

Chapter 6

B2B Exchanges, Directories, and Other Support Services

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Learning Objectives

1. Define exchanges and describe their major types.
2. Describe the various ownership and revenue models of exchanges.
3. Describe B2B portals.
4. Describe third-party exchanges.
5. Distinguish between purchasing (procurement) and selling consortia.

Learning Objectives

6. Define dynamic trading and describe B2B auctions.
7. Describe partner relationship management (PRM).
8. Discuss integration issues of e-marketplaces and exchanges.
9. Discuss B2B networks.
10. Discuss issues in managing exchanges, including the critical success factors of exchanges.

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B2B Electronic Exchanges— An Overview

- **public e-marketplace (public exchange)**

A many-to-many e-marketplace. Trading venues open to all interested parties (sellers and buyers); usually run by third parties. Some are also known as *trading exchanges*

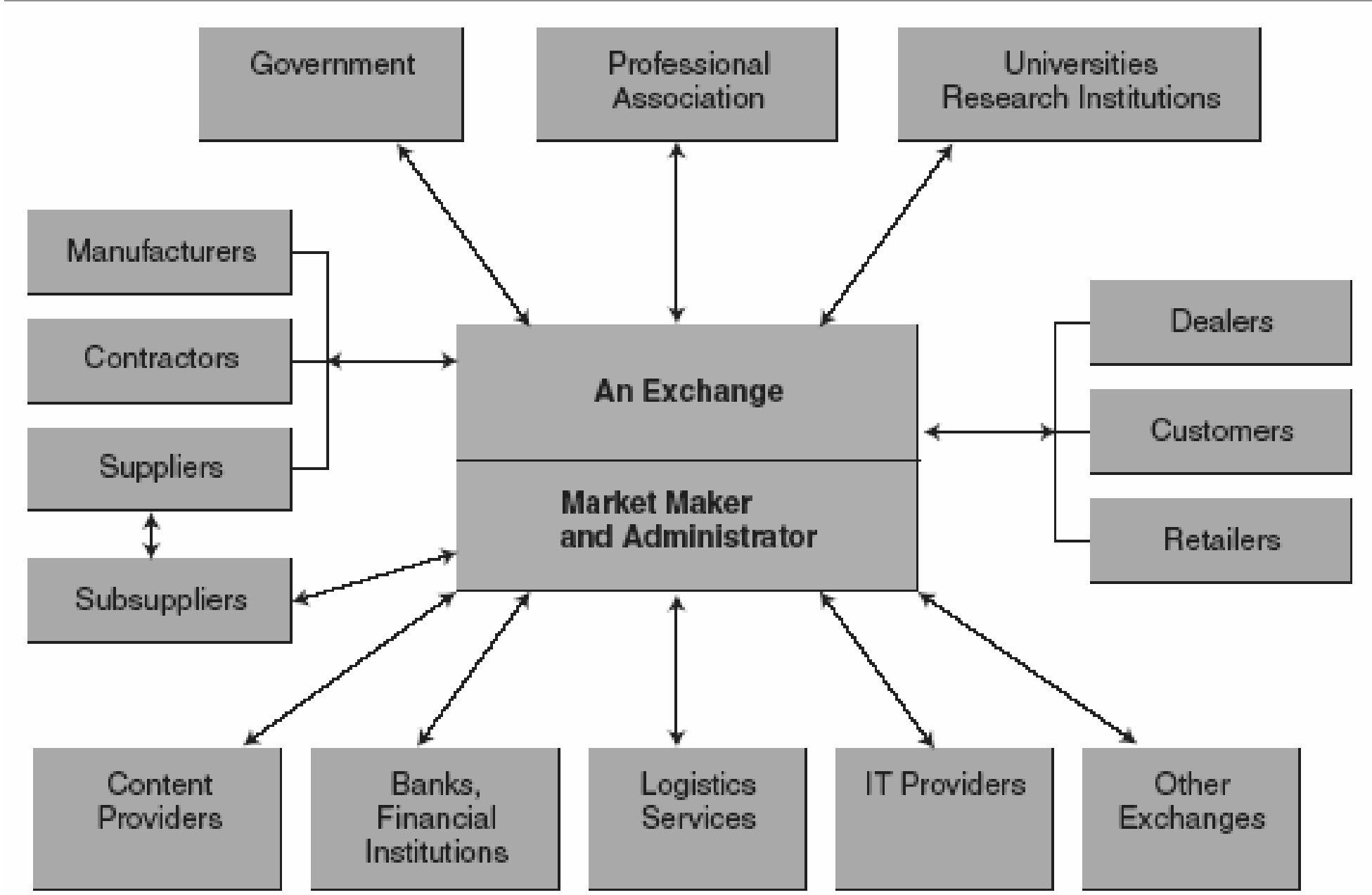
- **market maker**

The third party that operates an exchange (and in many cases, also owns the exchange)

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B2B Electronic Exchanges— An Overview

**EXHIBIT 6.1 The Community of an Exchange:
Flow and Access to Information**



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B2B Electronic Exchanges— An Overview

EXHIBIT 6.2 Classification of B2B Exchanges

	Direct	Indirect (MRO)
Strategic (Systematic) Sourcing	<div>(1) Vertical Distributors <i>plastics.com</i> <i>epapertrade.com</i> Methods: Aggregation, fixed/negotiated prices</div>	<div>(2) Horizontal E-Distributors <i>graininger.com</i> <i>staples.com</i> Methods: Aggregation, fixed/negotiated prices</div>
Spot Sourcing	<div>(3) Vertical Exchanges <i>isteelasia.com</i> <i>chemconnect.com</i> Methods: Matching, dynamic pricing</div>	<div>(4) Horizontal Exchanges <i>employease.com</i> <i>aribaSN</i> Methods: Matching, dynamic pricing</div>

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B2B Electronic Exchanges— An Overview

- **vertical exchange**

An exchange whose members are in one industry or industry segment. It trades only in materials/services unique for that industry

- **horizontal exchange**

An exchange that handles materials used by companies in different industries

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B2B Electronic Exchanges— An Overview

- **dynamic pricing**

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

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B2B Electronic Exchanges— An Overview

- The typical process that results in dynamic pricing in most exchanges:
 1. A company posts a bid to buy a product or an offer to sell one
 2. An auction (forward or reverse) is activated
 3. Buyers and sellers can see the bids and offers that usually remain anonymous
 4. Buyers and sellers interact with bids and offers in real time
Sometimes group purchasing is used to obtain a volume discount price
 5. A deal is struck when there is an exact match between a buyer and a seller on price, volume, and other variables, such as location or quality
 6. The deal is consummated, and payment and delivery are arranged

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B2B Electronic Exchanges— An Overview

- **Functions of Exchanges**
 - Matching buyers and sellers
 - Facilitating transactions
 - Maintaining exchange policies and infrastructure

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B2B Electronic Exchanges— An Overview

- **Ownership of Exchanges**

- One company, usually an industry giant
- A neutral entrepreneur
- The consortium (or co-op)

- **Governance and Organization**

- Membership
- Site access and security
- Services provided by exchanges

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B2B Electronic Exchanges— An Overview

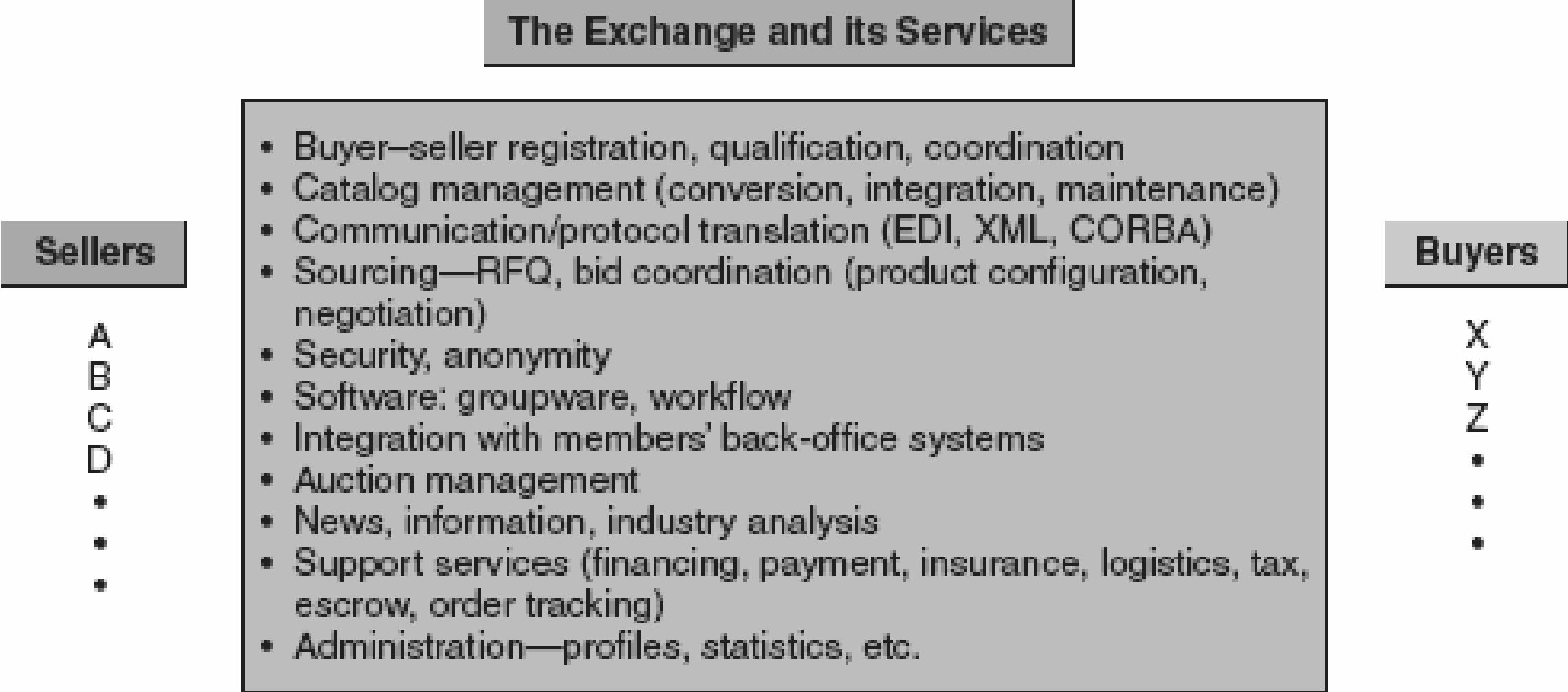
- **Advantages of Exchanges**

- Making markets more efficient, providing opportunities for sellers and buyers to find new business partners
- Cutting the administrative costs of ordering MROs
- Expediting trading processes
- Facilitating global trade
- Creating communities of informed buyers and sellers

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B2B Electronic Exchanges— An Overview

EXHIBIT 6.3 Services in Exchanges



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B2B Electronic Exchanges— An Overview

EXHIBIT 6.4 Potential Gains and Risks in B2B Exchanges

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

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B2B Electronic Exchanges— An Overview

- **Revenue Models**

- Transaction fees
- Fee for service
- Membership fees
- Advertising fees
- Other revenue sources

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B2B Portals and Directories

- **B2B portals**

Information portals for businesses

- **vortals**

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

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B2B Portals and Directories

- **Directory Services and Search Engines**

- Directory services can help buyers and sellers manage the task of finding specialized products, services, and potential partners
- Specialized search engines are becoming a necessity in many industries due to the information glut

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Third-Party and Directory Exchanges

- Third-party exchanges are characterized by two contradicting properties
 - They are *neutral* because they do not favor either sellers or buyers
 - Because they do not have a built-in constituency of sellers or buyers, they sometimes have a problem attracting enough buyers and sellers to attain financial viability

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Third-Party and Directory Exchanges

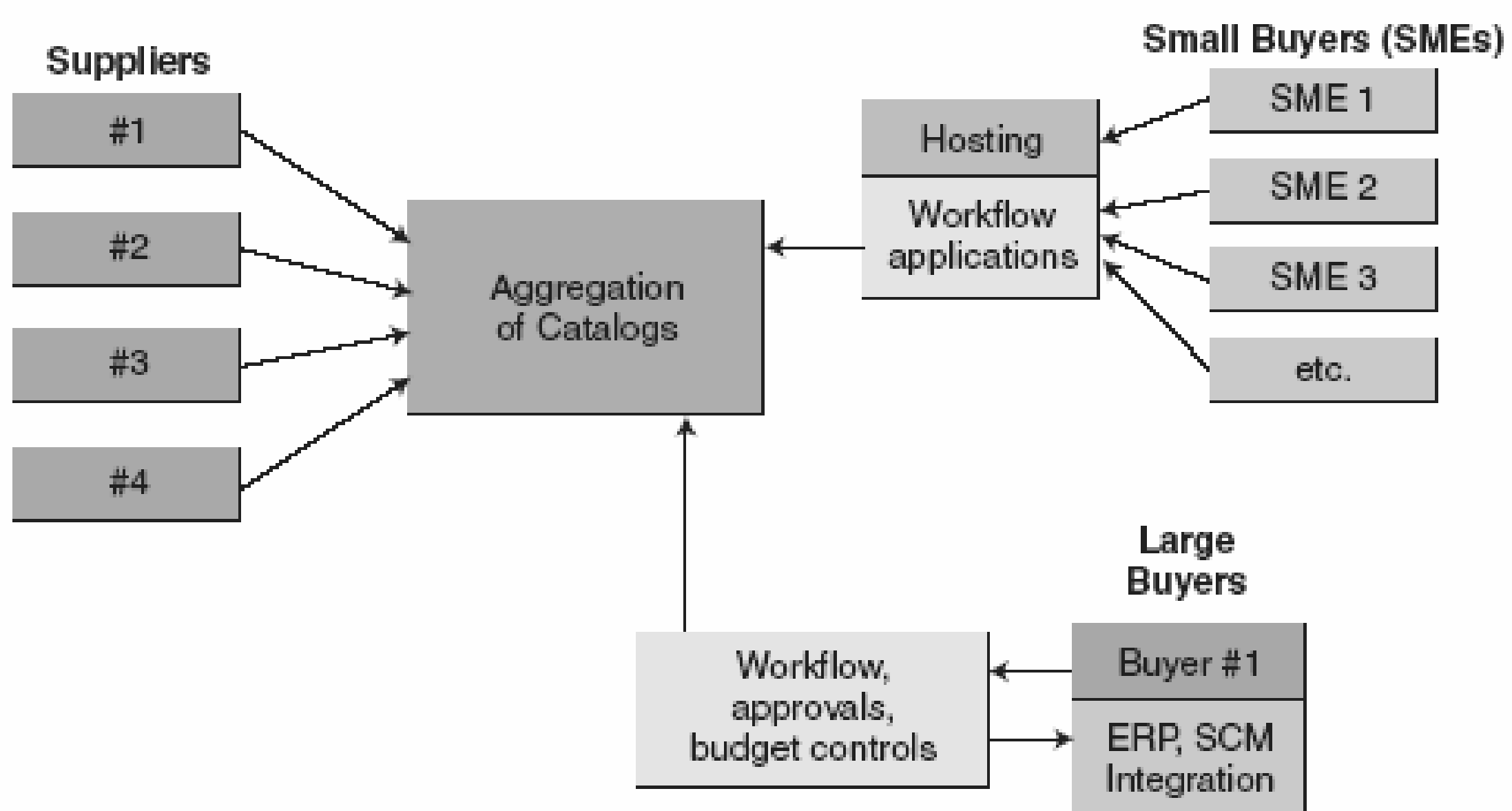
- **market liquidity**

The degree to which something can be bought or sold in a marketplace without significantly affecting its price. It is determined by the number of buyers and sellers in the market and the transaction volume

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Third-Party and Directory Exchanges

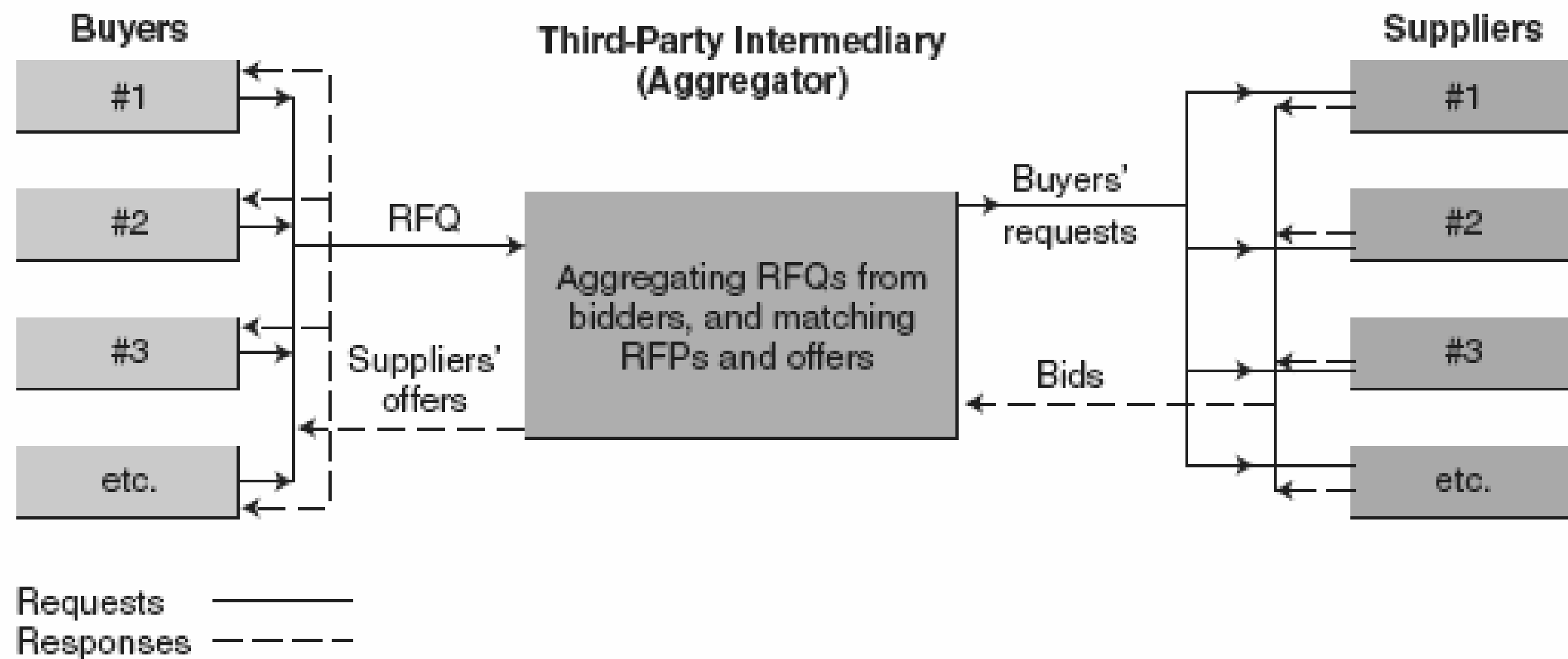
EXHIBIT 6.6 Supplier Aggregation Model



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Third-Party and Directory Exchanges

EXHIBIT 6.7 Buyer Aggregation Model



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Consortium Trading Exchanges

- **consortium trading exchange (CTE)**

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

- Markets operate in three basic types of environments:

- Fragmented markets
- Seller-concentrated markets
- Buyer-concentrated markets

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Consortium Trading Exchanges

- CTEs are classified by two main criteria:
 1. Whether they focus on buying or selling
 2. Whether they are vertical or horizontal
- The four types of consortia are:
 1. Purchasing oriented, vertical
 2. Purchasing oriented, horizontal
 3. Selling oriented, vertical
 4. Selling oriented, horizontal

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Consortium Trading Exchanges

- **Purchasing-Oriented Consortia**
 - Vertical purchasing-oriented CTEs
 - Horizontal purchasing-oriented CTEs
- **Selling-Oriented Consortia**
 - *Selling-oriented consortia* are less common than buying-oriented ones. Most selling-oriented consortia are vertical

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Consortium Trading Exchanges

- **Legal Issues for Consortia**

- Legal challenges for B2B consortia
- Critical success factors for consortia
 - Appropriate business and revenue models
 - Size of the industry
 - Ability to drive user adoption
 - Elasticity
 - Standardization of commodity-like products
 - Management of intensive information flow
 - Smoothing of supply chain inefficiencies
 - Harmonized shared objectives

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Consortium Trading Exchanges

- **elasticity**

The measure of the incremental spending (demand) by buyers as a result of price changing

- Combining consortia and third-party exchanges

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Dynamic Trading: Matching and Auctions

- **dynamic trading**

Trading that occurs in situations when prices are changing continuously, being determined by supply and demand (e.g., in auctions)

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Dynamic Trading: Matching and Auctions

- **Matching**

- The matching process may be more complex than buying and selling in regular auctions due to the need to match both prices and quantities, and many cases, quality, delivery times, and locations

- **Auctions**

- An exchange may offer auction services as one of its many activities
- An exchange is fully dedicated to auctions

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Dynamic Trading: Matching and Auctions

EXHIBIT 6.9 Comparing the Major B2B Many-to-Many Models		
Name	Major Characteristics	Types
B2B catalog-based exchanges	<ul style="list-style-type: none"> • A place for selling and buying • Fixed prices (updated as needed) • Search tools • Trading information 	<ul style="list-style-type: none"> • Vertical, horizontal • Shopping directory, usually with hyperlinks (only) • Shopping carts with services (payment, etc.)
B2B portals and directories	<ul style="list-style-type: none"> • Community services, news, information • Communication tools • Classified ads • Employment markets • May support selling (buying) • Fixed prices • May do auctions 	<ul style="list-style-type: none"> • Vertical (vortals), horizontal • Shopping directory, usually with hyperlinks
B2B dynamic exchanges	<ul style="list-style-type: none"> • Matches buyer/seller orders at dynamic prices, auctions • Provides trading-related information and services (payment, logistics) • Highly regulated • May provide general information, news, etc. • May provide for negotiations 	<ul style="list-style-type: none"> • Vertical, horizontal • Forward auctions • Reverse auctions • Bid/ask exchanges

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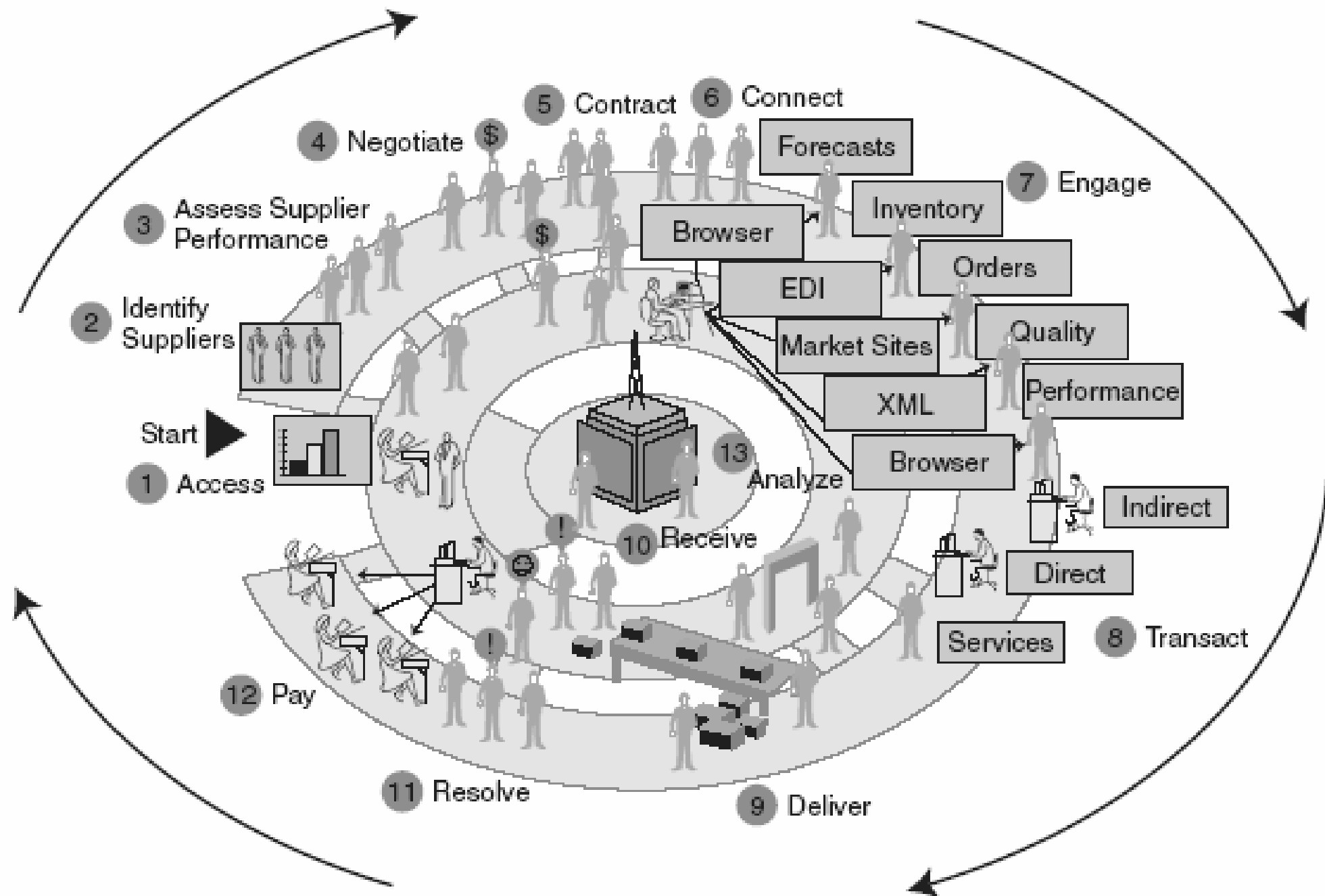
Partner and Supplier Relationship Management

- **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

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Partner and Supplier Relationship Management

EXHIBIT 6.10 SRM from PeopleSoft



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Partner and Supplier Relationship Management

● E-Communities and PRM

- B2B applications involve many participants: buyers and sellers, service providers, industry associations, and others, which creates a *community*
- E-communities connect personnel, partners, customers, and any combination of the three
- E-communities offer a powerful resource for e-businesses to leverage online discussions and interaction in order to maximize innovation and responsiveness

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Building and Integrating E-Marketplaces and Exchanges

- **Building E-Marketplaces**
- **The Integration Issue**
 - External communications
 - Web/client access
 - Data exchange
 - Direct application integration
 - Shared procedures

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Building and Integrating E-Marketplaces and Exchanges

- **The Integration Issue**
 - Process and information coordination in integration
 - Use of Web services in integration
 - System and information management in integration

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B2B Networks

- **Company-Centered (Private) Networks**

- Provide the infrastructure for e-marketplaces
- Allow suppliers to communicate effectively and efficiently with sub-suppliers along several tiers
- Increase the visibility of buyers, sellers, and other partners along the supply chain and around the globe
- Operate on a large scale
- Foster collaboration and closer relationships among business partners
- Enable industry-wide resource planning
- Provide support services, especially financial ones for the benefit of trading partners
- Provide insurance, financial derivatives, and so on to reduce risks in certain markets

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B2B Networks

- **Public Industrywide (Vertical) Networks**

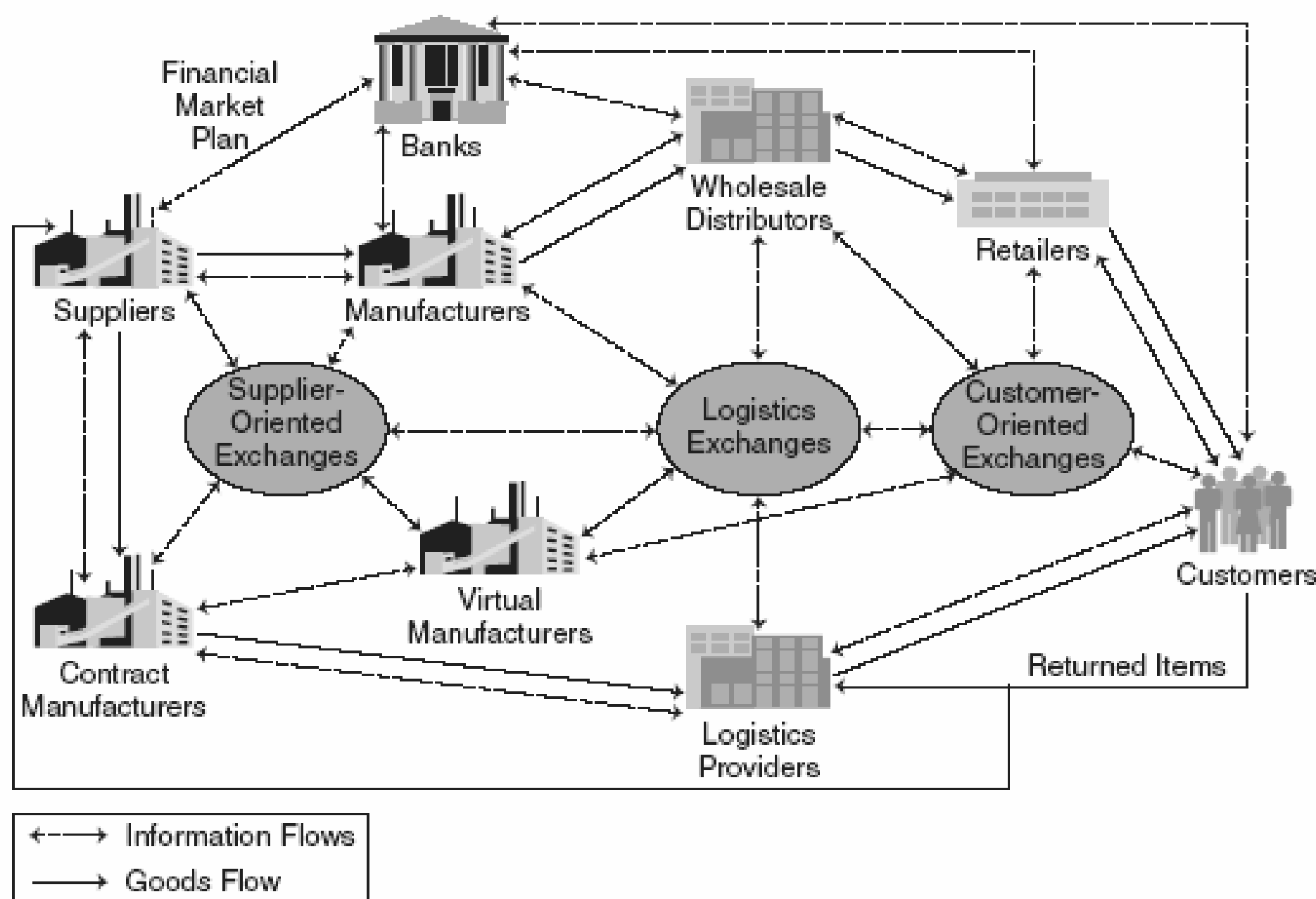
- **Transindustry And Global Networks**

- Networks of exchanges (E2E)
- Global networks

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B2B Networks

EXHIBIT 6.11 How Several Exchanges Work in One Supply Chain



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Other B2B Implementation Issues

- **Private Marketplaces versus Public Exchanges**
 - **private marketplaces**
E-marketplaces that are owned and operated by one company. Also known as *company-centric marketplaces*

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Other B2B Implementation Issues

- **Problems with Public Exchanges**
 - Transaction fees
 - Sharing information
 - Cost savings
 - Recruiting suppliers
 - Too many exchanges
- **Supply Chain Improvers**
- **Problems with Private Exchanges**

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Other B2B Implementation Issues

- **Software Agents in B2B Exchanges**
 - Software agents provide an efficient infrastructure to provide real-time, tighter integration between buyers and sellers and to facilitate management of multiple trading partners and their transactions across multiple virtual industry exchanges
- **Disintermediation and Reintermediation**

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Managing and the Future of Exchanges

- **Evaluating Exchanges**
- **Centralized Management**
- **Critical Success Factors for Exchanges**
 1. Early liquidity
 2. The right owners
 3. The right governance
 4. Openness
 5. A full range of services

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Managing and the Future of Exchanges

- **New Directions for B2B Marketplaces**
 - Critical success factors for exchanges
 - Importance of domain expertise
 - Targeting inefficient industry processes
 - Targeting the right industries
 - Brand building
 - Exploiting economies of scope
 - Choice of business/revenue models
 - Blending content, community, and commerce
 - Managing channel conflict
 - Maximize the benefits for all participants
 - Other factors

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Managerial Issues

1. Have we done our homework?
2. Can we use the Internet?
3. Which exchange to join?
4. Will joining an exchange force restructuring?
5. Will we face channel conflicts?
6. What are the benefits and risks of joining an exchange?
7. Can we trust new trading partners?