MANAGING GLOBAL SYSTEMS

Chapter -15

LAYOUT OF THE CLASS

1) Example of the **Managing Global System**.

2) Chapter opening case study

3) Learning objectives

4) Global environment and business challenges

5) International IS & Global system strategy

6) Connectivity and S/W localization

7) Online MOOC links

SEVERSTAL CREATES AN IT INFRASTRUCTURE FOR GLOBAL STEEL MARKETING (SNA SEVERSTAL NORTH AMERICA)

PROBLEM FACED

SNA (Severstal North America)→ *Infrastructure combination* was made up of *different systems*

Financials →   Oracle people soft Enterprise.
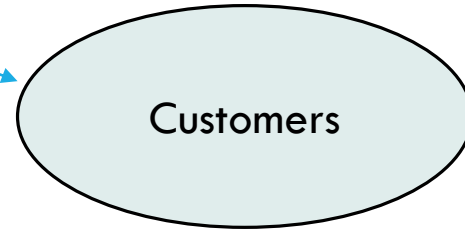
Purchasing & maintenance →   Indus enterprise PAC.

Other varieties (production/distributers/suppliers/marketing)of custom systems

Difficulty in Information flow across different functional area

Severstal North America: fourth largest integrated steelmaker in the united states.

Customers

North America
Europe
Russia
Company motto:- to create a global production ,which will supply high quality steel to the customer ,wherever they are located

As a result we require s/w : that will meet the changing global business requirement.

SOLUTION IS: ORACLE E-BUSINESS SUITE 12

It contains/covers every modules for :
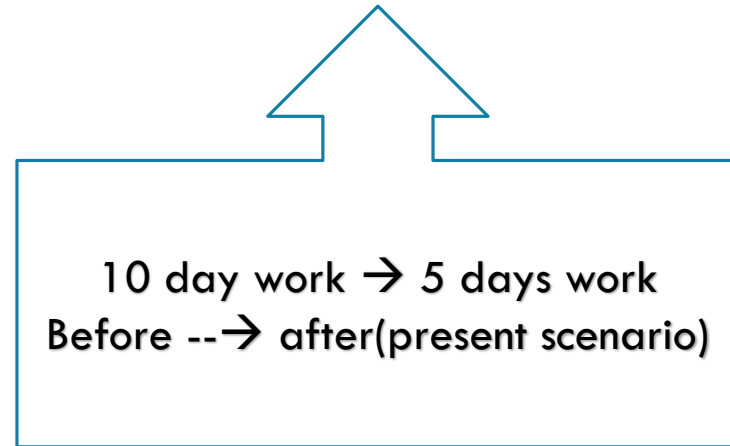
Financials

Purchasing

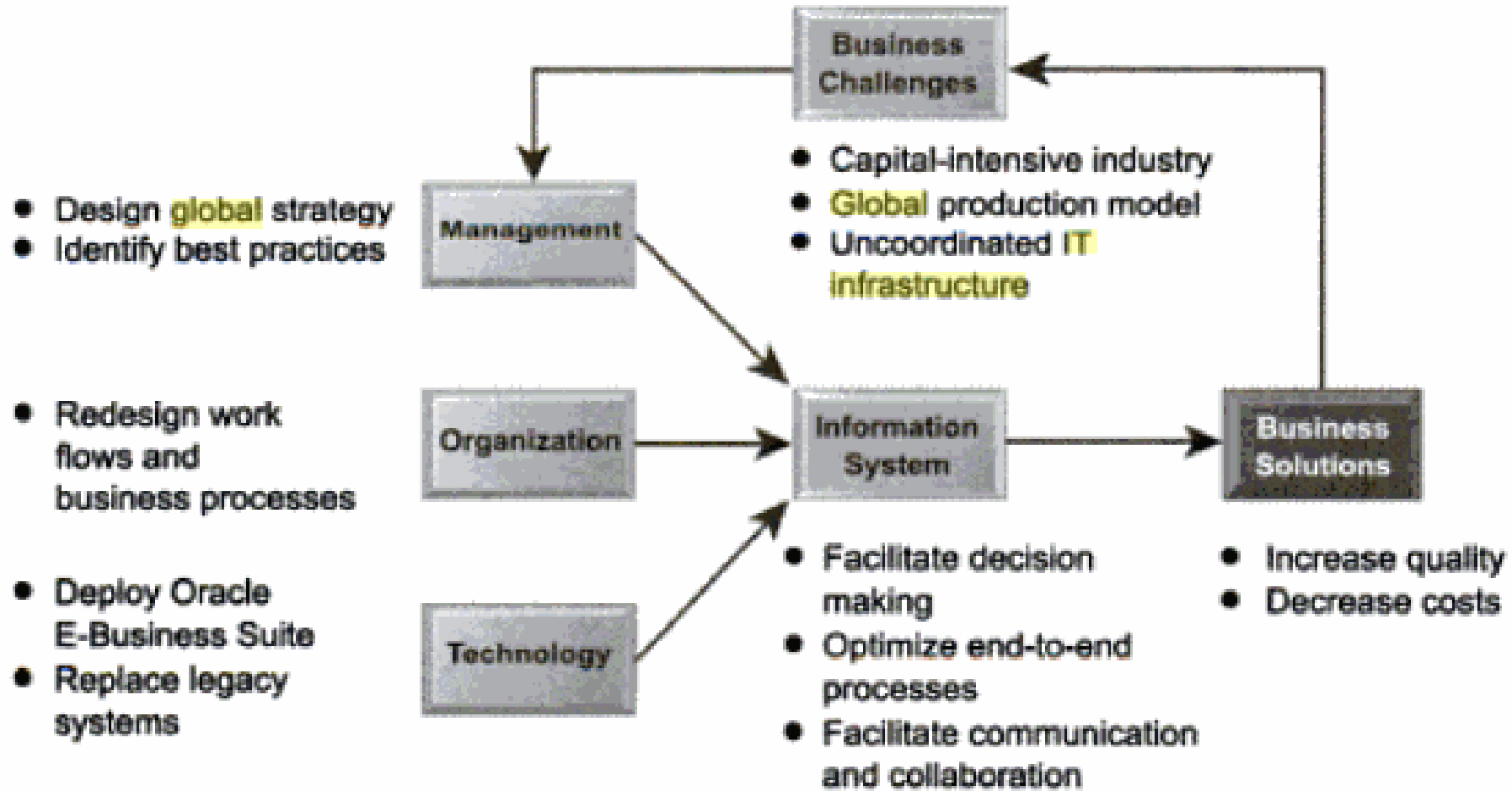Enterprise Asset Management

Manufacturing

Order Management

10 day work → 5 days work
Before --→ after(present scenario)

Result was: **more efficient work flows** , **enhanced productivity** and optimised end to end process→ *ORACLE E-BUSINESS SUITE 12*

Business Challenges
- Capital-intensive industry
- Global production model
- Uncoordinated IT infrastructure

Management
- Design global strategy
- Identify best practices

Organization
- Redesign work flows and business processes

Technology
- Deploy Oracle E-Business Suite
- Replace legacy systems

Information System
- Facilitate decision making
- Optimize end-to-end processes
- Facilitate communication and collaboration

Business Solutions
- Increase quality
- Decrease costs

LEARNING OBJECTIVES

1. What major factors are driving the internationalization of business?

2. What are the alternative strategies for developing global businesses?

3. How can information systems support different global business strategies?

4. What are the challenges posed by global information systems and management solutions for these challenges?

5. What are the issues and technical alternatives to be considered when developing international information systems?
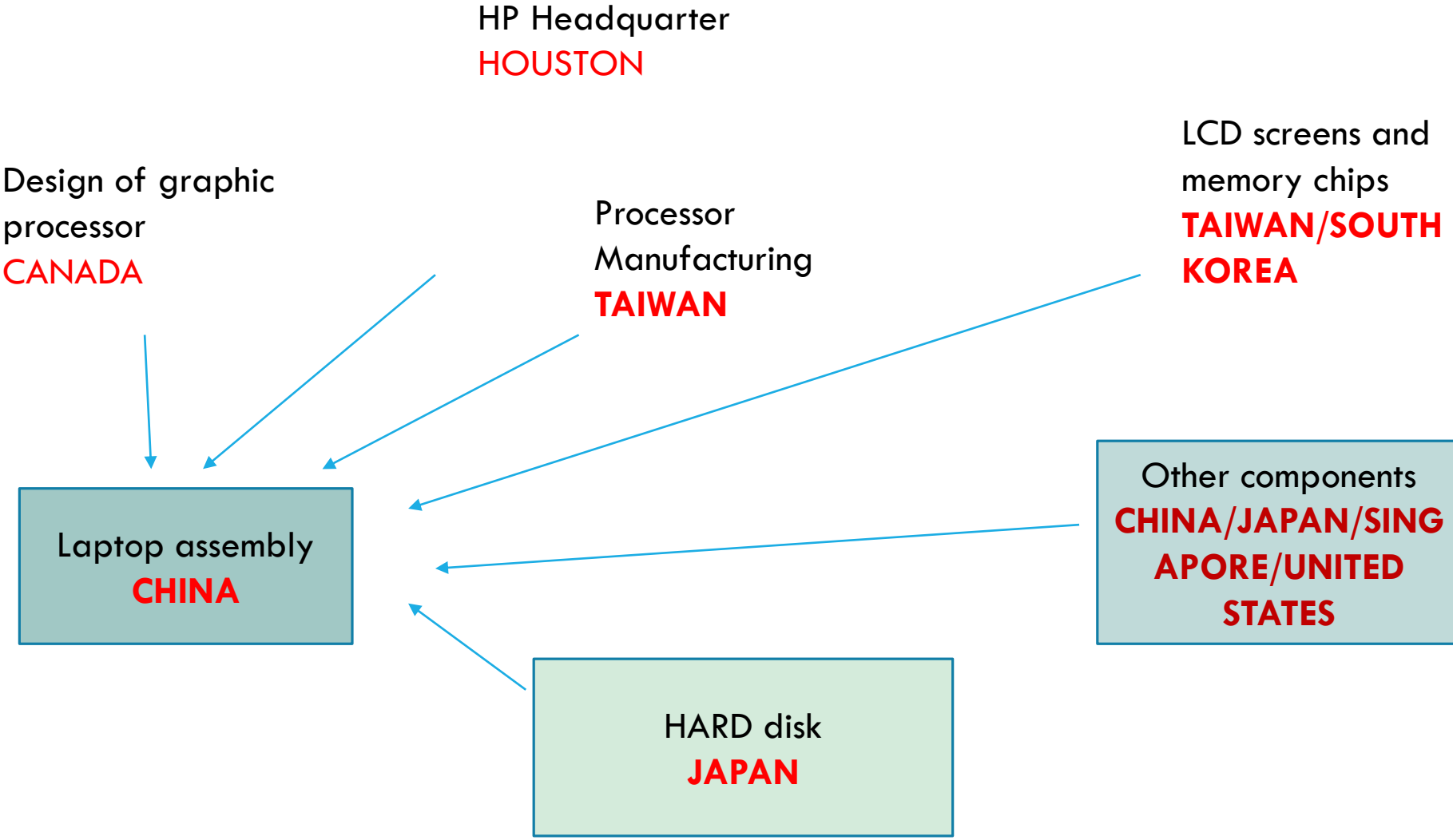
THE GROWTH OF INTERNATIONAL INFORMATION SYSTEMS

Consider the path to market for a Hewlett-Packard (HP) laptop computer:-

FIGURE 15-1   AN HP LAPTOP'S PATH TO MARKET
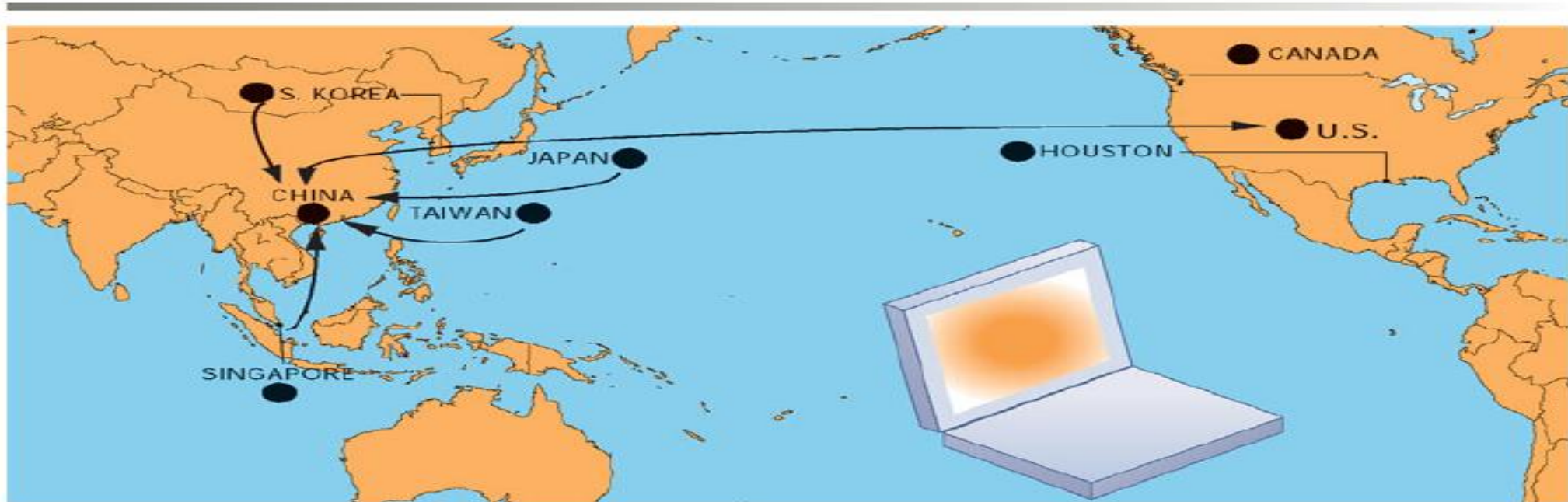
HP and other electronics companies assign distribution and production of their products to a number of different countries.

DEVELOPING AN INTERNATIONAL INFORMATION SYSTEMS ARCHITECTURE

An **international information systems architecture** consists of the basic information systems required by organizations to *coordinate worldwide trade and other activities*.

FIGURE 15-2   INTERNATIONAL INFORMATION SYSTEMS ARCHITECTURE

The major dimensions for developing an international information systems architecture are the global environment, the corporate global strategies, the structure of the organization, the management and business processes, and the technology platform.

1) To **understand the global environment** /A **business driver** is a *force in the environment which influences the direction of the business towards the globalisation.* or *negative factors that create management challenges.*

2) Corporate global strategy:- How will your firm respond? You could ignore the *global market* and focus on **domestic** competition only, sell to the globe from a *domestic base*, or organize production and distribution *around the globe*. There are many in-between choices.

3) Organisation structure:-

division of labour across a global environment?

Where will production, administration, accounting, marketing, and human resource functions be located?

Who will handle the systems function?

4) Management and business processes:-

How can you discover and manage *user requirements*?

How can *you induce change in local* units to conform to international

requirements?

How can you *reengineer on a global scale,* and how can you coordinate systems development?

5) Technology platform:-

Changing technology is a key driving factor leading toward global markets, → **prepare the strategy and structure** ---→ **to choose the right technology**.

THE GLOBAL ENVIRONMENT

1) Information, communication, and transportation technologies have created a **global village** in which communication (by telephone, television, radio, or computer network) around the globe is no more difficult .

2) A **global culture** created by *television, the Internet, and other globally shared media* such as movies now permits different cultures and peoples to develop common expectations about right and wrong, desirable and undesirable.

3) **Global markets**— *global consumers* interested in consuming similar products that are made and designed in different country.

Ex:- *Coca-Cola, American sneakers (made in Korea but designed in Los Angeles),* and Cable News Network (CNN) programming can now be sold in Latin America, Africa, and Asia.

BUSINESS CHALLENGES

1) At a cultural level, **particularism**, making judgments and taking action on the basis of **narrow or personal characteristics** → (*religious, nationalistic, ethnic(*cultural tradition*), regionalism, geopolitical position*) rejects → *shared global culture*

"**Differences among cultures produce differences in social expectations, politics, and ultimately legal rules**"

2) **Transborder data flow** is defined as the *movement of information across international boundaries* in any form.

Ex. Some European countries prohibit the processing of financial information outside their boundaries or the **movement of personal information to foreign countries.**

3**) Language remains a significant barrier**. Although English has become a kind of standard business language, this is truer at higher levels of companies and not throughout the middle and lower ranks. (*even the s/w will be made in local languages)*

4) **Currency fluctuations** can play havoc with planning models and projections. *A product that appears profitable in Mexico or Japan may actually produce a loss because of changes in foreign exchange rates*.

Ex:-huge supply but no global demand : who will buy the currency??

ORGANIZING INTERNATIONAL INFORMATION SYSTEMS

1) The **domestic exporter** strategy is characterized by heavy **centralization of corporate activities in the home country** of origin.

2) The **multinational** strategy concentrates financial management and control out of a central home base or ***decentralizing production, sales, and marketing operations to units in other countries.***

(3) **Franchisers (giving authorisation to individuals)** are an interesting mix of old and new.

Ex. The product is created, designed, financed, and initially produced in the home country, ***but for product-specific reasons must rely heavily on foreign personnel for further production, marketing, and human resources***. (Food franchisers such as McDonald's and KFC fit this kind pattern)

4) Transnational firms are the stateless, truly globally (_**Transnational firms have no single national headquarters but instead have many regional headquarters and perhaps a world headquarters**_). In a **transnational** strategy, nearly all the activities are managed from a global perspective without reference to national borders.

Summary in the form of the table:-

TABLE 15-3 GLOBAL BUSINESS STRATEGY AND STRUCTURE

BUSINESS FUNCTION	DOMESTIC EXPORTER	MULTINATIONAL	FRANCHISER	TRANSNATIONAL
Production	Centralized	Dispersed	Coordinated	Coordinated
Finance/Accounting	Centralized	Centralized	Centralized	Coordinated
Sales/Marketing	Mixed	Dispersed	Coordinated	Coordinated
Human Resources	Centralized	Centralized	Coordinated	Coordinated
Strategic Management	Centralized	Centralized	Centralized	Coordinated

Distributed over a wide area

Doing work together/in relationship

GLOBAL SYSTEMS TO FIT THE STRATEGY

Four types of systems configuration:-

Centralized *systems* are those in which systems development and operation occur totally at the domestic home base.

Duplicated systems are those in which **development occurs at the home base but operations are handed over to autonomous units in foreign locations**.(similar to franchise)

*Decentralized systems* are those in which each foreign unit designs its own unique solutions and systems.

Networked systems are those in which systems development and operations occur in an integrated and coordinated fashion across all units.

FIGURE 15-3 GLOBAL STRATEGY AND SYSTEMS CONFIGURATIONS

SYSTEM CONFIGURATION	Strategy			
	Domestic Exporter	Multinational	Franchiser	Transnational
Centralized	X			
Duplicated			X	
Decentralized	x	X	x	
Networked		x		X

GLOBAL SYSTEMS STRATEGY

FIGURE 15-4   LOCAL, REGIONAL, AND GLOBAL SYSTEMS
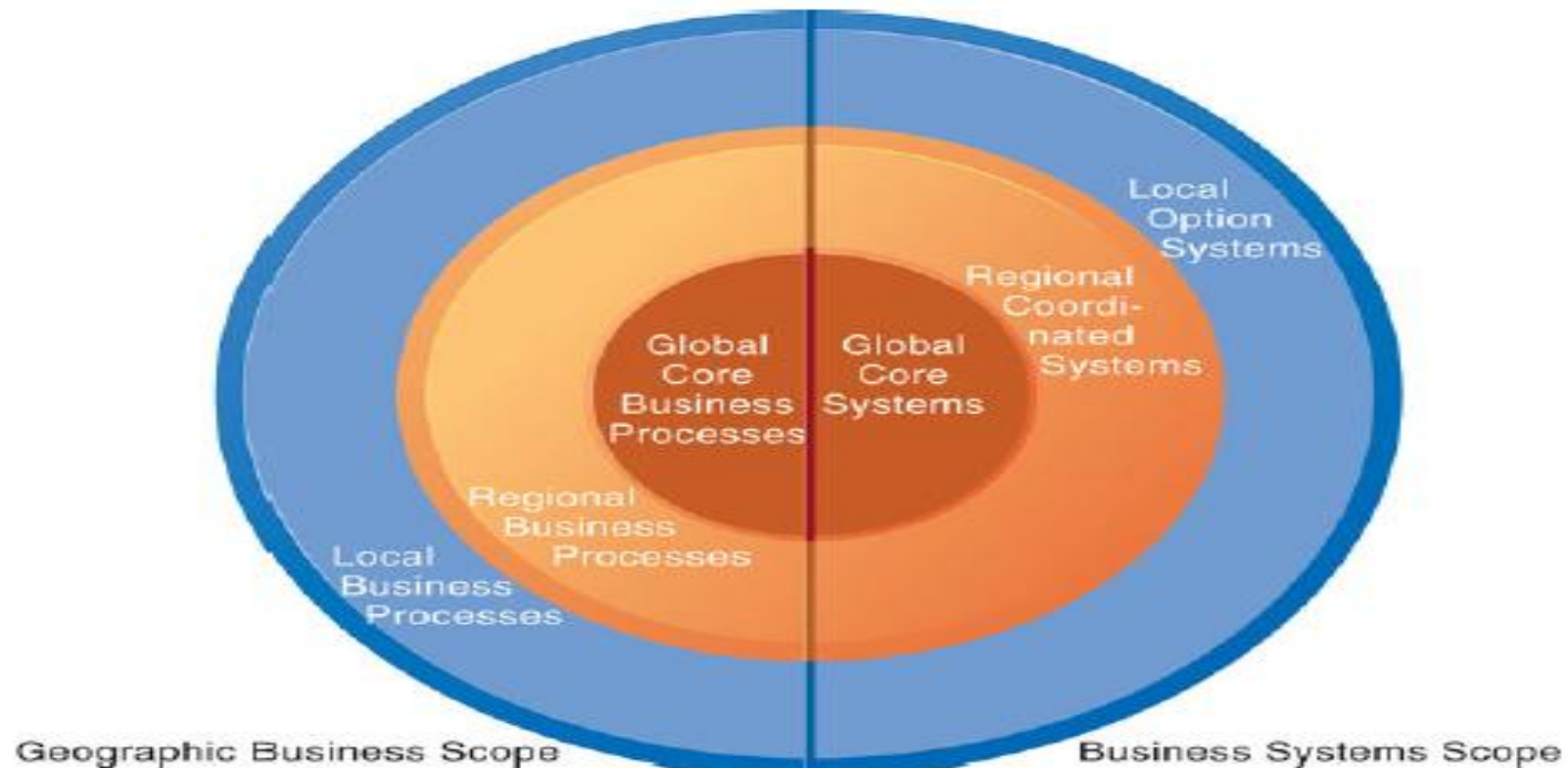
Agency and other coordination costs increase as the firm moves from local option systems toward regional and global systems. However, transaction costs of participating in global markets probably decrease as firms develop global systems. A sensible strategy is to reduce agency costs by developing only a few core global systems that are vital for global operations, leaving other systems in the hands of regional and local units.

The benefit should be clear: -

From the beginning, it is crucial that senior management at headquarters and foreign division **managers clearly understand the benefits that will come to the company as well as to individual units**. Although each system offers unique benefits to a particular budget, the overall contribution of global system should also be noted.

Ex:-For instance, that *capital in a surplus region can be moved efficiently to expand production of capital-starved regions*; thus the cash can be managed more effectively.

THE MANAGEMENT SOLUTION

1) Agreeing on Common User Requirements : *Establishing a short list of the core business* →develop a common language for discussing the business, and naturally lead to an understanding of common elements (as well as the unique qualities that must remain local).

2) Introducing Changes in Business Processes :-*Your success as a change agent will depend on your legitimacy, your authority, and your ability to involve users in the change design process.*

Legitimacy is defined as the extent to which your authority is accepted on grounds of competence and vision.

3) Coordinating Applications Development:- At the global level there is far too much complexity to attempt a grand design strategy of change. ***Do coordinate change by making small incremental steps toward a larger vision***.

4) Coordinating Software Releases:- Firms can institute procedures to ensure that all ***operating units convert to new software updates at the same time so that everyone's software is compatible.***

5) Encouraging Local Users to Support Global Systems:- develop application in home territory → throughout the world.

Pilot Testing

TECHNOLOGY ISSUES AND OPPORTUNITIES FOR GLOBAL VALUE CHAINS

Hardware + software + networking standards + key system applications = global business processes.

Bridge between heterogeneity:- computing platform and system integration.

Ex:- German business units may use an open source collaboration tool to share documents and communicate, which is incompatible with American headquarters teams, which use Lotus Notes.

Overcoming these challenges requires systems integration and connectivity on a global basis.

CONNECTIVITY

VPN (virtual private network)

How VPNs can be used to provide security to the information?

(HINT: encode the data and wrap it in the IP)

Monitoring the connectivity:-

Governments in China, Singapore, Iran, and Saudi Arabia monitor Internet traffic and _**block access to Web sites considered morally or politically offensive**_.

In future, Internet connectivity will be much more widely available and reliable in less-developed regions of the world, _**and it will play a significant role in integrating these economies with the world economy**_.

SOFTWARE LOCALIZATION

First level→ s/w → common language →English

But as *international systems penetrate deeper into management and clerical groups,* a common language may not be assumed *and human interfaces must be built to accommodate different languages and even conventions*.

 "The entire process of converting software to operate in a second language is called software localization"

This page from the Pearson Prentice Hall Web site was translated into Japanese. Web sites and software interfaces for global systems may have to be translated into multiple languages to accommodate users in other parts of the world.

ONLINE VIDEOS LINK

Videos:

http://www.youtube.com/watch?v=OPAWy1v9Gnw

E book/data

http://accessengineeringlibrary.com/browse/global-project-management-handbook-planning-organizing-and-controlling-international-projects-second-edition

THE END of the semester…………………Thank you

ALL THE BEST FOR YOUR EXAMS !!!!!!