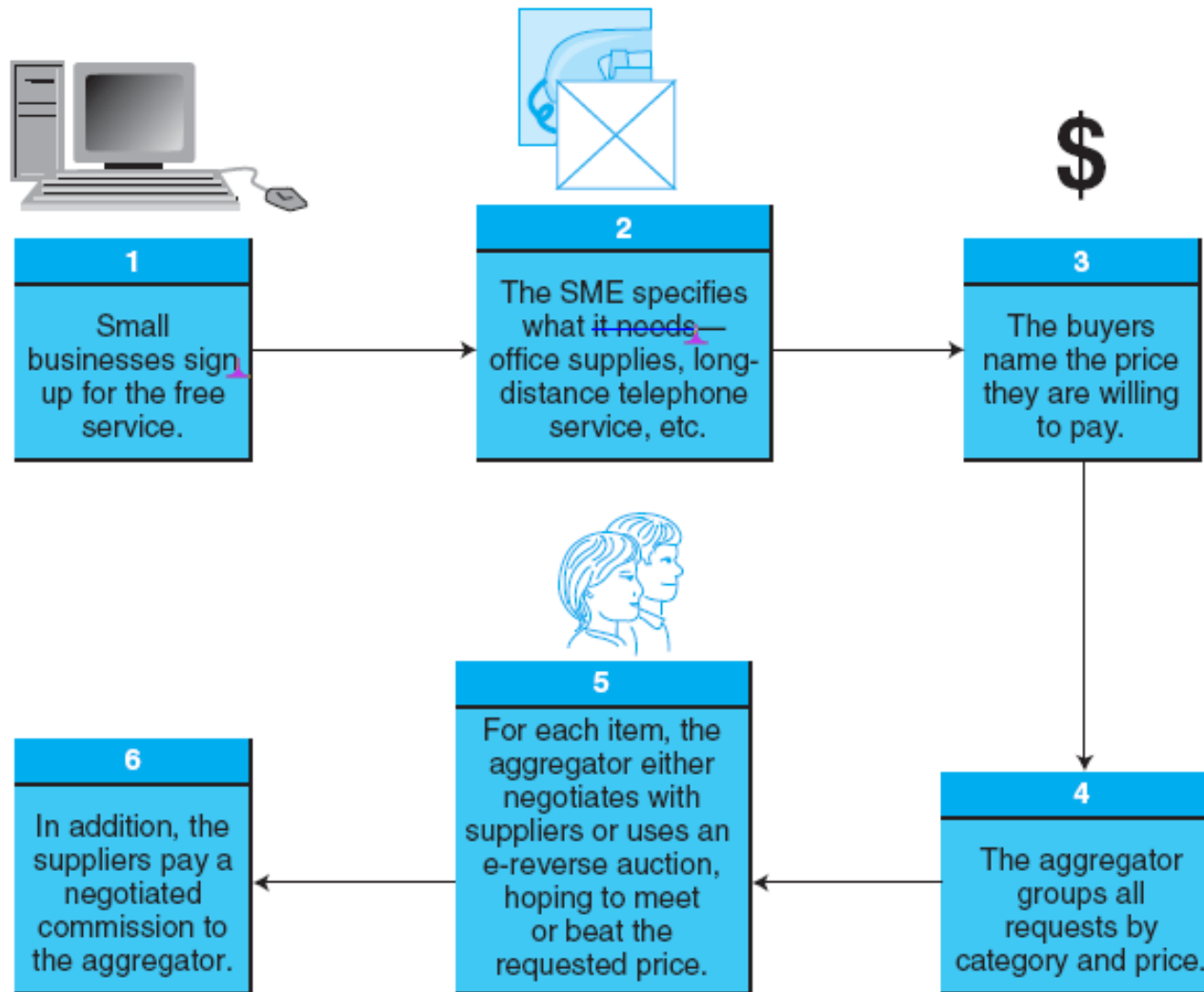
## ☐ **group purchasing**

The aggregation of orders from several buyers into volume purchases so that better prices can be negotiated

- ☐ **Internal Aggregation of Purchasing Orders**

- ☐ **External Aggregation for Group Purchasing**

## EXHIBIT 4.10 The Group Purchasing Process





# Other E-Procurement Methods

## ☐ **BUYING AT SELLERS' SITES**

### ☐ **Purchasing Direct Goods**

## ☐ **ACQUISITION VIA ELECTRONIC BARTERING**

### ☐ **bartering exchange**

An intermediary that links parties in a barter; a company submits its surplus to the exchange and receives points of credit, which can be used to buy the items that the company needs from other exchange participants

## ☐ **SELECTING AN APPROPRIATE E-PROCUREMENT SOLUTION**

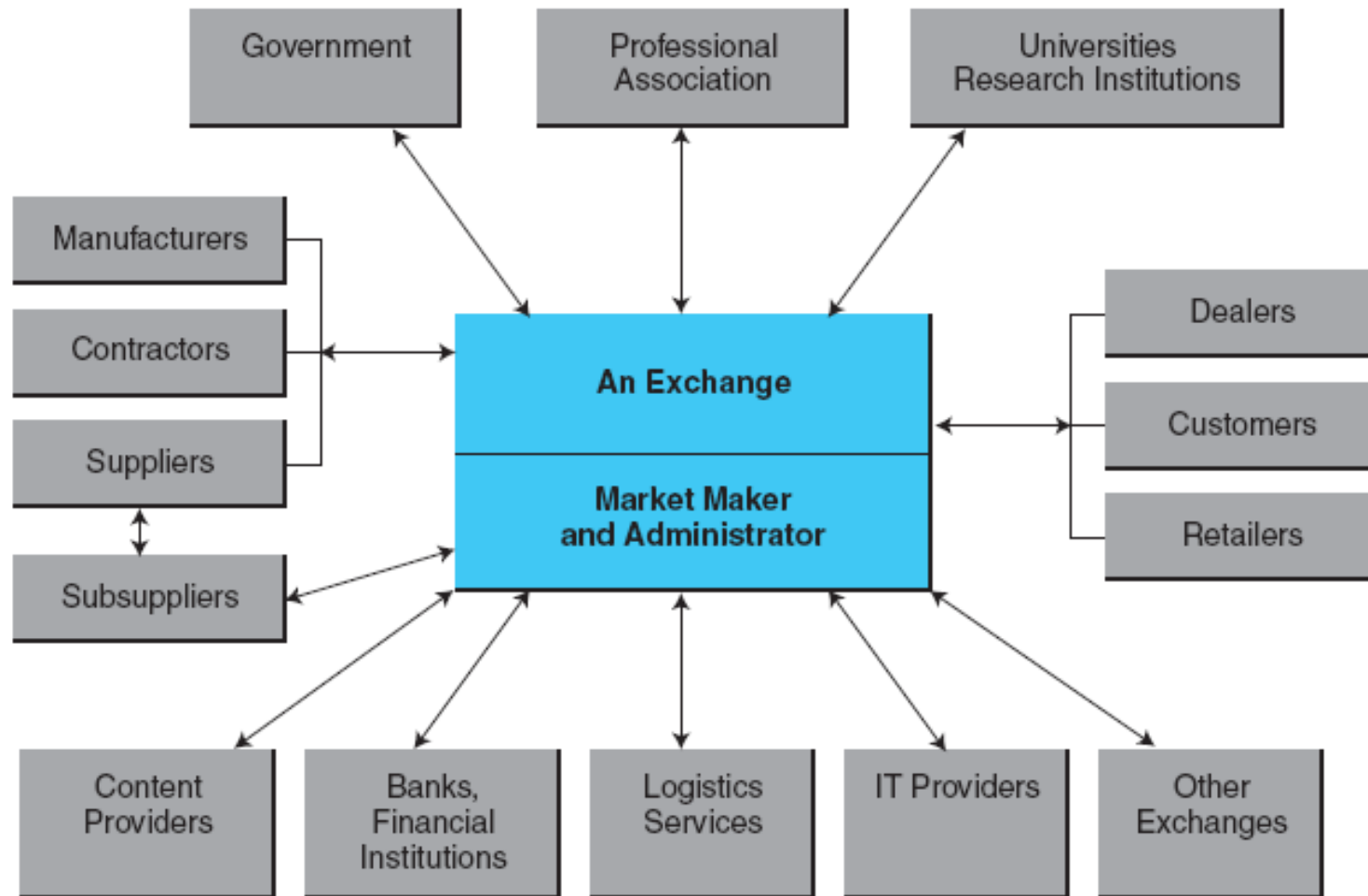
# B2B Exchanges: Definitions and Concepts

## □ **Functions of Exchanges**

1. Matching buyers and sellers
2. Facilitating transactions
3. Maintaining exchange policies and infrastructure

## □ **Services Provided by Exchanges**

## EXHIBIT 4.11 The Community of an Exchange: Flow of and Access to Information





## EXHIBIT 4.12 Services in Exchanges

### The Exchange and Its Services

#### Sellers

A  
B  
C  
D  
•  
•  
•

- Buyer–seller registration, qualification, coordination
- Catalog management (conversion, integration, maintenance)
- Communication/protocol translation (EDI, XML, CORBA)
- Sourcing—RFQ, bid coordination (product configuration, negotiation)
- Security, anonymity
- Software: groupware, workflow
- Integration with members' back-office systems
- Auction management
- News, information, industry analysis
- Support services (financing, payment, insurance, logistics, tax, escrow, order tracking)
- Administration—profiles, statistics, etc.

#### Buyers

X  
Y  
Z  
•  
•  
•

# B2B Exchanges: Definitions and Concepts

## ☐ **OWNERSHIP OF B2B EXCHANGES**

- ☐ **Third-Party Independent Marketplaces**

- ☐ **consortium trading exchange (CTE)**

An exchange formed and operated by a group of major companies in an industry to provide industry-wide transaction services



# B2B Exchanges:

## Definitions and Concepts

### □ **DYNAMIC PRICING IN B2B EXCHANGES**

#### □ **dynamic pricing**

A rapid movement of prices over time and possibly across customers, as a result of supply and demand matching

### □ **ADVANTAGES, LIMITATIONS, AND THE REVENUE MODEL OF EXCHANGES**

#### □ **Revenue Models**



## EXHIBIT 4.13 Potential Gains and Risks in B2B Exchanges

	For Buyers	For Sellers
Potential gains	<ul style="list-style-type: none"><li>• One-stop shopping, huge</li><li>• Search and comparison shopping</li><li>• Volume discounts</li><li>• 24/7 ordering from any location</li><li>• Make one order from several suppliers</li><li>• Huge, detailed information</li><li>• Access to new suppliers</li><li>• Status review and easy reordering</li><li>• Community participation</li><li>• Fast delivery</li><li>• Less maverick buying</li><li>• Better partner relationship management</li></ul>	<ul style="list-style-type: none"><li>• New sales channel</li><li>• No physical store is needed</li><li>• Reduced ordering errors</li><li>• Sell 24/7</li><li>• Community participation</li><li>• Reach new customers at little extra cost</li><li>• Promote the business via the exchange</li><li>• An outlet for surplus inventory</li><li>• Can go global more easily</li><li>• Efficient inventory management</li><li>• Better partner relationship management</li></ul>
Potential risks	<ul style="list-style-type: none"><li>• Unknown vendors; may not be reliable</li><li>❑ Loss of customer service quality (inability to compare all services)</li></ul>	<ul style="list-style-type: none"><li>• Loss of direct CRM and PRM</li><li>• More price wars</li><li>• Competition for value-added services</li><li>• Must pay transaction fees (including on seller's existing customers)</li></ul> <p>Possible loss of customers to competitors</p>

# B2B Portals and Directories

- **B 2 B portals**

Information portals for businesses

- **vortals**

B2B portals that focus on a single industry or industry segment; “vertical portals”



# B2B Portals and Directories

## □ **corporate (enterprise) portal**

A major gateway through which employees, business partners, and the public can enter a corporate website

### □ **Examples**

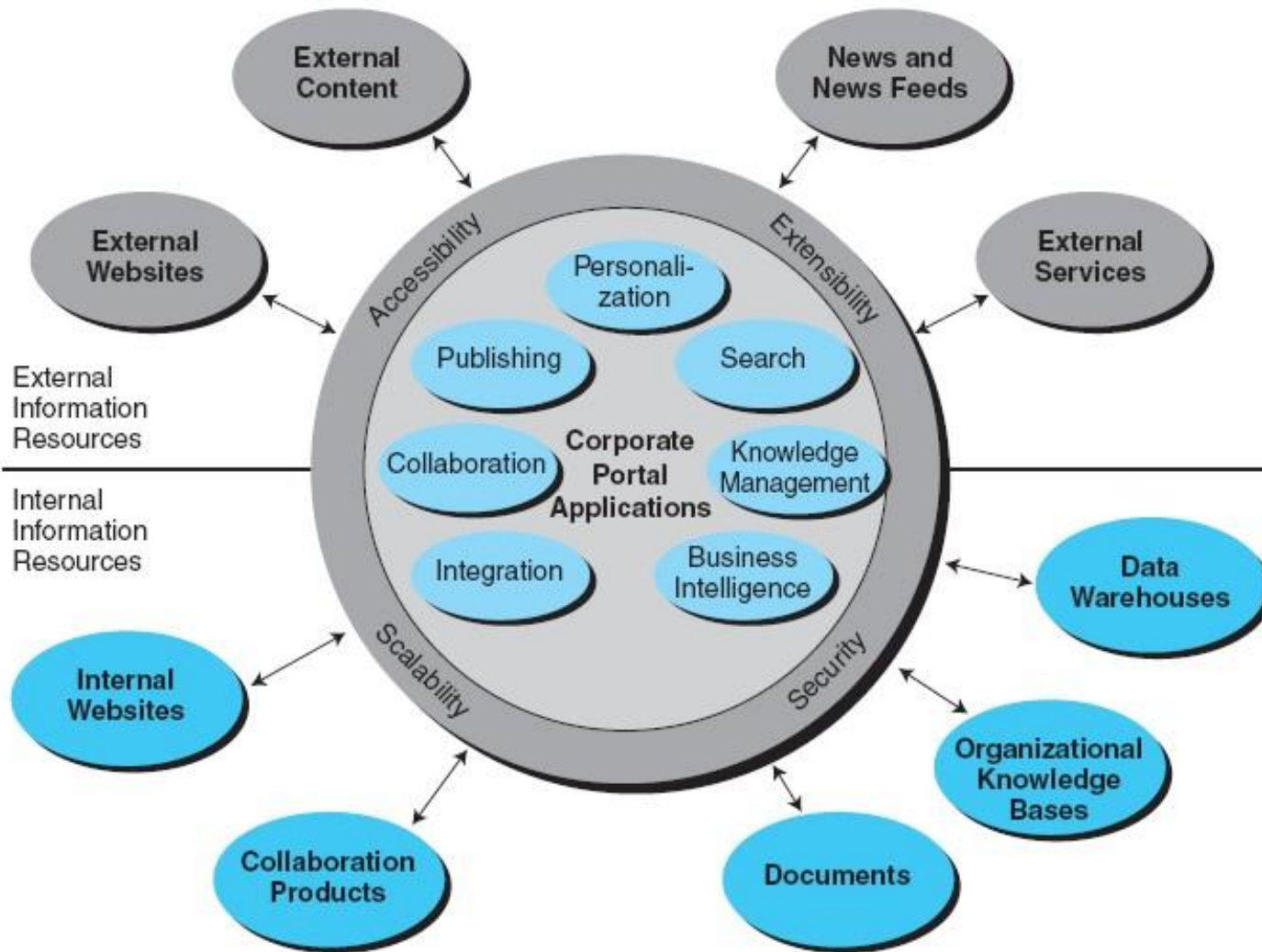
### □ **Types of Corporate Portals**

- Portals for Suppliers and Other Partners
- Customer Portals
- Employee Portals
- Executive and Supervisor Portals
- **mobile portals**

Portals accessible via mobile devices, especially cell phones and PDAs



## EXHIBIT 4.14 Corporate Portal Framework



# B2B Portals and Directories

- **The Functionalities of Portals**

- **information portals**

- Portals that store data and enable users to navigate and query these data

- **collaborative portals**

- Portals that allow collaboration

- **Corporate Portal Applications and Issues**

- **Directory Services and Search Engines**

- **Thomas Register and ThomasNet**

- **Alibaba.com**



# B2B In Web 2.0 and Social Networking

- **E-COMMUNITIES IN B2B**
- **THE OPPORTUNITIES OF SOCIAL COMMERCE IN B2B**
- **THE USE OF WEB 2.0 TOOLS IN B2B**



# B2B In Web 2.0 and Social Networking

- **SOCIAL NETWORKING IN B2B**
- **EXAMPLES OF OTHER ACTIVITIES OF B  
SOCIAL NETWORKS**
  - **Success Stories**
- **STRATEGY FOR B2B SOCIAL NETWORKING**
- **THE FUTURE OF B2B SOCIAL NETWORKING**

# B2B Internet Marketing

## ☐ **B 2 B marketing**

Marketing by manufacturers and wholesalers along the sell-side of the supply chain

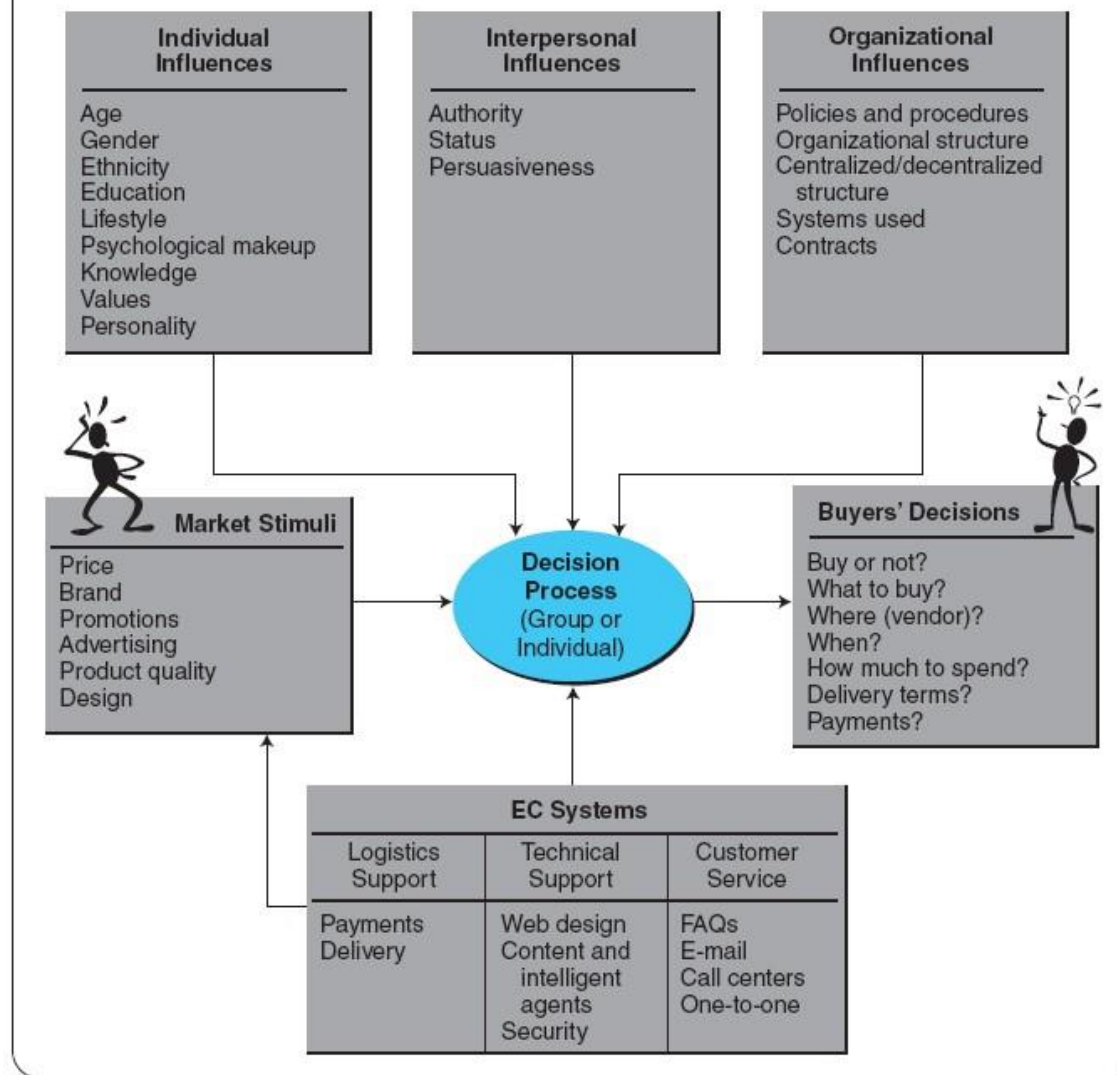
## ☐ **ORGANIZATIONAL BUYER BEHAVIOR**

☐ **A Behavioral Model of Organizational Buyers**

## ☐ **THE MARKETING AND ADVERTISING PROCESSES IN B2B**



## EXHIBIT 4.15 A Model of Organizational Buyer Behavior





# B2B Internet Marketing

## ☐ **METHODS FOR B2B ONLINE MARKETING**

### ☐ **Targeting Customers**

## ☐ **AFFILIATE PROGRAMS, MARKET RESEARCH, AND DATA MINING**

### ☐ **Affiliate Programs**

### ☐ **B2B Market Research**

# Managerial Issues

1. Which B2B model(s) should we use for e-procurement?
2. Which B2B model(s) should we use for online B2B sales?
3. Which exchange should we join?
4. Which solutions and vendor(s) should we select?
5. What is the organizational impact of B2B?
6. What are some ethical issues in B2B?
7. How shall we manage the suppliers?
8. Which type of social network should we use—private (proprietary) or public?
9. Can we use B2C marketing methods and research in B2B?



# Summary

1. The B2B field
2. The major B2B models
3. The characteristics and models of sell-side marketplaces
4. Sell-side intermediaries
5. The characteristics of buy-side marketplaces and e-procurement
6. B2B reverse auctions
7. B2B aggregation and group purchasing



# Summary

- 8. Other procurement methods
- 9. Exchanges defined and the major types of exchanges
- 10. B2B portals
- 11. Third-party exchanges
- 12. B2B in Web 2.0 and social networks
- 13. B2B Internet marketing methods and organizational buyers