

Chapter 9

Achieving Operational Excellence and Customer Intimacy: Enterprise Applications

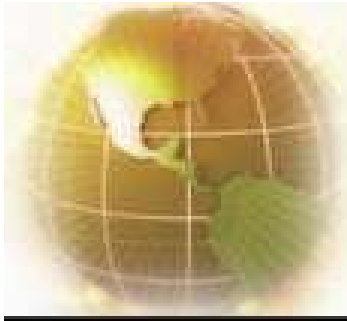
Video Cases

Video Case 1a: What Is Workday: Enterprise Software as a Service (SaaS)

Video Case 1b: Workday: Mobile Solutions for iPad

Video Case 2: Evolution Homecare Manages Patients with Microsoft CRM (2011)

Instructional Video 1: Zara's: Wearing Today's Fashions with Supply Chain Management



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LEARNING OBJECTIVES

- **How do enterprise systems help businesses achieve operational excellence?**
- **How do supply chain management systems coordinate planning, production, and logistics with suppliers?**
- **How do customer relationship management systems help firms achieve customer intimacy?**
- **What are the challenges posed by enterprise applications and how are enterprise applications taking advantage of new technologies?**

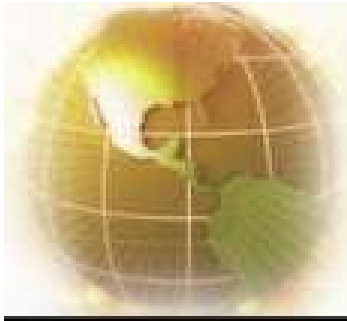


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Statoil Fuel and Retail Competes Using Enterprise Systems

- **Problem:** Antiquated IT infrastructure and ERP system; disparate processes for each country and market; massive operational inefficiencies
- **Solution:** Numerous separate legacy systems replaced with **Oracle's JD Edwards EnterpriseOne** ERP system
- Demonstrates use of technology to maximize supply chain efficiency, integrate data into a common source



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Enterprise Systems

- **Enterprise systems**
 - Enterprise resource planning (ERP) systems
 - Suite of integrated software modules and a common central database
 - Collects data from many divisions of firm for use in nearly all of firm's internal business activities
 - Information entered in one process is immediately available for other processes



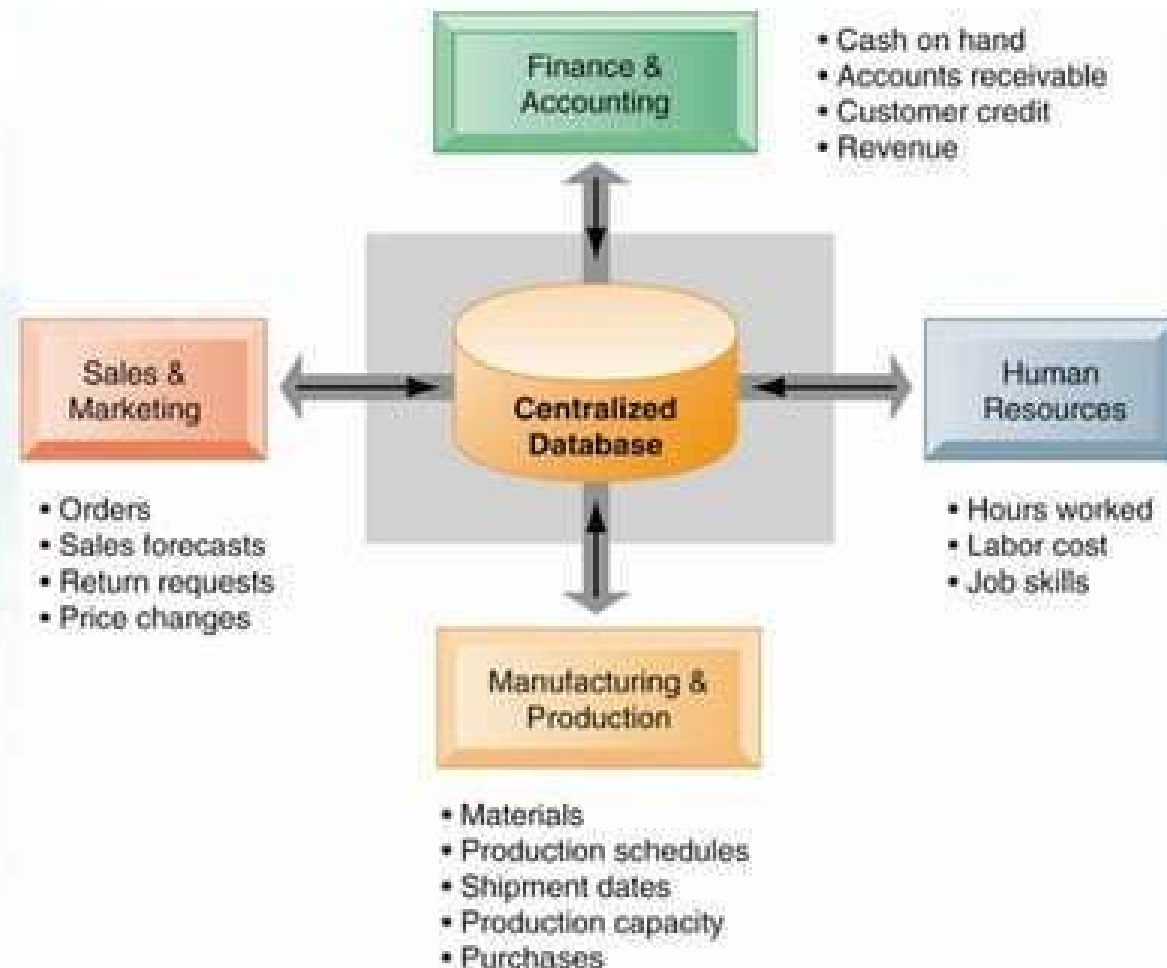
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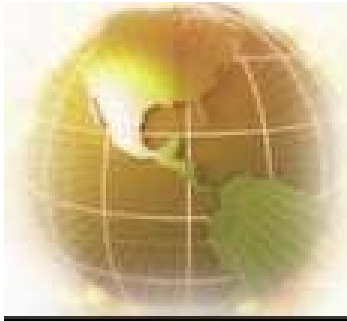
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How Enterprise Systems Work

Enterprise systems feature a set of integrated software modules and a central database that enables data to be shared by many different business processes and functional areas throughout the enterprise.

Figure 9-1



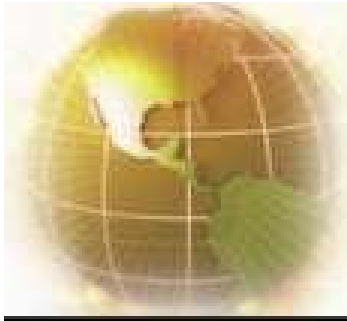


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Enterprise Systems

- **Enterprise software**
 - **Built around thousands of predefined business processes that reflect best practices**
 - Finance and accounting
 - Human resources
 - Manufacturing and production
 - Sales and marketing
 - **To implement, firms:**
 - Select functions of system they wish to use.
 - Map business processes to software processes.
 - Use software's configuration tables for customizing.

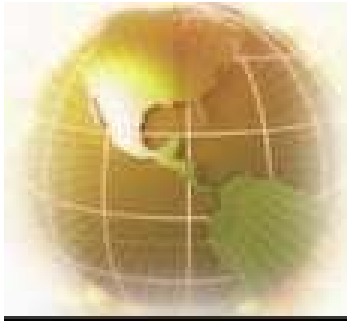


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Enterprise Systems

- **Business value of enterprise systems**
 - Increase operational efficiency
 - Provide firm-wide information to support decision making
 - Enable rapid responses to customer requests for information or products
 - Include analytical tools to evaluate overall organizational performance



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Supply Chain Management Systems

- **Supply chain**

- **Network of organizations and processes for:**
 - Procuring materials, transforming them into products, and distributing the products
- **Upstream supply chain:**
 - Firm's suppliers, suppliers' suppliers, processes for managing relationships with them
- **Downstream supply chain:**
 - Organizations and processes responsible for delivering products to customers
- **Internal supply chain**



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Nike's Supply Chain

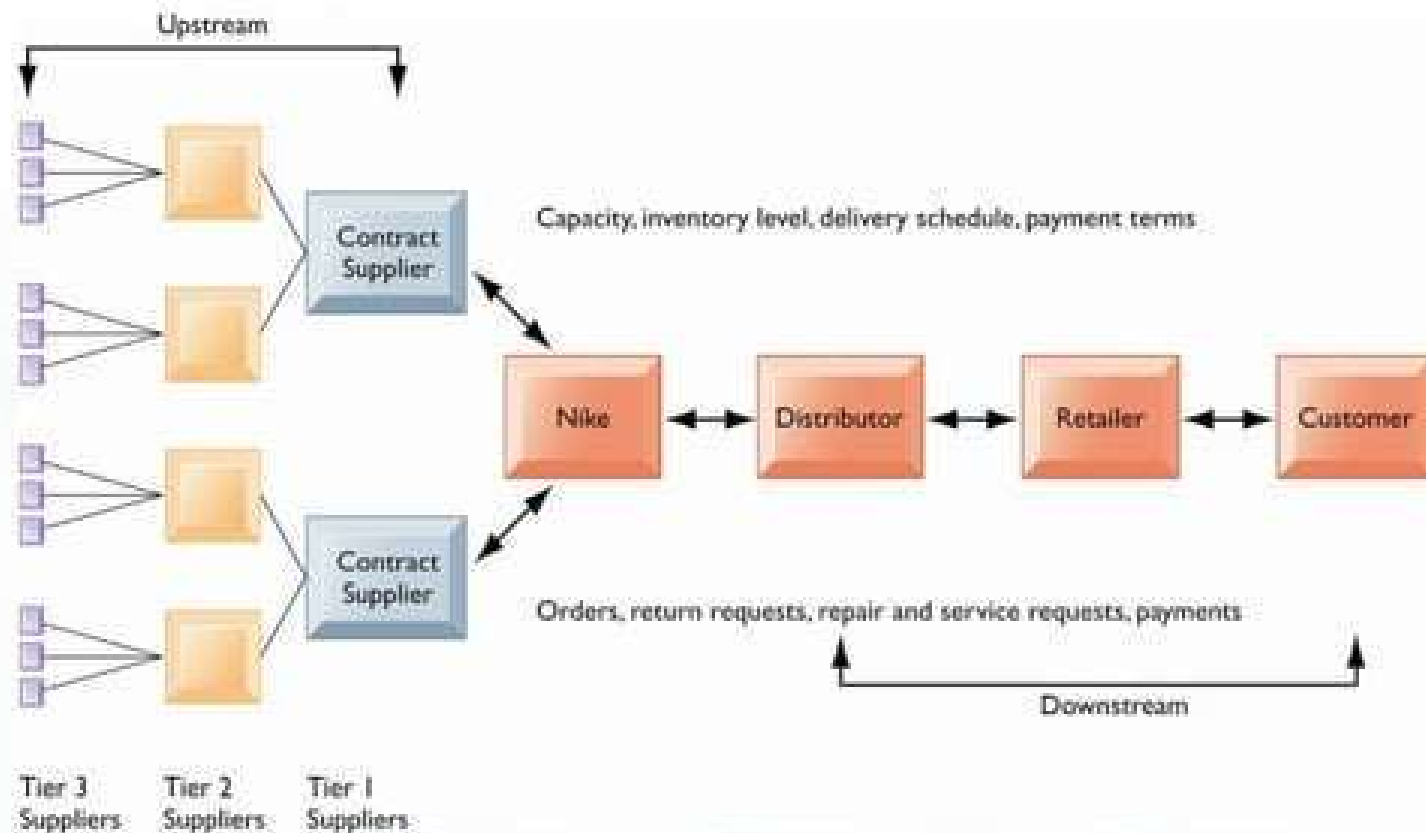
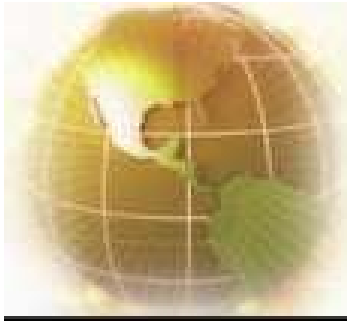


Figure 9-2

This figure illustrates the major entities in Nike's supply chain and the flow of information upstream and downstream to coordinate the activities involved in buying, making, and moving a product. Shown here is a simplified supply chain, with the upstream portion focusing only on the suppliers for sneakers and sneaker soles.



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Supply Chain Management Systems

- **Supply chain management**
 - **Inefficiencies cut into a company's operating costs**
 - Can waste up to 25 percent of operating expenses
 - **Just-in-time strategy:**
 - Components arrive as they are needed
 - Finished goods shipped after leaving assembly line
 - **Safety stock:** Buffer for lack of flexibility in supply chain
 - **Bullwhip effect**
 - Information about product demand gets distorted as it passes from one entity to next across supply chain



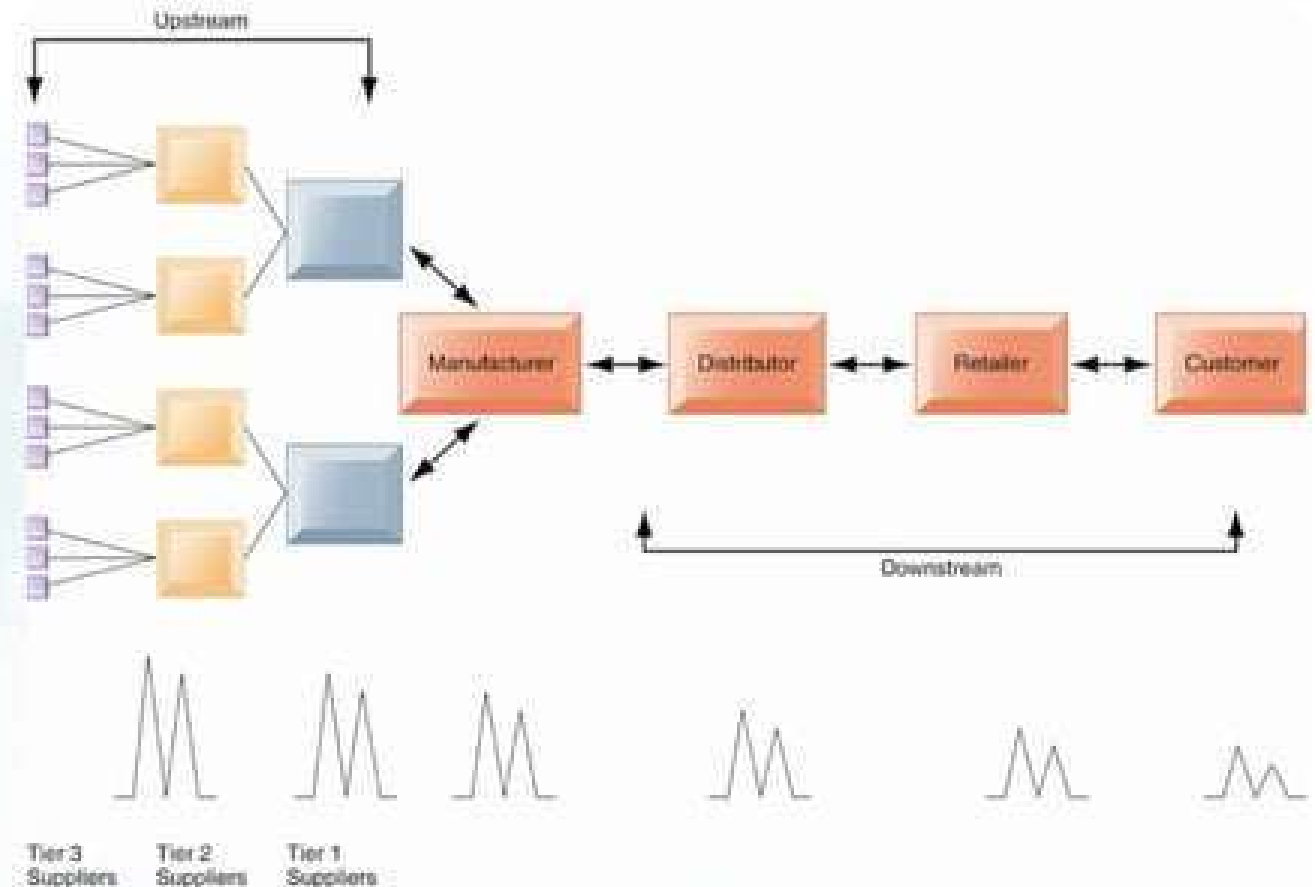
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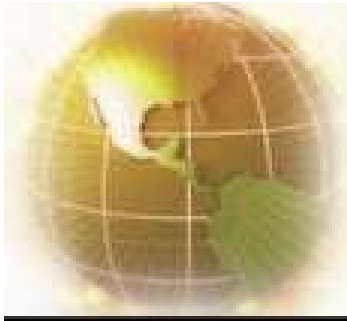
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The Bullwhip Effect

Inaccurate information can cause minor fluctuations in demand for a product to be amplified as one moves further back in the supply chain. Minor fluctuations in retail sales for a product can create excess inventory for distributors, manufacturers, and suppliers.

Figure 9.3



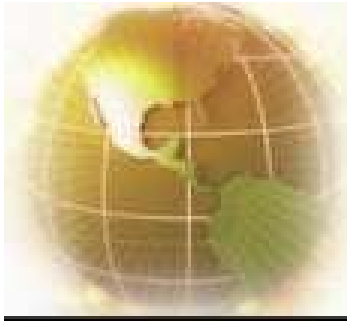


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Supply Chain Management Systems

- **Supply chain management software**
 - **Supply chain planning systems**
 - Model existing supply chain
 - Enable demand planning
 - Optimize sourcing, manufacturing plans
 - Establish inventory levels
 - Identify transportation modes
 - **Supply chain execution systems**
 - Manage flow of products through distribution centers and warehouses



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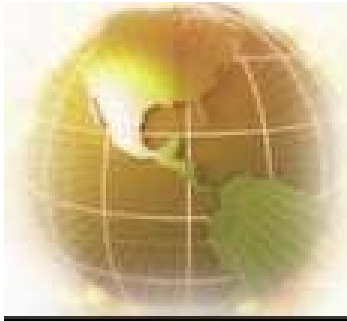
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Interactive Session: Management

DP World Takes Port Management to the Next Level with RFID

Read the Interactive Session and discuss the following questions

- How did Identec Solutions' RFID-based technology help DP World increase the efficiency and effectiveness of its customers' supply chains?
- Describe two improvements that resulted from implementing the Identec RFID-based solution.
- How does the concept of supply chain execution relate to this interactive session?
- What managerial, organizational, and technological challenges might DP World have faced in the early stages of the RFID project's deployment?

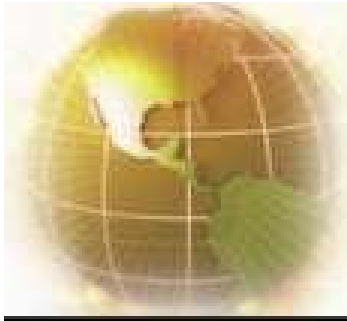


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Supply Chain Management Systems

- **Global supply chain issues**
 - Greater geographical distances
 - Greater time differences
 - Participants from different countries
 - Different performance standards
 - Different legal requirements
- **Internet helps manage global complexities**
 - Warehouse management
 - Transportation management
 - Logistics
 - Outsourcing



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Supply Chain Management Systems

- **Supply chain management**
 - **Push-based model (build-to-stock)**
 - Earlier SCM systems
 - Schedules based on best guesses of demand
 - **Pull-based model (demand-driven)**
 - Web-based
 - Customer orders trigger events in supply chain
 - **Internet enables move from *sequential* supply chains to *concurrent* supply chains**
 - Complex networks of suppliers can adjust immediately



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Push- Versus Pull-Based Supply Chain Models

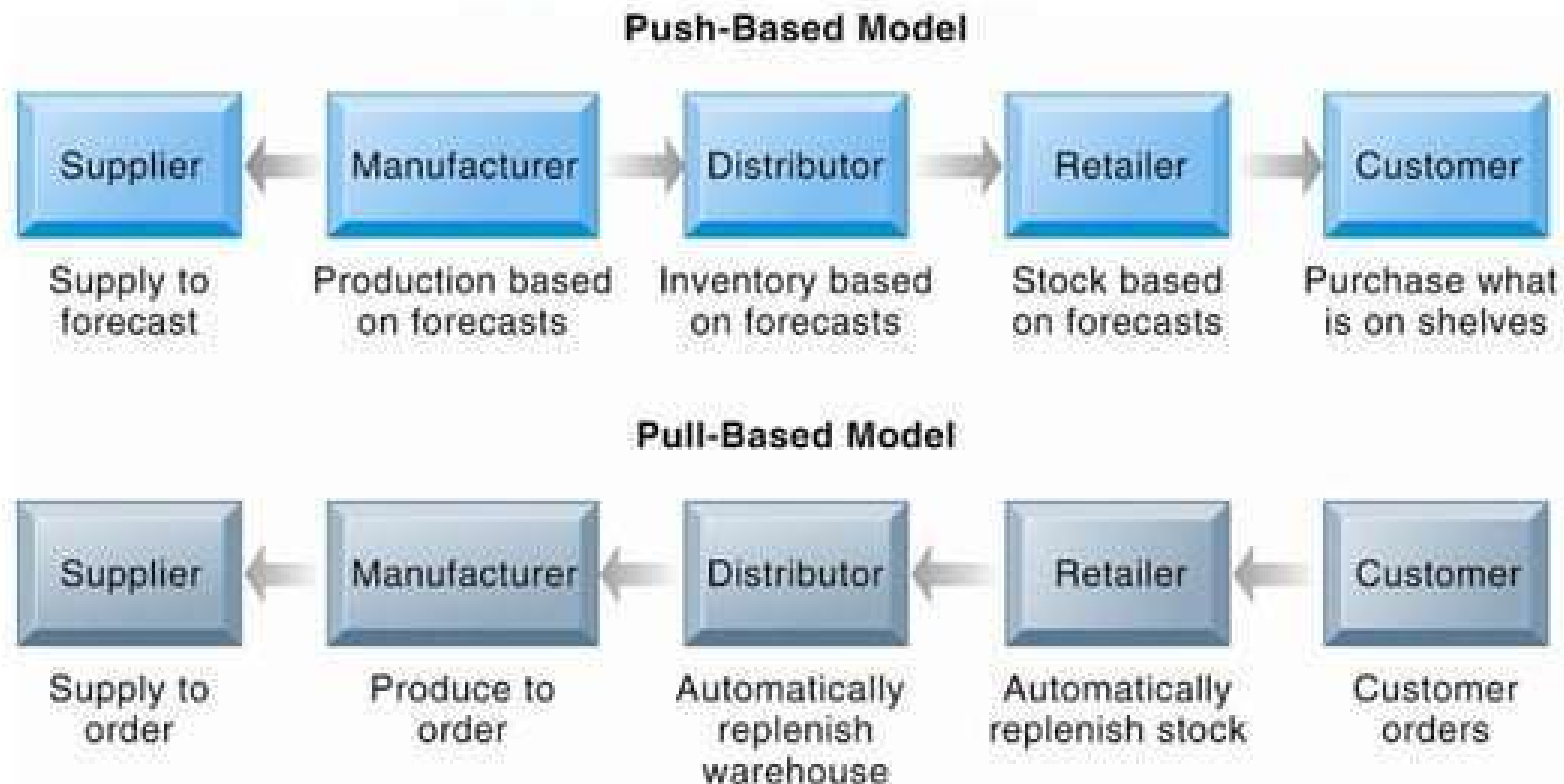


Figure 9-4 The difference between push- and pull-based models is summarized by the slogan “Make what we sell, not sell what we make.”



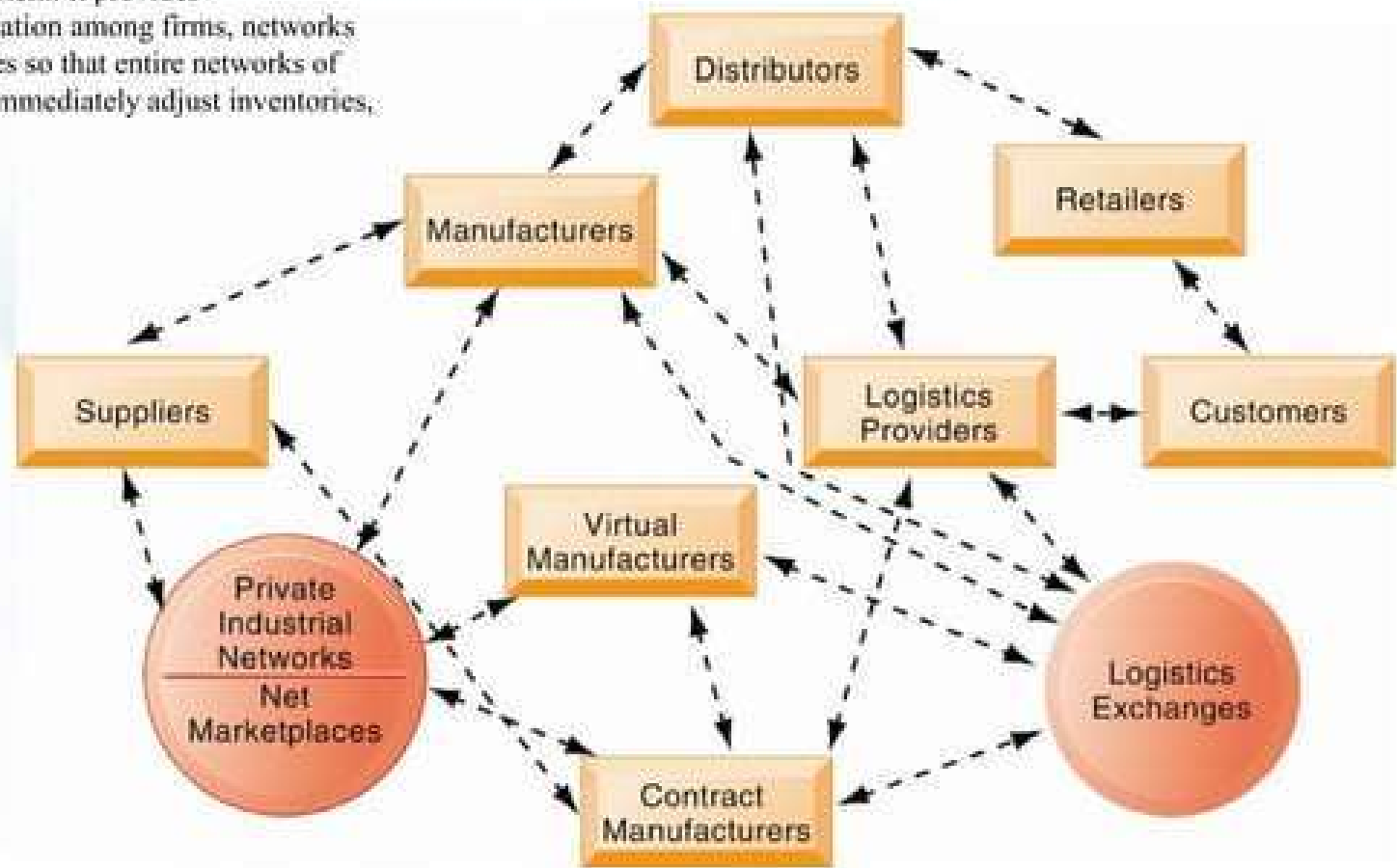
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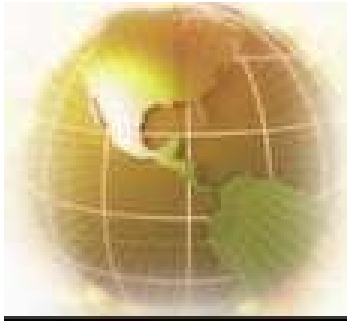
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The Emerging Internet-Driven Supply Chain

The emerging Internet-driven supply chain operates like a digital logistics nervous system. It provides multidirectional communication among firms, networks of firms, and e-marketplaces so that entire networks of supply chain partners can immediately adjust inventories, orders, and capacities.

Figure 9-5





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Supply Chain Management Systems

- **Business value of SCM systems**
 - Match supply to demand; reduce inventory levels
 - Improve delivery service
 - Speed product time to market
 - Use assets more effectively
 - Reduced supply chain costs lead to increased profitability
 - Total supply chain costs can be 75 percent of operating budget
 - Increase sales



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Customer Relationship Management Systems

- **Customer relationship management (CRM)**
 - Knowing the customer
 - In large businesses, too many customers and too many ways customers interact with firm
- **CRM systems:**
 - Capture and integrate customer data from all over the organization
 - Consolidate and analyze customer data
 - Distribute customer information to various systems and customer touch points across enterprise
 - Provide single enterprise view of customers



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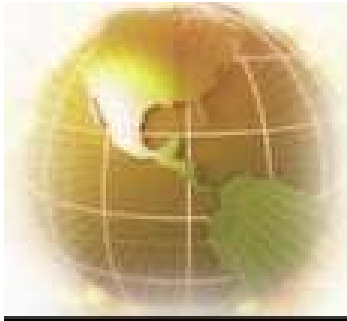
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Customer Relationship Management (CRM)

CRM systems examine customers from a multifaceted perspective. These systems use a set of integrated applications to address all aspects of the customer relationship, including customer service, sales, and marketing.

Figure 9-6



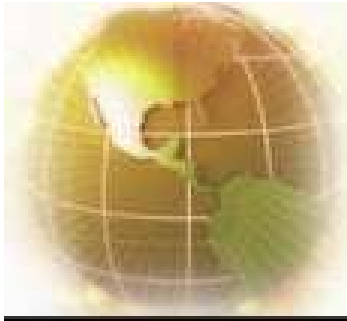


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Customer Relationship Management Systems

- **CRM software**
 - Packages range from niche tools to large-scale enterprise applications.
 - More comprehensive have modules for:
 - Partner relationship management (PRM)
 - Integrating lead generation, pricing, promotions, order configurations, and availability
 - Tools to assess partners' performances
 - Employee relationship management (ERM)
 - Setting objectives, employee performance management, performance-based compensation, employee training



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Customer Relationship Management Systems

- CRM software (cont.)
 - CRM packages typically include tools for:
 - Sales force automation (SFA)
 - Sales prospect and contact information, sales quote generation capabilities
 - Customer service
 - Assigning and managing customer service requests, Web-based self-service capabilities
 - Marketing
 - Capturing prospect and customer data, scheduling and tracking direct-marketing mailings or e-mail, cross-selling



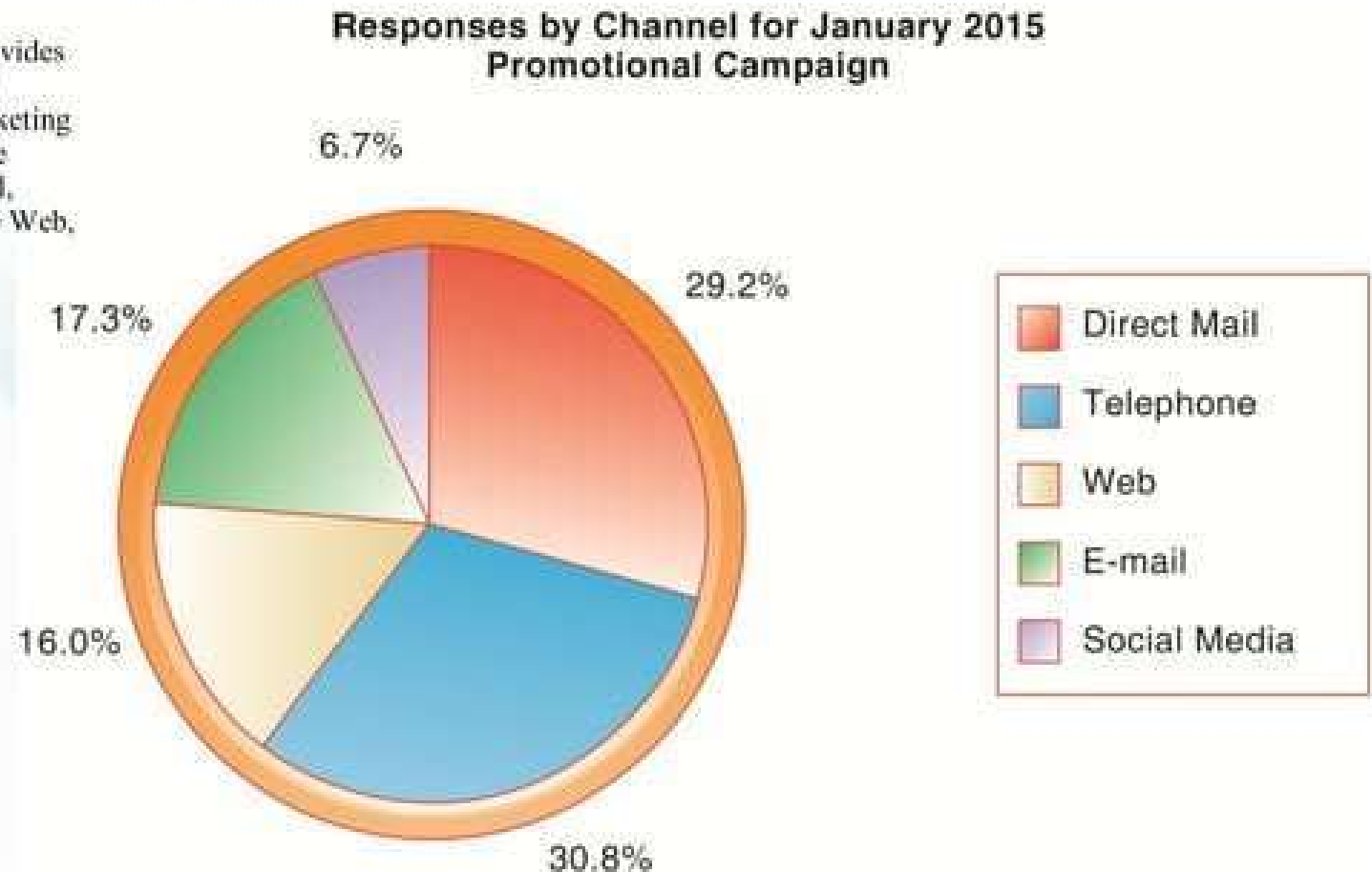
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How CRM Systems Support Marketing

Customer relationship management software provides a single point for users to manage and evaluate marketing campaigns across multiple channels, including e-mail, direct mail, telephone, the Web, and wireless messages.

Figure 9-7





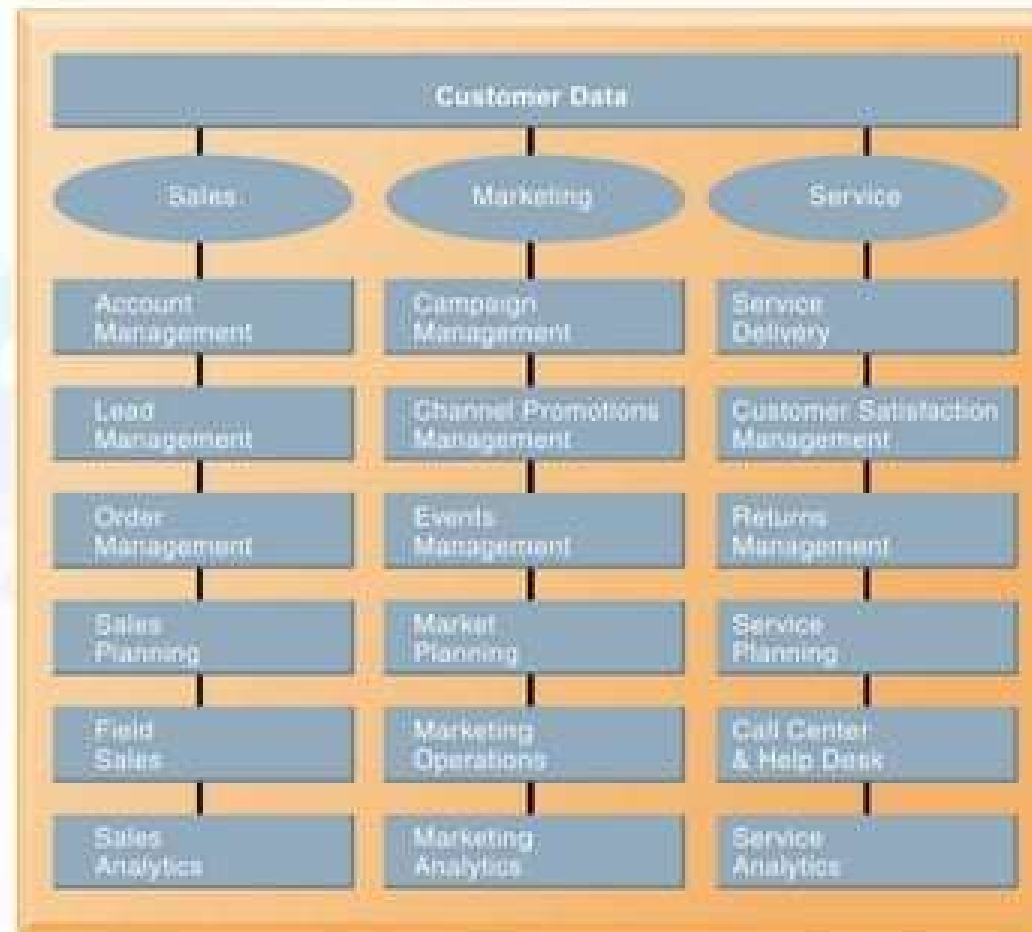
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CRM Software Capabilities

The major CRM software products support business processes in sales, service, and marketing, integrating customer information from many different sources. Included are support for both the operational and analytical aspects of CRM.

Figure 9-8





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Customer Loyalty Management Process Map

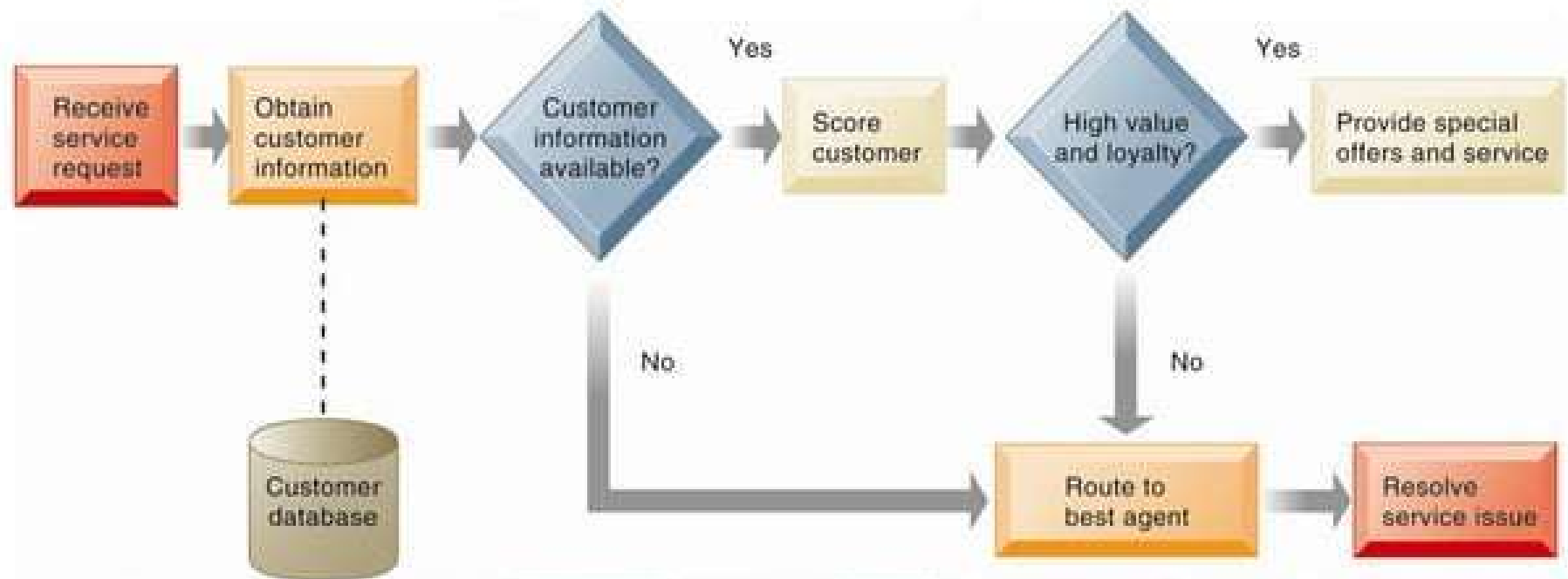


Figure 9-9

This process map shows how a best practice for promoting customer loyalty through customer service would be modeled by customer relationship management software. The CRM software helps firms identify high-value customers for preferential treatment.



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Customer Relationship Management Systems

- **Operational CRM:**
 - Customer-facing applications such as sales force automation, call center and customer service support, and marketing automation
- **Analytical CRM:**
 - Based on data warehouses populated by operational CRM systems and customer touch points
 - Analyzes customer data (OLAP, data mining, etc.)
 - Customer lifetime value (CLTV)



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Analytical CRM Data Warehouse

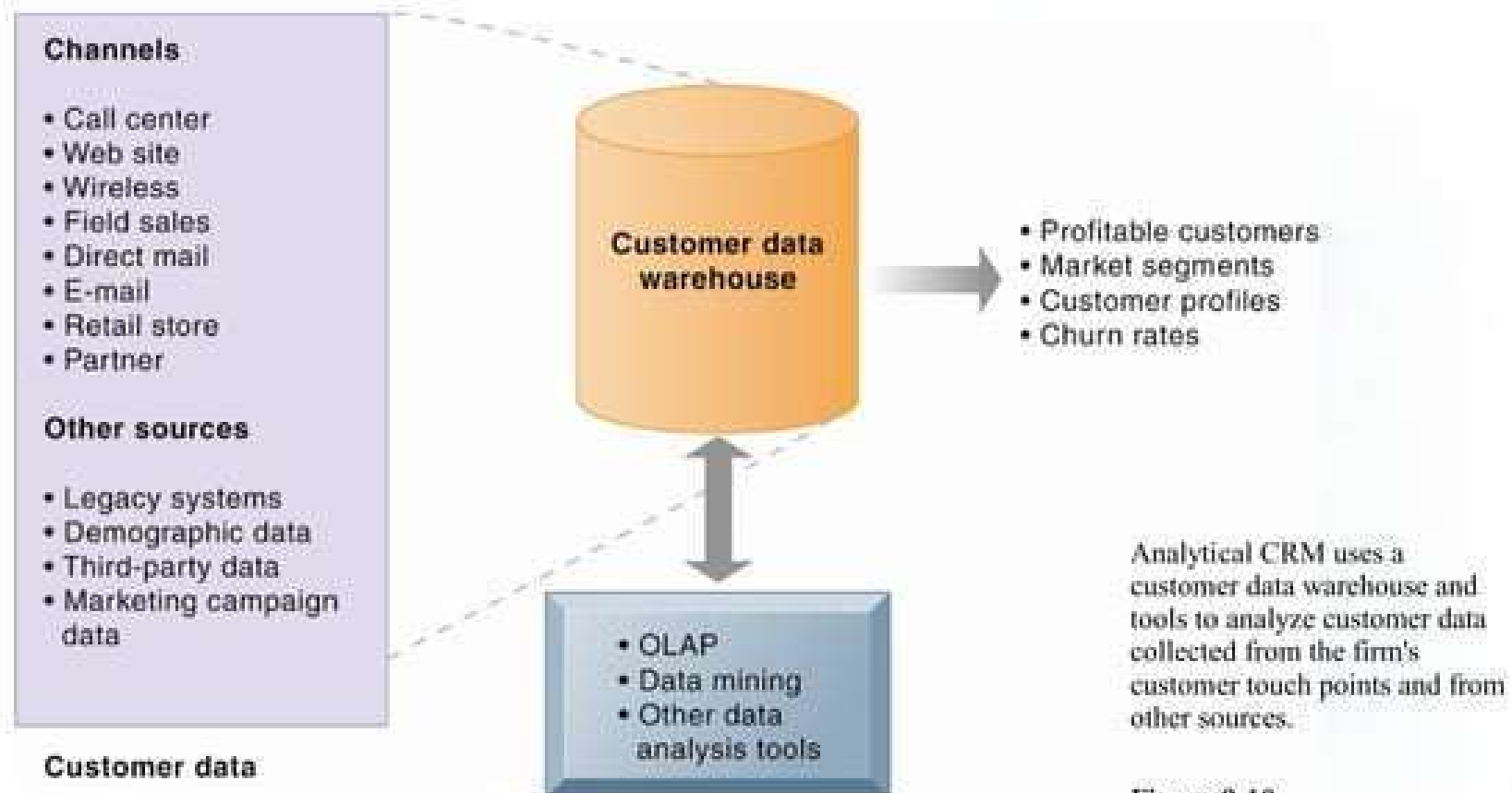


Figure 9-10



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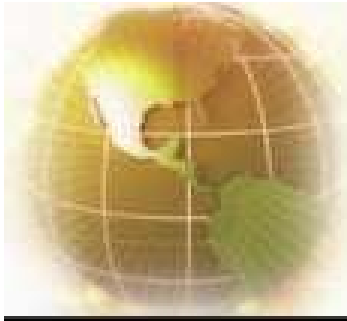
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Interactive Session: Organizations

Customer Relationship Management Heads to the Cloud

Read the Interactive Session and discuss the following questions

- What types of companies are most likely to adopt cloud-based CRM software services? Why? What companies might not be well-suited for this type of software?
- What are the advantages and disadvantages of using cloud-based enterprise applications?
- What management, organization, and technology issues should be addressed in deciding whether to use a conventional CRM system versus a cloud-based version?



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Customer Relationship Management Systems

- **Business value of CRM systems**
 - Increased customer satisfaction
 - Reduced direct-marketing costs
 - More effective marketing
 - Lower costs for customer acquisition/retention
 - Increased sales revenue
- **Churn rate:**
 - Number of customers who stop using or purchasing products or services from a company
 - Indicator of growth or decline of firm's customer base



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Enterprise Applications: Challenges and Opportunities

- **Enterprise application challenges**
 - **Highly expensive to purchase and implement enterprise applications**
 - Average cost of ERP project in 2014—\$2.8 million
 - **Technology changes**
 - **Business process changes**
 - **Organizational learning, changes**
 - **Switching costs, dependence on software vendors**
 - Integrating cloud applications
 - **Data standardization, management, cleansing**



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Enterprise Applications: Challenges and Opportunities

- **Next-generation enterprise applications**
 - **Enterprise solutions/suites:**
 - Make applications more flexible, Web-enabled, integrated with other systems
 - **SOA standards**
 - **Open-source applications**
 - **On-demand solutions**
 - **Cloud-based versions**
 - **Functionality for mobile platform**



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Enterprise Applications: Challenges and Opportunities

- Next-generation enterprise applications (cont.)
 - **Social CRM**
 - Incorporating social networking technologies
 - Company social networks
 - Monitor social media activity; social media analytics
 - Manage social and Web-based campaigns
 - **Business intelligence**
 - Inclusion of BI with enterprise applications
 - Flexible reporting, ad hoc analysis, “what-if” scenarios, digital dashboards, data visualization