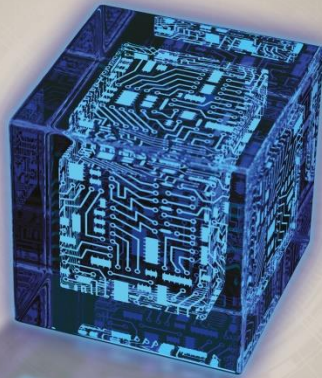


BIDGOLI

MIS⁹

MANAGEMENT INFORMATION SYSTEMS



NOW WITH  MINDTAP
From Cengage

9

Global Information Systems

Learning Objectives (1 of 2)

- Discuss the reasons for globalization and for using global information systems, including e-business and Internet growth
- Describe global information systems and their requirements and components

Learning Objectives (2 of 2)

- Explain the types of organizational structures used with global information systems
- Discuss obstacles to using global information systems

Why Go Global? (1 of 3)

- Global economy
 - Creating increased customer demand for integrated worldwide services
- Expansion of global markets
 - Major factor in developing global information systems whose success requires understanding:
 - Customs and laws
 - Technological issues
 - Local business needs and practices

Why Go Global? (2 of 3)

- Increased importance of global products in international marketing efforts
 - Operations are often regionalized; advantages available in certain regions
- Important factor in purchasing and the supply chain
 - Worldwide purchasing provides suppliers the incentive to consider domestic and foreign competition

Why Go Global? (3 of 3)

- Large global organizations can reduce costs in purchasing, manufacturing, and distribution
 - Access to cheaper labor
 - Ability to sell products and services locally and internationally

E-Business: A Driving Force (1 of 2)

- Major factor in the widespread use of global information systems
 - Revenue-generating transactions; focus on buying and selling goods and services
- Adds flexibility to existing advantages and structures of traditional business
 - Creates new opportunities for conducting commercial activities

E-Business: A Driving Force (2 of 2)

- Enables consumers to indulge in comparison shopping
 - New opportunities for intermediaries
- Provides cost benefit to small companies
 - Companies can replace internal networks with the Internet

Growth of the Internet

- Part of daily life in most parts of the world
 - Rapidly growing; requires global businesses to create Web sites that appeal to the global customer
 - Localization of a Web site: creating separate Web sites for each country in which the company does business

The Rise of Non-English Speakers on the Internet

- Top ten languages represent about 84 percent of the world's Internet users
 - English, Chinese, Spanish, Arabic, Portuguese, Japanese, Russian, Malay, French, and German
- Growing diversity of language on the Internet
 - Offers great opportunities and some challenges for global companies

Mobile Computing and Globalization

- Mobile apps play a major role in globalization by offering basic social services and commerce
 - M-Pesa
 - SoukTel
 - Esoko
 - Frogtek
 - Ver Se' Innovation

Global Information Systems: An Overview (1 of 2)

- Global Information System (GIS): information system that works across national borders
 - Facilitates communication between headquarters and subsidiaries
 - Incorporates technologies and applications found in a typical information system
 - Gathers, stores, manipulates, and transmits data across cultural and geographic boundaries

Global Information Systems: An Overview (2 of 2)

- Enables international companies to:
 - Increases control over their subsidiaries
 - Better coordinates activities and access new global markets
- Defined along the dimensions of control and coordination
 - Dimensions can be used in combinations

Components of a Global Information System (1 of 3)

- Global database
 - Challenges: designing and implementing a global database and currency conversion
- Information-sharing technologies
 - Companies can outsource or customize technologies

Components of a Global Information System (2 of 3)

- Responsibilities of information system managers
 - Determine the best communication media to meet global performance and traffic needs
 - Choose the best transmission technology for the global network's needs
 - Consider the company's objectives when determining the network architecture
 - Decide on the type of information-sharing technology to be used

Components of a Global Information System (3 of 3)

- Standardized software and hardware are ideal but not always feasible
 - Using the same software in other countries is complicated because of differences
 - Language and business practices
 - Transborder data flow (TDF): restricts what type of data can be captured and transmitted

Requirements of Global Information Systems (1 of 2)

- Multinational corporation (MNC)
 - Organization with assets and operations in at least one country other than its home country
 - Delivers products and services across national borders
 - Centrally managed from its headquarters
 - Global risks of operating an MNC: political, foreign exchange, and market risks

Requirements of Global Information Systems (2 of 2)

- GIS classifications
 - Operational support: involves day-to-day activities
 - Tactical support: concentrates on medium-range activities that move toward long-term goals
 - Strategic support: includes broad and long-term goals

Implementation of Global Information Systems (1 of 2)

- Implementing a GIS can be difficult
 - Differences in culture, politics, social and economic infrastructures, and business methods
 - Varying international policies, which affect communication and standardization processes

Implementation of Global Information Systems (2 of 2)

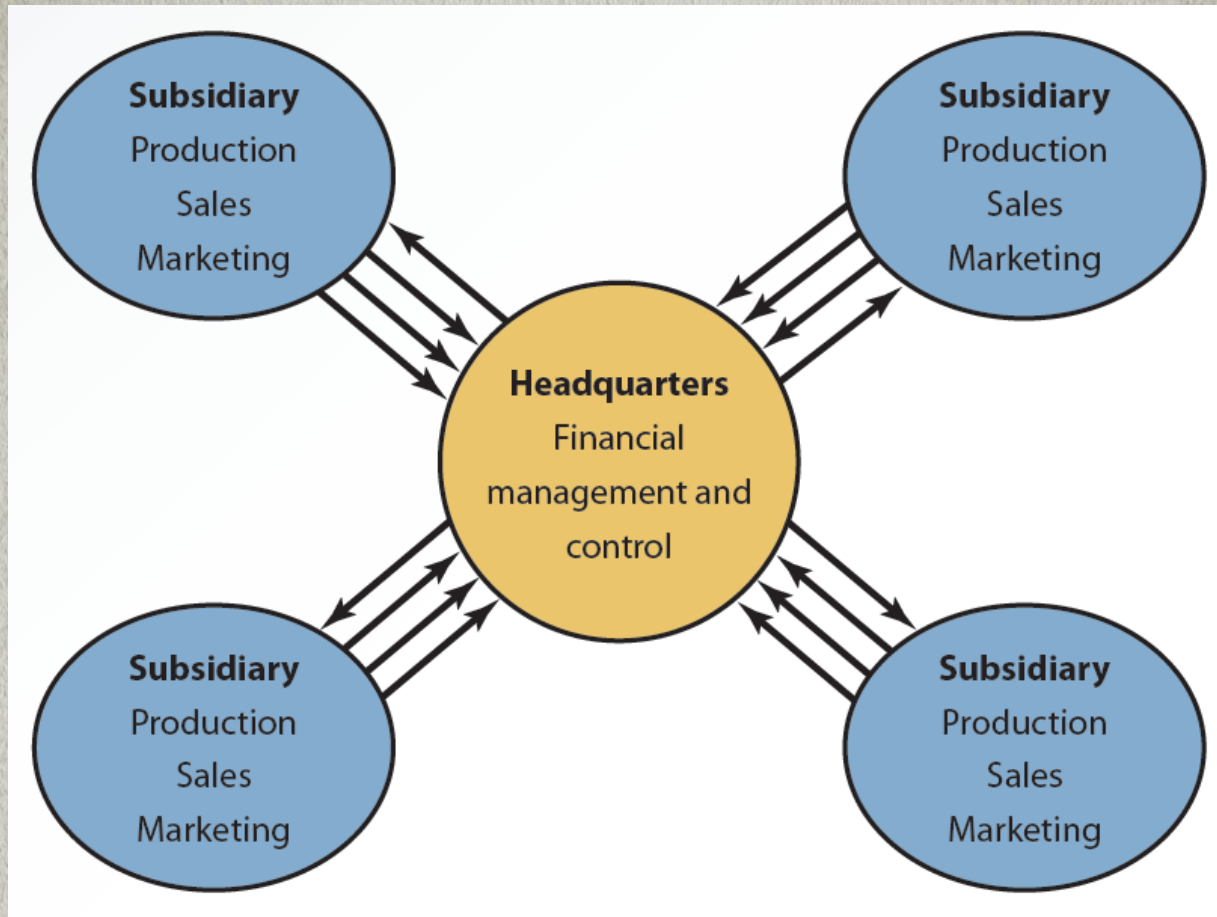
- Issues to be addressed before implementing a GIS
 - Identify business opportunities in the global marketplace
 - Justify an organization's investment in a GIS
 - Screen personnel needs for technical and business expertise
 - Carefully coordinate migration to GIS

Organizational Structures and Global Information Systems

- Organization's structure determines the architecture of its GIS
 - Types of organizations that conduct international business
 - Multinational organizations
 - Global organizations
 - International organizations
 - Transnational organizations

Multinational Structure (1 of 2)

- Production, sales, and marketing are decentralized
 - Financial management is the parent company's responsibility
- Advantage
 - Reduces the need for communication between subsidiaries and headquarters
 - Enables subsidiaries to make decisions on their own

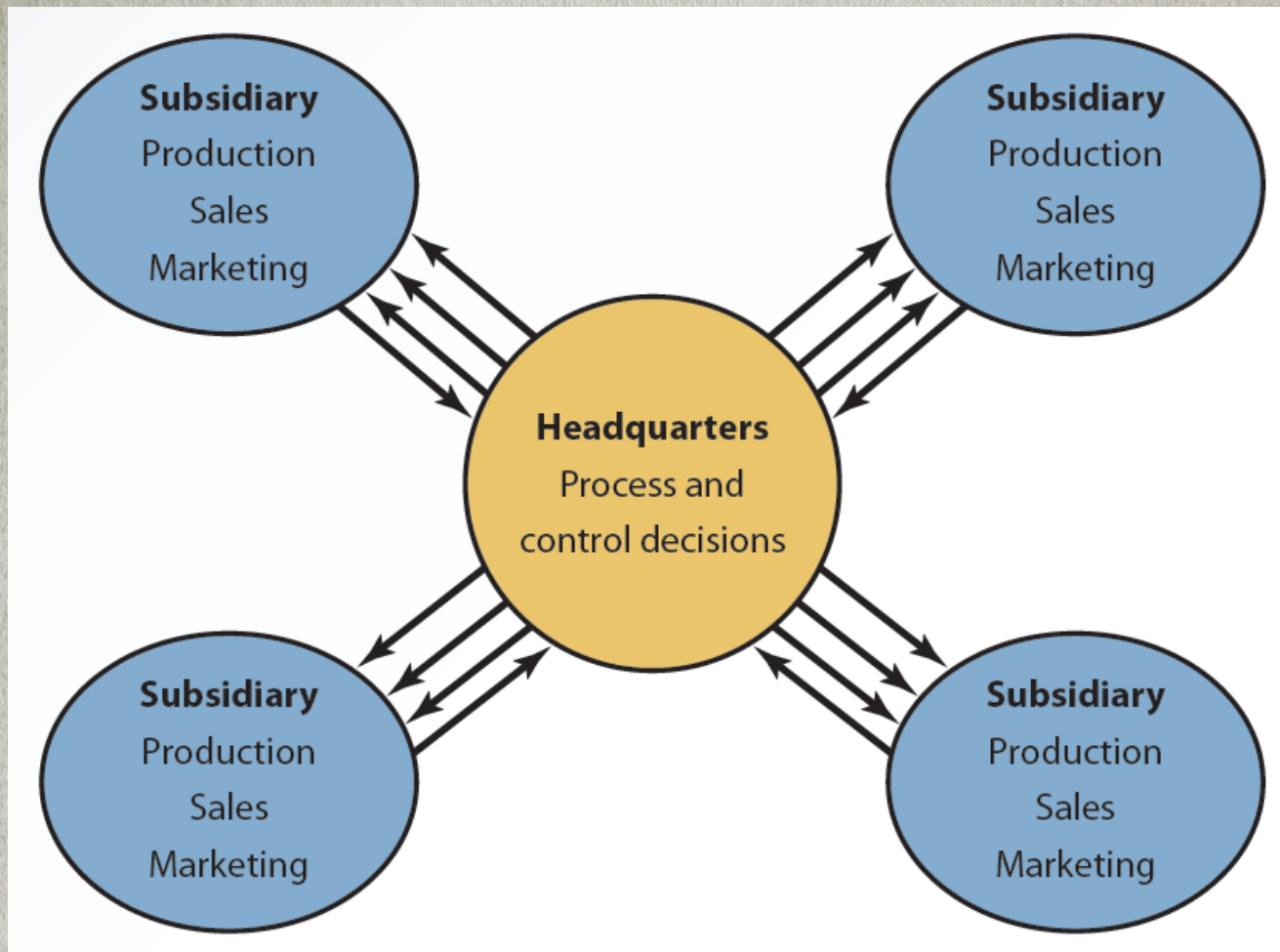


Global Structure (1 of 3)

- Uses highly centralized information systems
- Subsidiaries have less autonomy
 - Rely on headquarters for all process and control decisions, as well as system design and implementation
- Requires an extensive communication network
 - GIS fits well

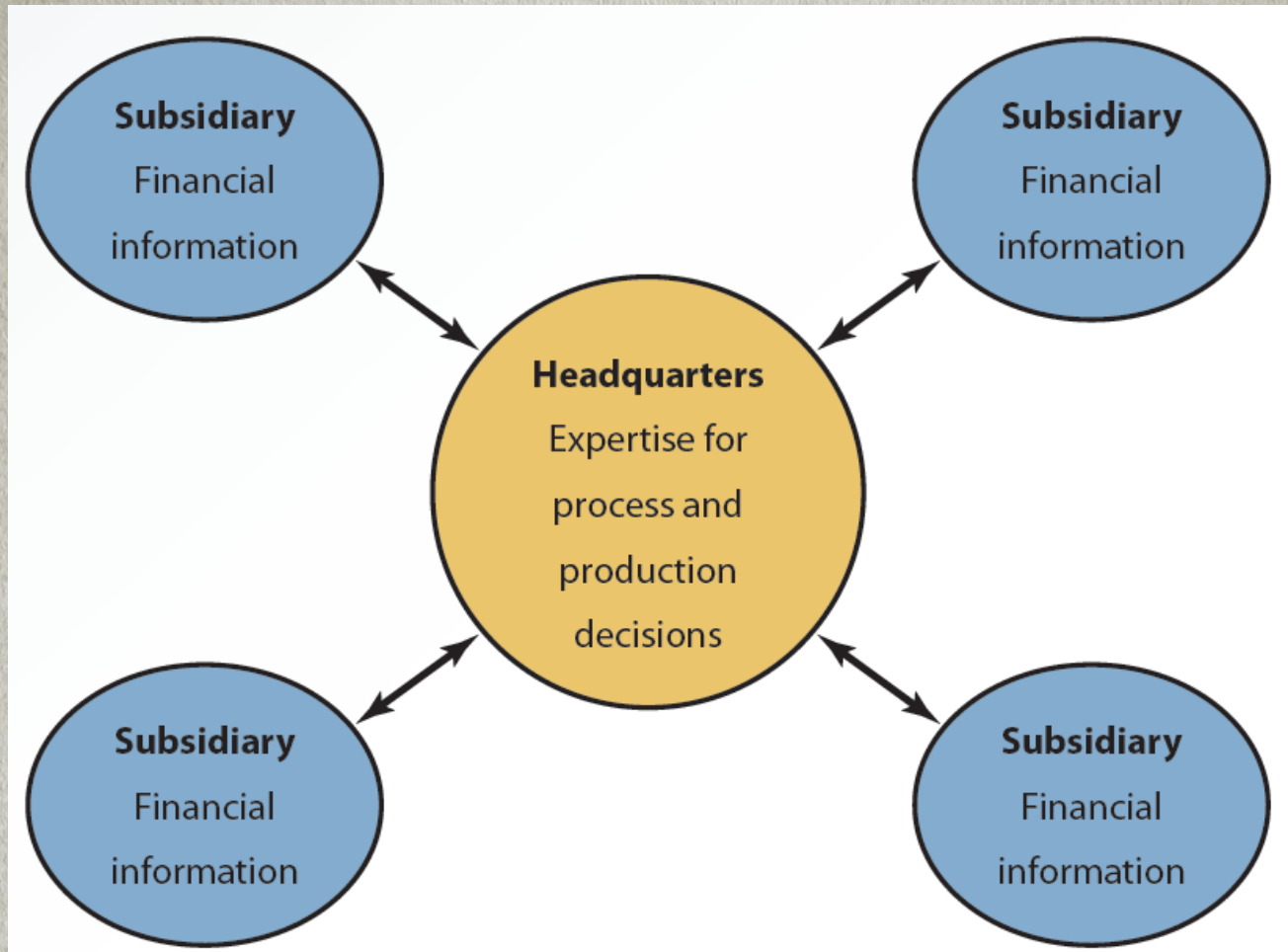
Global Structure (2 of 3)

- Integration needed to manage production, marketing, and human resources is difficult
 - Caused by heavy reliance on headquarters
- Duplicate information systems have to be developed to attain efficiency
 - Subsidiaries have the responsibility of selling, marketing, and tailoring the products to their countries' requirements and tastes



International Structure (1 of 2)

- Organization operates like a multinational corporation
 - Subsidiaries depend on headquarters for process and production decisions
- Information systems personnel are regularly exchanged among locations
 - Encourages a cooperative culture, which increases feasibility of a GIS
- GIS can be centralized or decentralized, depending on the extent of cooperation

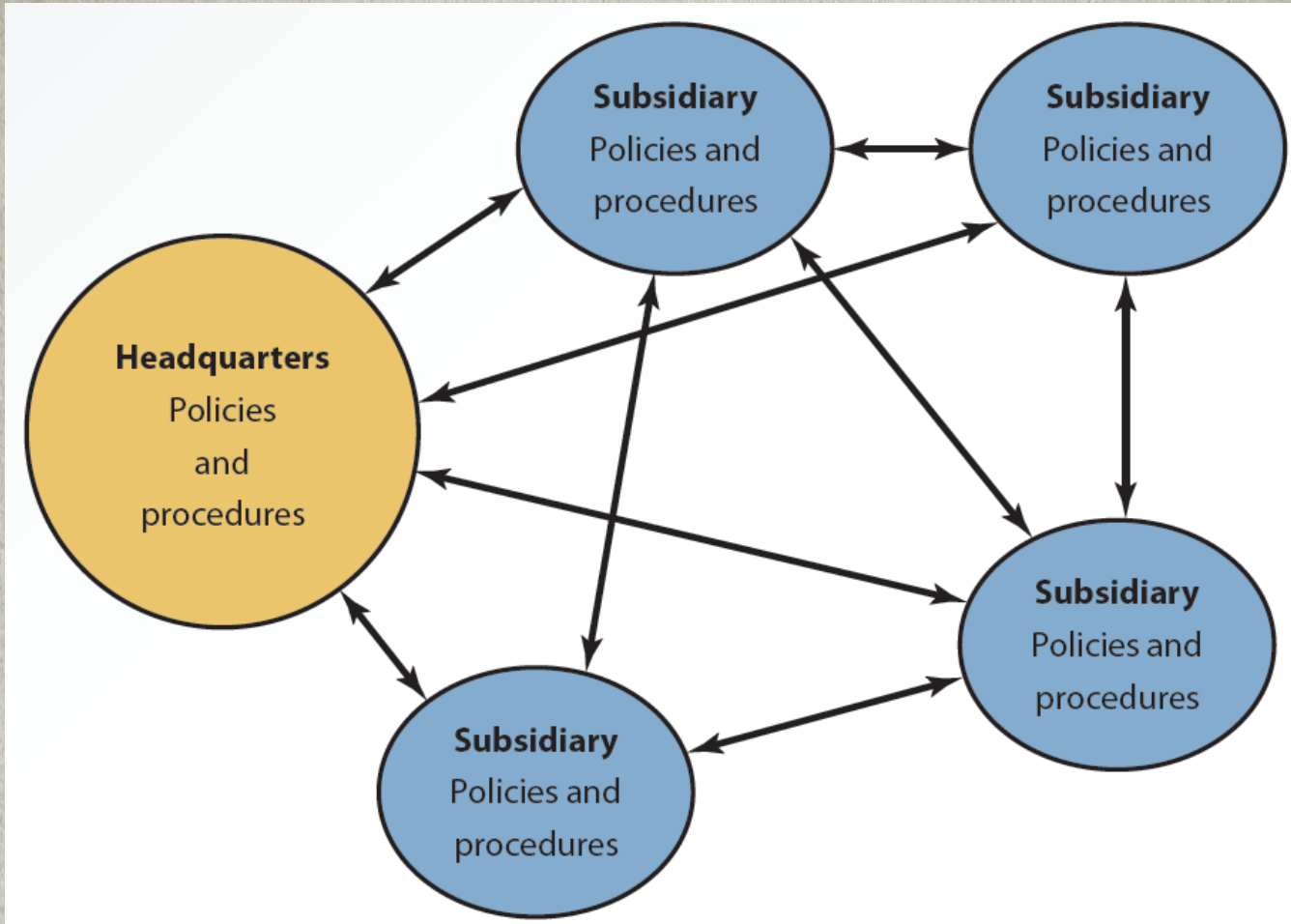


Transnational Structure (1 of 3)

- Parent company and subsidiaries work together
 - Design policies, procedures, and logistics for delivering products and services to the right market
- Organization's headquarters is not set up in a particular country
 - Regional divisions share authority and responsibility

Transnational Structure (2 of 3)

- Organization focuses on:
 - Optimizing supply sources
 - Using advantages available in subsidiary locations
- GIS requires high standardization and uniformity for global efficiency
 - Local responsiveness should be maintained
 - Integration of GIS is enhanced by universal data dictionaries and standard databases



Global Information Systems Supporting Offshore Outsourcing (1 of 2)

- Organizations choose an outsourcing firm in another country that can provide services and products
 - Used for many information technology tasks
- Attractive for all types of organizations
 - Widespread availability of the Internet
 - Improved telecommunication systems
 - Reduced cost of communication
 - Increased bandwidth

Global Information Systems Supporting Offshore Outsourcing (2 of 2)

- Supported by a GIS, which provides a global network
 - Network can be used by all participants for coordinating development activities

Obstacles to Using Global Information Systems

- Many factors can hinder success
 - Lack of standardization
 - Cultural differences
 - Diverse regulatory practices
 - Poor telecommunication infrastructures
 - Lack of skilled analysts and programmers

Lack of Standardization

- Lack of standardization can impede the development of a cohesive GIS
 - Impractical to work with various standards
 - Inability to meet the costs of integrating different platforms
- Excessive standardization
 - Decreases organizational flexibility in responding to local preferences
- Difficulties posed by time zones
 - Backup and maintenance

Cultural Differences

- Differences in values, attitudes, and behaviors play an essential role in using GISs
 - Web site content or images would have to be changed to suit the target market
 - Best addressed with education and training

Diverse Regulatory Practices

- Apply to policies on business practices and technological use
 - Jurisdiction issues regarding the contents of a GIS
 - Nature of intellectual property laws and how they are enforced
- Other legal issues
 - Privacy and cybercrime laws, censorship, and government control

Poor Telecommunication Infrastructures

(1 of 2)

- Organizations must consider telecommunication infrastructures in subsidiary countries
 - Implementation of a GIS could be expensive and cumbersome when each subsidiary country has different:
 - Service offerings
 - Price schedules
 - Policies

Poor Telecommunication Infrastructures

(2 of 2)

- Countries with slow and costly access to the Internet
 - Web pages with content that contains high bandwidth graphics and animations must be avoided
- Differences in standards can cause problems

Lack of Skilled Analysts and Programmers

- Nature of culture and differences in skills in other countries must be considered when forming teams
 - Cultural and political differences affect cooperative environment
- Training and certification programs offered through the Internet can reduce skills gap in developing nations

Summary

- Globalization has become an important factor in purchasing and the supply chain
 - GIS is an information system that works across national borders
 - Organization's structure determines the architecture of its GIS
 - Some of the obstacles in using a GIS include lack of standardization and cultural differences

