



LISBON
**SCHOOL OF
ECONOMICS &
MANAGEMENT**
UNIVERSIDADE DE LISBOA

Academic Year: 2020/2021

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KEY SYSTEMS APPLICATIONS



Learning Goals

Students will be able to:

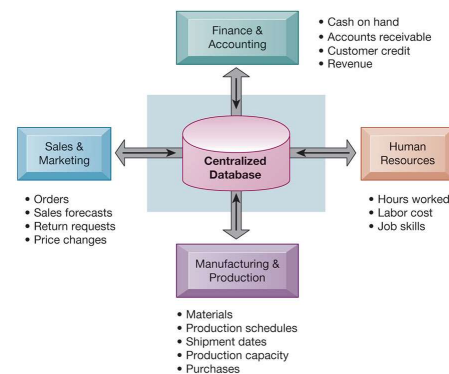
- Describe and analyze IT in the context of society and organizations
- **Propose, select, choose and build solutions of IT infrastructure and IT applications**
- Reflect and evaluate IT management and development



9. Achieving Operational Excellence and Customer Intimacy: Enterprise Applications

1. How do enterprise systems help businesses achieve operational excellence?

- 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



9. Achieving Operational Excellence and Customer Intimacy: Enterprise Applications

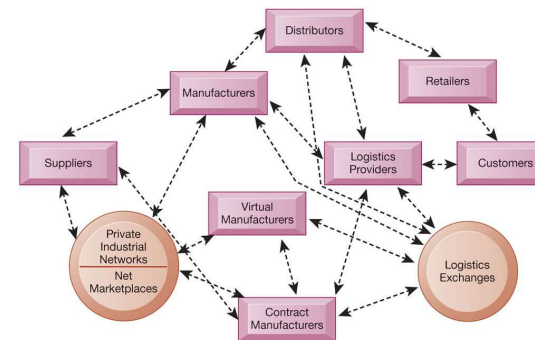
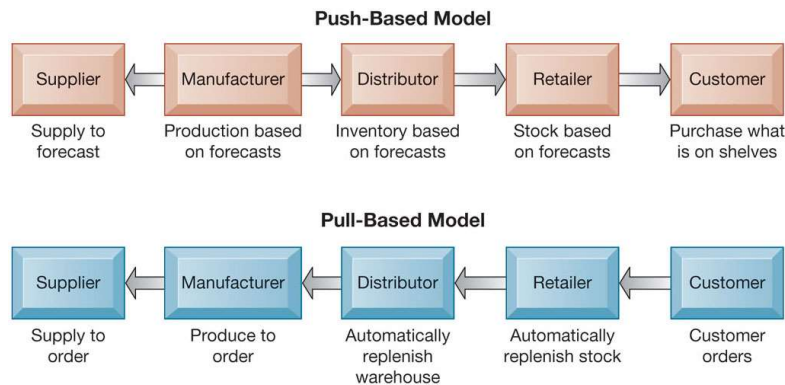
2. How do supply chain management systems coordinate planning, production, and logistics with suppliers?

- 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

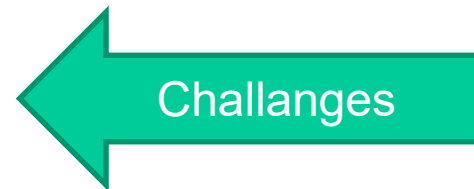


9. Achieving Operational Excellence and Customer Intimacy: Enterprise Applications

2. How do supply chain management systems coordinate planning, production, and logistics with suppliers?

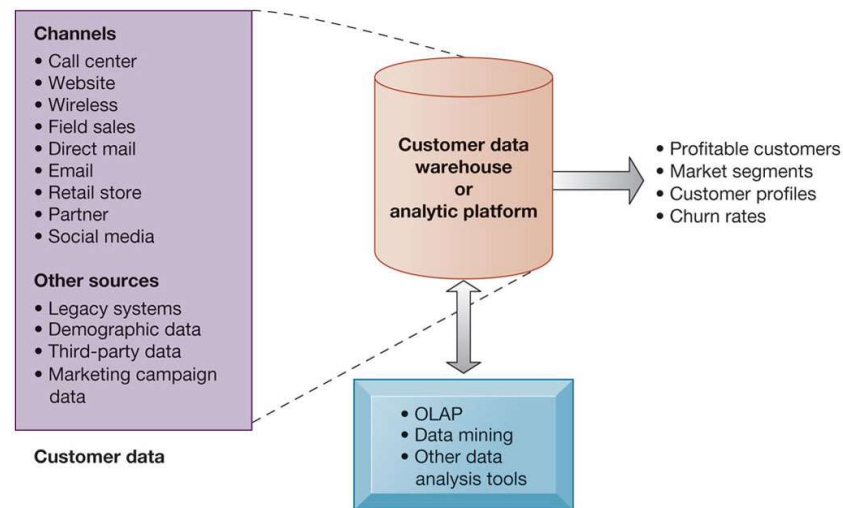


- Match supply to demand
- Reduce inventory levels
- Improve delivery service
- Speed product time to market
- Use assets more effectively
 - Total supply chain costs can be 75 percent of operating budget
- Increase sales



9. Achieving Operational Excellence and Customer Intimacy: Enterprise Applications

3. How do customer relationship management systems help firms achieve customer intimacy?



9. Achieving Operational Excellence and Customer Intimacy: Enterprise Applications

4. What are the challenges that enterprise applications pose, and how are enterprise applications taking advantage of new technologies?

- Expensive to purchase and implement enterprise applications
 - Multi-million dollar projects in 2018
 - Long development times
- Technology changes
- Business process changes
- Organizational learning, changes
- Switching costs, dependence on software vendors
- Data standardization, management, cleansing



9. Achieving Operational Excellence and Customer Intimacy: Enterprise Applications

4. What are the challenges that enterprise applications pose, and how are enterprise applications taking advantage of new technologies?

- 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
- 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



10. E-commerce: Digital Markets, Digital Goods

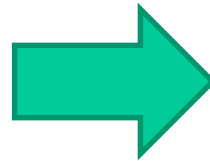
1. What are the unique features of e-commerce, digital markets, and digital goods?
 - Internet and digital markets have changed the way companies conduct business
 - Information asymmetry reduced
 - Menu costs, search and transaction costs reduced
 - Dynamic pricing enabled
 - Switching costs
 - Delayed gratification
 - Disintermediation



10. E-commerce: Digital Markets, Digital Goods

2. What are the principal e-commerce business and revenue models?

- Portal
- E-tailer
- Content provider
- Transaction broker
- Market creator
- Service provider
- Community provider



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Advertising
Sales
Subscription
Free/Freemium
Transaction fee
Affiliate

10. E-commerce: Digital Markets, Digital Goods

3. How has e-commerce transformed marketing?

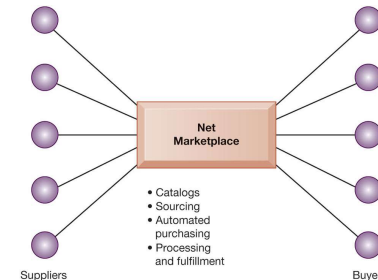
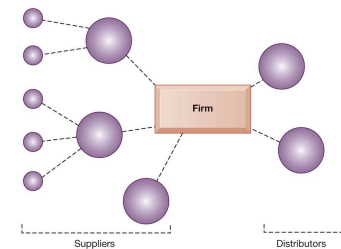
- Internet provides new ways to identify and communicate with customers
- Long tail marketing
- Internet advertising formats
- Behavioral targeting
 - Tracking online behavior of individuals
- Programmatic ad buying
- Native advertising



10. E-commerce: Digital Markets, Digital Goods

4. How has e-commerce affected business-to-business transactions?

- U.S. B2B trade in 2019 is \$13.5 trillion
 - U.S. B2B e-commerce in 2018 is \$6.2 trillion
- Internet and networking helps automate procurement
- Variety of Internet-enabled technologies used in B2B
 - Electronic data interchange (EDI)
 - Private industrial networks (private exchanges)
 - Net marketplaces
 - Exchanges



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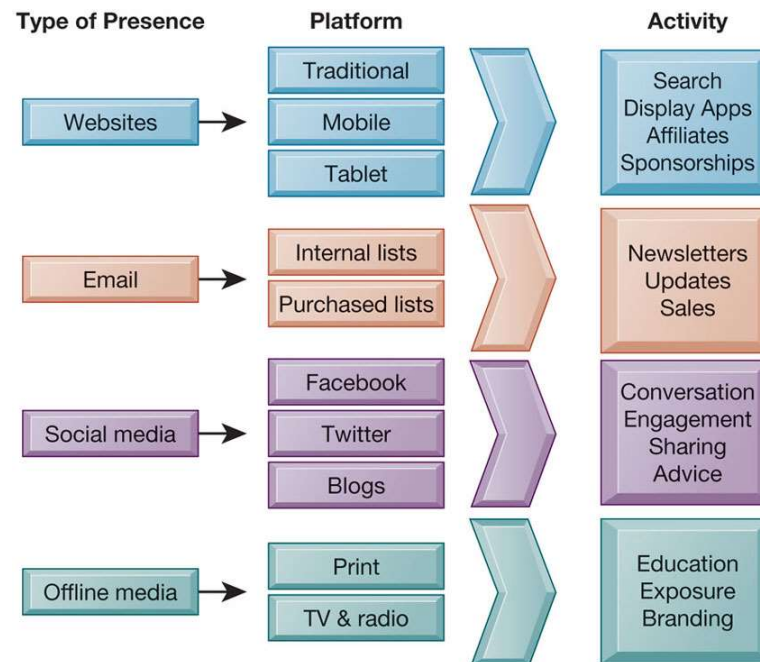
5. What is the role of m-commerce in business, and what are the most important m-commerce applications

- M-commerce in 2017 is 35 percent of all e-commerce
- Fastest growing form of e-commerce
 - Growing at 20 percent or more per year
- Main areas of growth
 - Mass market retailing (Amazon, eBay, etc.)
 - Sales of digital content (music, T V, etc.)
 - In-app sales to mobile devices



10. E-commerce: Digital Markets, Digital Goods

6. What issues must be addressed when building an e-commerce presence?



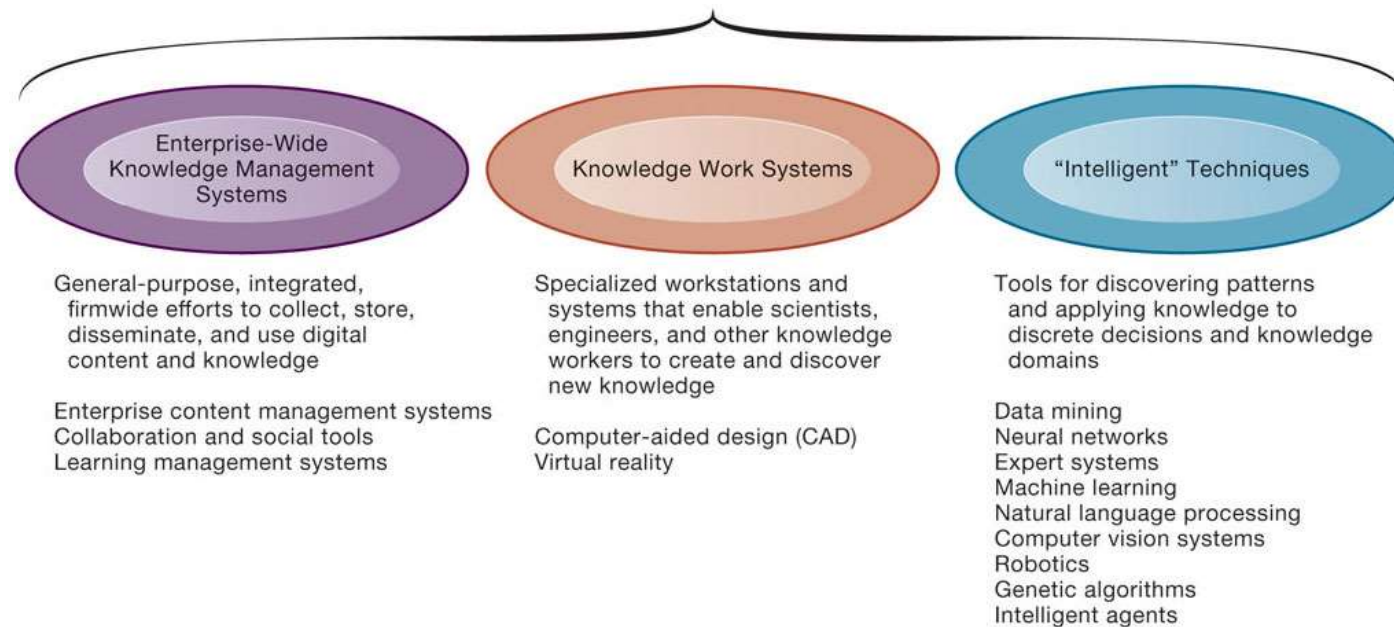
11. Managing Knowledge and Artificial Intelligence

1. What is the role of knowledge management systems in business?
 - Knowledge management systems among fastest growing areas of software investment
 - Information economy
 - 37 percent U.S. labor force: knowledge and information workers
 - 55 percent U.S. GDP from knowledge and information sectors
 - Substantial part of a firm's stock market value is related to intangible assets: knowledge, brands, reputations, and unique business processes
 - Well-executed knowledge-based projects can produce extraordinary ROI



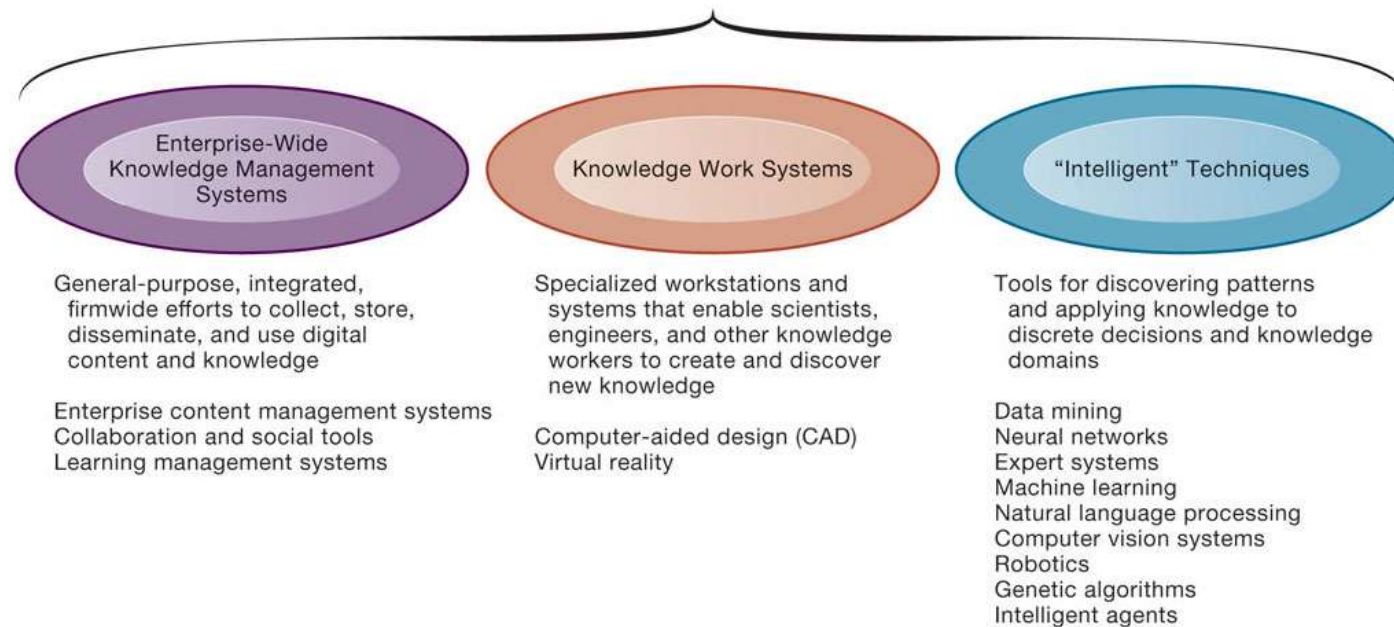
11. Managing Knowledge and Artificial Intelligence

2. What types of systems are used for enterprise-wide knowledge management, and how do they provide value for businesses?



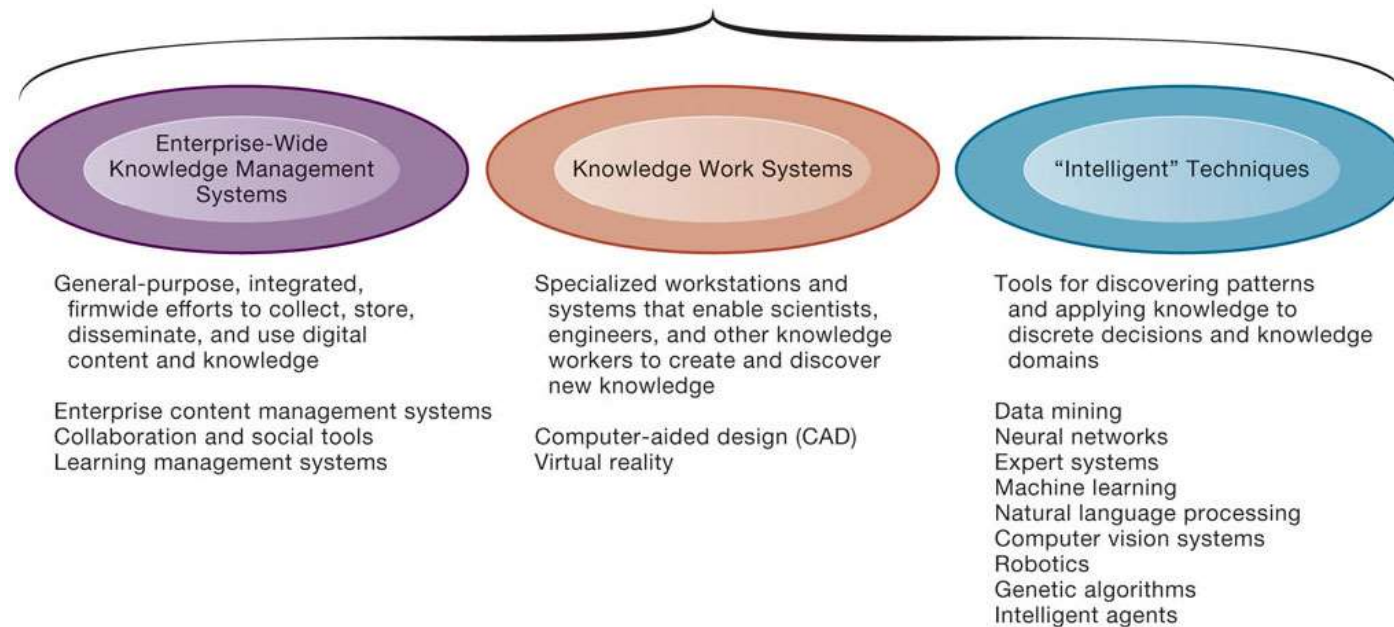
11. Managing Knowledge and Artificial Intelligence

3. What are the major types of knowledge work systems, and how do they provide value for firms?



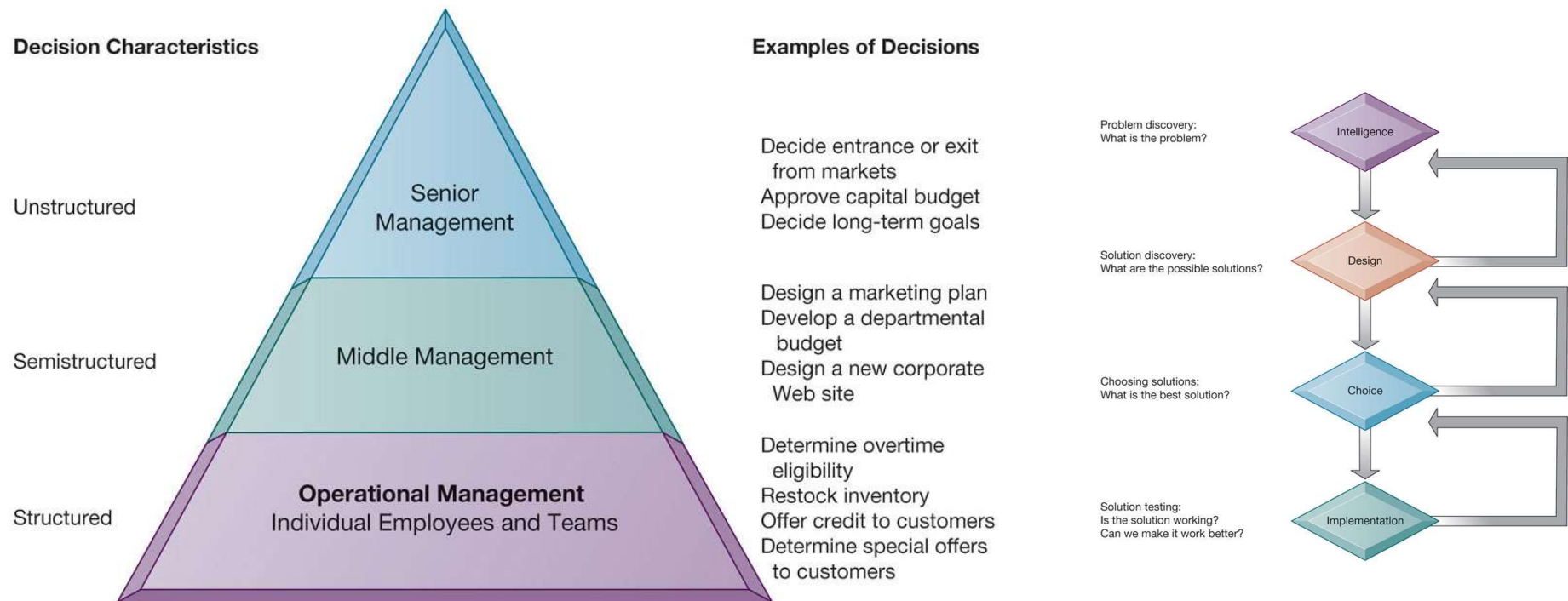
11. Managing Knowledge and Artificial Intelligence

4. What are the business benefits of using intelligent techniques for knowledge management?



12. Enhancing Decision Making

1. What are the different types of decisions, and how does the decision making process work?



12. Enhancing Decision Making

2. How do information systems support the activities of managers and management decision making?

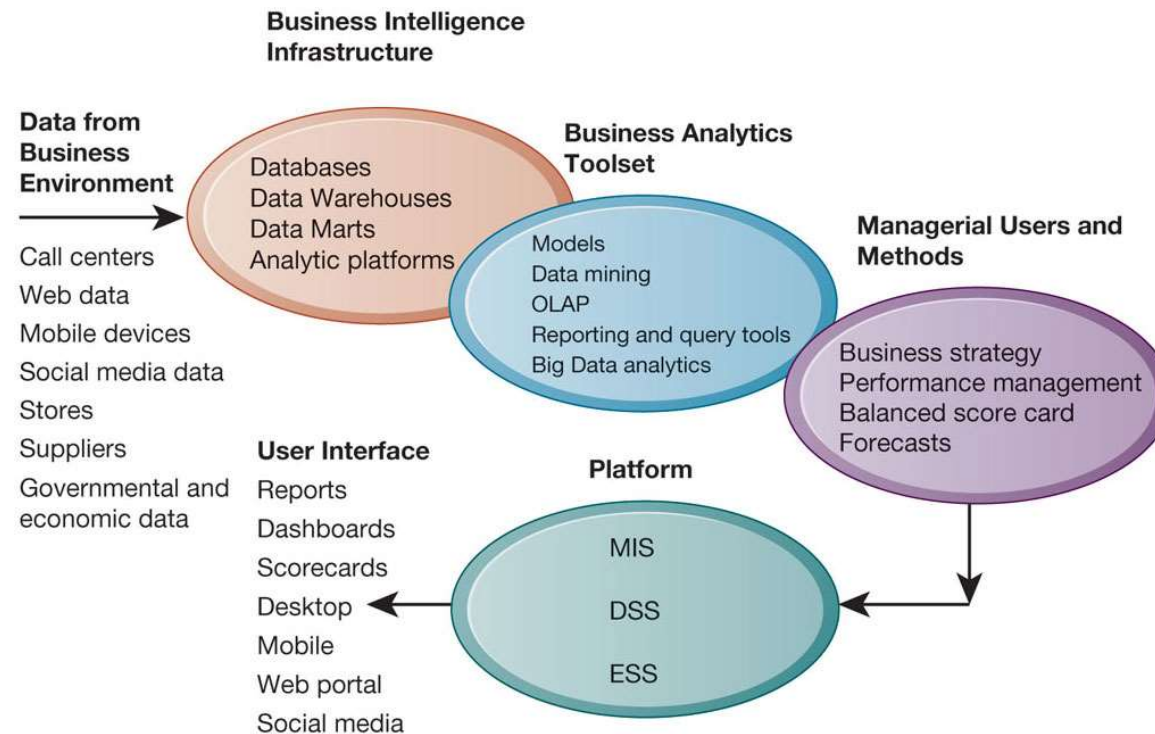
Three main reasons why investments in IT do not always produce positive results

- Information quality
 - High-quality decisions require high-quality information
- Management filters
 - Managers have selective attention and have variety of biases that reject information that does not conform to prior conceptions
- Organizational inertia and politics
 - Strong forces within organizations resist making decisions calling for major change



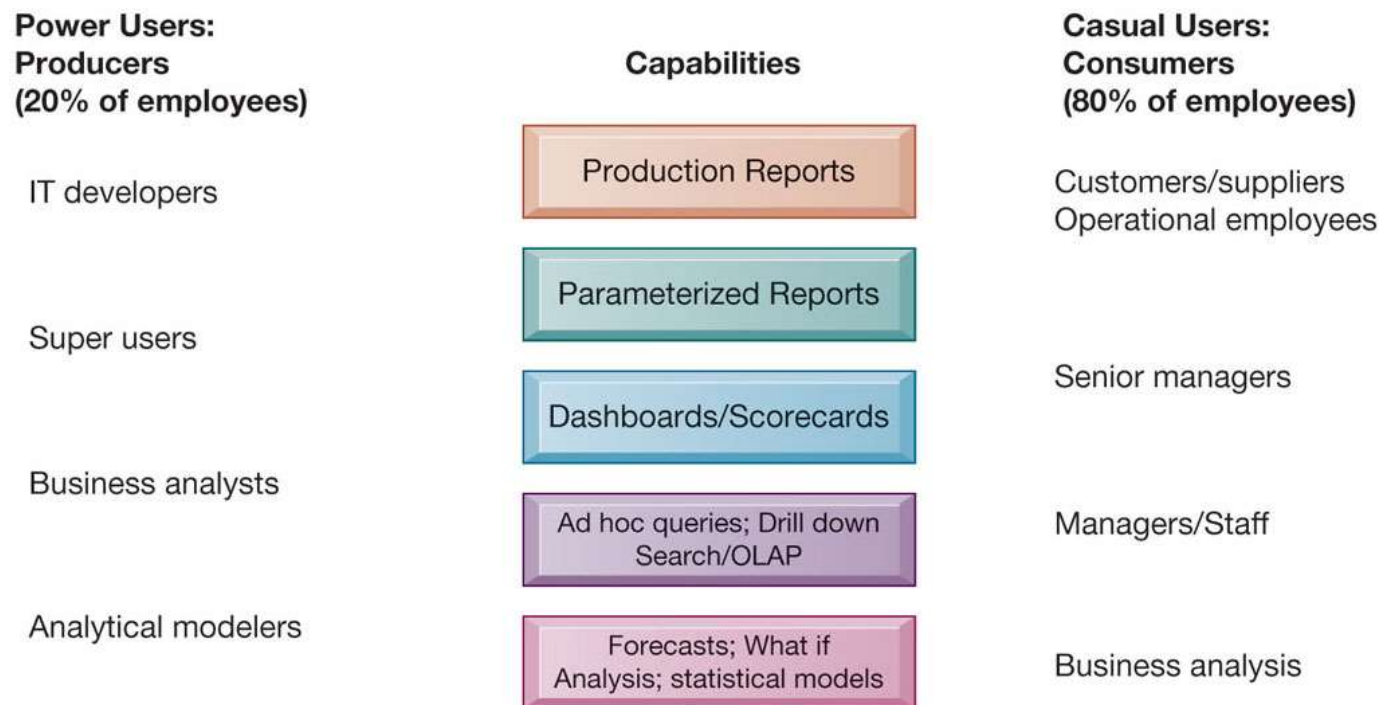
12. Enhancing Decision Making

3. How do business intelligence and business analytics support decision making?



12. Enhancing Decision Making

4. How do different decision-making constituencies in an organization use business intelligence, and what is the role of information systems in helping people working in a group make decisions more efficiently?



Next Session

- IT in Business and Society
- IT Infrastructure
- Key Systems Applications
- **Build and Manage Systems**

