

MIS



CHAPTER 9

GLOBAL INFORMATION SYSTEMS

COKE INTERNATIONAL

Gates Non-profit

Global Logistics

Marriot

Growth Strategies SPITZ



Products

Present

New

Markets

Present

New

Why Go Global?

- ▶ Customers demand integrated worldwide services
- ▶ Example: shoe company
 - Produces leather and uppers in Italy
 - Upper shipped to China
 - Tested in Ireland
 - Sold in United States
 - Supply chain logistics managed and coordinated in US

Why Go Global?



- ▶ 2010 Coca-Cola Company
 - Generated more than 75% of its revenue from outside United States
- ▶ Prerequisites to the success of a global information system:
 - Clear understanding of factors such as customs, laws, technological issues, and local business needs and practices

COKE INTERNATIONAL

Why Go Global? (cont'd.)

- ▶ Airline reservation systems
 - First large-scale interactive global system
- ▶ Global products
 - Products or services that have been standardized for all markets
- ▶ Manufacturer might “regionalize” operations
- ▶ Globalization
 - Important factor in purchasing and supply chain

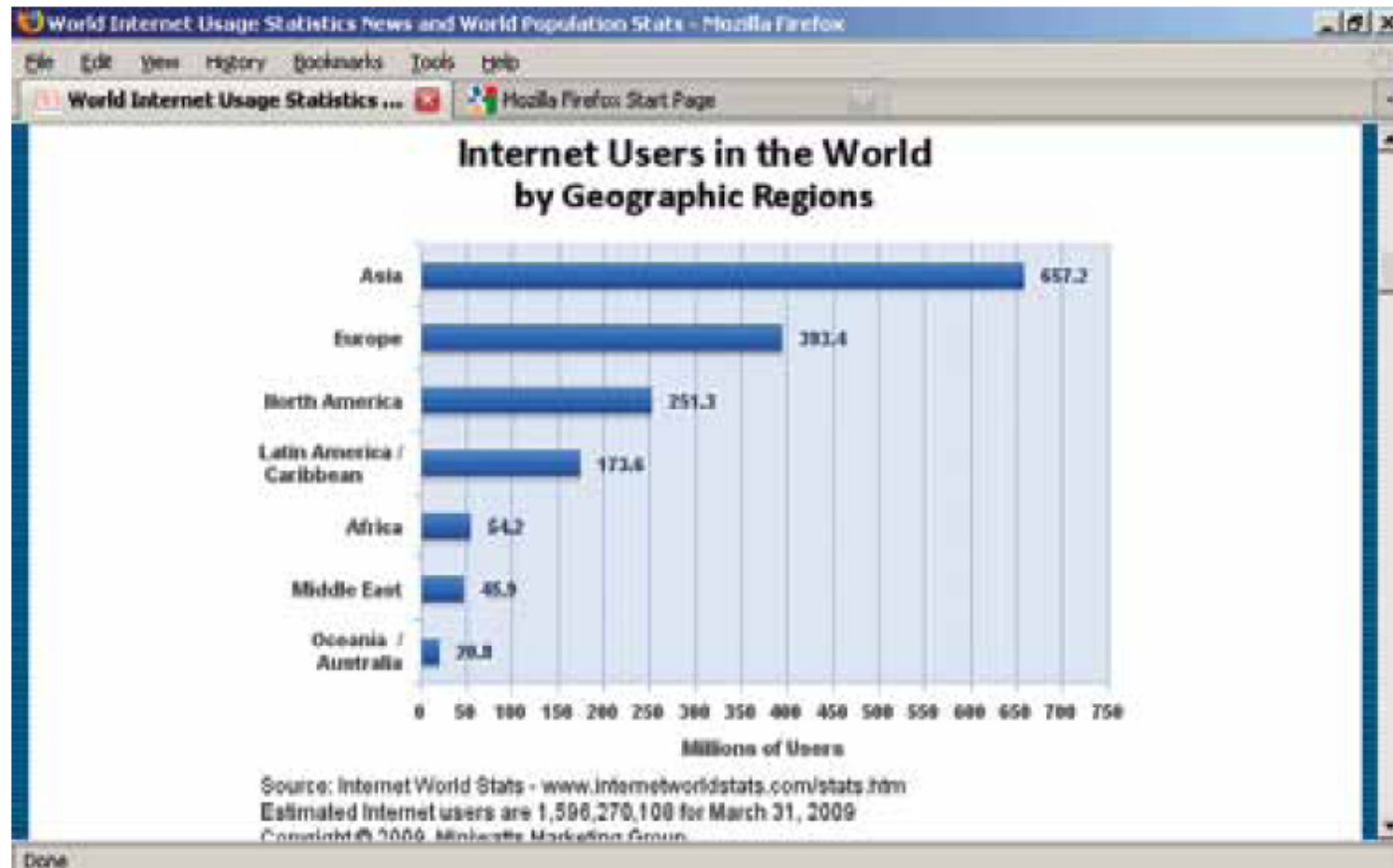


FOXCONN

Gates Non-profit

E-Business: A Driving Force

- ▶ E-business
 - Major factor in the widespread use of global information systems
 - Builds on the advantages and structures of traditional business
- ▶ The Internet
 - Simplify communication
 - Change business relationships
 - Consumers can engage in comparison shopping more easily
- ▶ Small companies can conduct business on-line just as large companies



Global Information Systems: An Overview

- ▶ **Global information system (GIS)**
- ▶ International company
 - Can increase control and enhance coordination of its subsidiaries and be able to access new global markets
- ▶ Strategic planning is a core function
- ▶ Defined in terms of two dimensions:
 - **Control VS Coordination**

Control

- ▶ Control requires:
 - Centralized architecture for data, standardized definitions used across the organization
 - Standard formats for reports
 - Defined behaviors for different processes
 - Performance-tracking system

Coordination

- ▶ Coordination requires:
 - Decentralized architecture for data
 - Standardization within departments
 - Ability to communicate these standards to other departments
 - Collaboration systems
 - Technologies that support informal communication and socialization
- ▶ Many advantages of high coordination

Components of a Global Information System (cont'd.)

- ▶ Information system manager
 - Faces design and implementation issues when developing a global network
 - 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
 - Keep in mind that standardized software and hardware are always ideal but not always feasible

Requirements of Global Information Systems

- ▶ Must be capable of supporting complex global decisions
- ▶ **Multinational corporations (MNCs)** environment includes many variations in different forces
 - Legal
 - Transborder data flow (TDF)
 - Intellectual property laws
 - Patent & trademark laws
 - Cultural
 - Language, ethics, religious beliefs
 - Economic
 - Currency, taxes, interest rates,
 - Political
 - Type, stability, policy towards MNC



Requirements of Global Information Systems (cont'd.)

► **Operational requirements:**

- Global data access
- Consolidated global reporting
- Communication between headquarters and subsidiaries
- Management of short-term foreign exchange risks

► **Strategic requirements:**

- Strategic planning support
- Management of conflicts and political risks
- Management of long-term foreign exchange risks
- Management of global tax risks

Goals of Global Information Systems

► Issues:

- Identify business opportunities in global marketplace
- Justify investment in GIS
- Information systems personnel must have technical and business expertise
- Coordinate migration carefully

Organizational Structures and Global Information Systems

- ▶ Four commonly accepted types of global organizations:
 - Multinational
 - Global
 - International
 - Transnational

Multinational Structure

- ▶ Production, sales, and marketing are decentralized
- ▶ Financial management remains the parent's responsibility
- ▶ Example: Tyco Corporation (CABLE)
- ▶ Focus on local responsiveness
 - Reduces the need for communication between subsidiaries and headquarter
- ▶ Each subsidiary operates on a different platform

The Tyco logo is displayed in a bold, italicized, blue sans-serif font. The letters are closely spaced, and the overall style is dynamic and modern.

Global Structure



- ▶ Highly centralized information system
- ▶ Subsidiaries have little autonomy
- ▶ Sometimes called a “franchiser”
- ▶ Extensive communication network necessary
- ▶ Difficult and impractical
 - Heavy reliance on headquarters for new products and ideas
- ▶ Examples:
 - McDonald's, Mrs. Fields' Cookies, General Motors

International Structure

- ▶ Operates much like a multinational corporation
 - But subsidiaries depend on headquarters more for process and production decisions
- ▶ Information systems personnel are regularly exchanged among locations
 - Encourages a cooperative culture in geographically dispersed personnel
- ▶ Example: Caterpillar Corporation



Global Logistics

Transnational Structure

- ▶ Parent and all subsidiaries work together in designing policies, procedures, and logistics
- ▶ Usually focuses on optimizing supply sources and using advantages available in subsidiary locations
- ▶ Architecture requires a higher level of standardization and uniformity for global efficiency
 - But must maintain local responsiveness
- ▶ Examples: Citigroup, Sony, Ford



Global Information Systems

Supporting Offshore Outsourcing

- ▶ **Offshore outsourcing**
 - Alternative for developing information systems
- ▶ Organization chooses an outsourcing firm in another country
- ▶ Used for many information technology tasks
- ▶ GIS plays an important role in supporting offshore outsourcing

Table 9.2*Top offshoring countries in 2008*

Americas	Asia/Pacific	Europe, Middle East, and Africa
Argentina	Australia	Czech Republic
Brazil	China	Hungary
Canada	India	Ireland
Chile	Malaysia	Israel
Costa Rica	New Zealand	Northern Ireland
Mexico	Pakistan	Poland
Uruguay	Philippines	Romania
	Singapore	Russia
	Sri Lanka	Slovakia
	Vietnam	South Africa
		Spain
		Turkey
		Ukraine

Obstacles to Using Global Information Systems

- ▶ Lack of standardization
 - Can also include differences in time zones, taxes, language, work habits, etc.
- ▶ Cultural differences
- ▶ Diverse regulatory practices
- ▶ Poor telecommunication infrastructures
- ▶ Lack of skilled analysts and programmers

Summary

- ▶ Factors contribute to the globalization trend
- ▶ Global information systems
 - Components
 - Requirements
 - Uses in multinational structures
 - Applications
 - Obstacles