

# Structuring & Innovating in the MNE

(Mike Peng & Klaus Meyer, International Business)

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▶ **1. Introduction (The Case of ‘Big Four’)**

2. Organizational Structures in MNEs

3. Managing Knowledge in Global Firms

4. Implications for Practice



## ■ Learning Objectives

- Articulate the relationship between **MULTINATIONAL STRATEGY & STRUCTURE**.
- Outline the **CHALLENGES** associated with **LEARNING, INNOVATION & KNOWLEDGE MANAGEMENT**.
- Draw **IMPLICATIONS** for action

# Introduction



## ■ The Global Organizational Design of the 'Big 4'

Deloitte  
Touche  
Tohmatsu



### ❖ What the 'Big 4' offer is ...

- Financial advice
- Audit
- Management consulting



  
pwc



### ❖ Who is the main customer?

- Fortune 500 corporations
- Smaller, local clients
- Government agencies



15  
countries

KPMG



34  
countries

  
ERNST & YOUNG



### ❖ Professional firms as key actors

- The 'Big 4' are regarded as the source of managerial & organizational inspiration.



151  
countries



## ■ Major Challenges Facing the 'Big 4'

❖ '3' different axes

Service line

Seamless cross-national services

Geographic location

Industry & market

❖ *Deep specialization:*  
professional expertise, client  
expertise & geographical  
expertise

❖ *A sophisticated client  
management system:*  
connections of teams of  
professionals drawn from the  
different expertise axes

❖ *A culture of reciprocity:*  
building relationships &  
organizational processes across  
the different specialization axes



## ■ Key Questions Drawn from the Opening Case

- ❖ How can multinational enterprises (MNEs) organize their operations to be successful both **LOCALLY & GLOBALLY**?
- ❖ How can MNEs make sure that people within the organization **WORK TOGETHER** constructively?
- ❖ To what degree should MNEs **CENTRALIZE** or **DECENTRALIZE** their decision-making structures & processes?
- ❖ How can MNEs foster the **EXCHANGE** of **KNOWLEDGE** & improve the odds for **BETTER INNOVATION**?



1. Introduction (The Case of ‘Big Four’)



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# Organizational Structures in MNEs



## ■ Global Integration

- ❖ ... is the process of **combining** differentiated parts **into a standardized whole**.
- ❖ The higher the pressure for global integration, the greater the need to **maximize efficiency**.

## ■ Local Responsiveness

- ❖ ... is the process of **disaggregating** a standardized whole **into differentiated parts**.
- ❖ The higher the pressure for local responsiveness, the greater the need to **adapt to local conditions**.

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**Balancing the asymmetric forces affects how managers configure & coordinate value activities !**

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## ■ Pressures for Global Integration (GI)

### ❖ Globalization of markets (Converging consumer preferences)

- Apple iPods, Samsung plasma screens, Facebook connections, Starbucks espressos, Google searches, or Zara blouses
- Buying the **highest-quality** product for the **lowest-possible price**
- Improving communication & transportation logistics
- **Zara's success: Standardized fashion styles at reasonable prices**, global retail networks

### ❖ Efficiency gains of standardization (Improving efficiency)

- Doing the **same task** the **same way** => efficiency (↑), quality (↑), production cost (↓), price (↓)
- The WTO membership => international standards (↑)



## ■ Pressures for Local Responsiveness (LR)

### ❖ Consumer divergence

- Differences in local consumers' preferences due to culture, historical legacy & nationalism (*i.e.*, buy-local campaigns)
- Forms of LR
  - (1) **Designing & making** a product that local customers prefer (*e.g.*, large cars in the US, smaller cars in Europe)
  - (2) **Buyer preferences** (*e.g.*, Web-based & 3G-driven content in the US, print & media promotion in France)
  - (3) **Adapting marketing** practices to consumption patterns (*e.g.*, large package sizes in Australia, smaller sizes in Japan)

### ❖ Host-government policies

- **Pharmaceutical companies** (*i.e.*, product approval in each country)
- **Global Financial Crisis (GFC)**: Meeting growing demands for transparency, nationalism

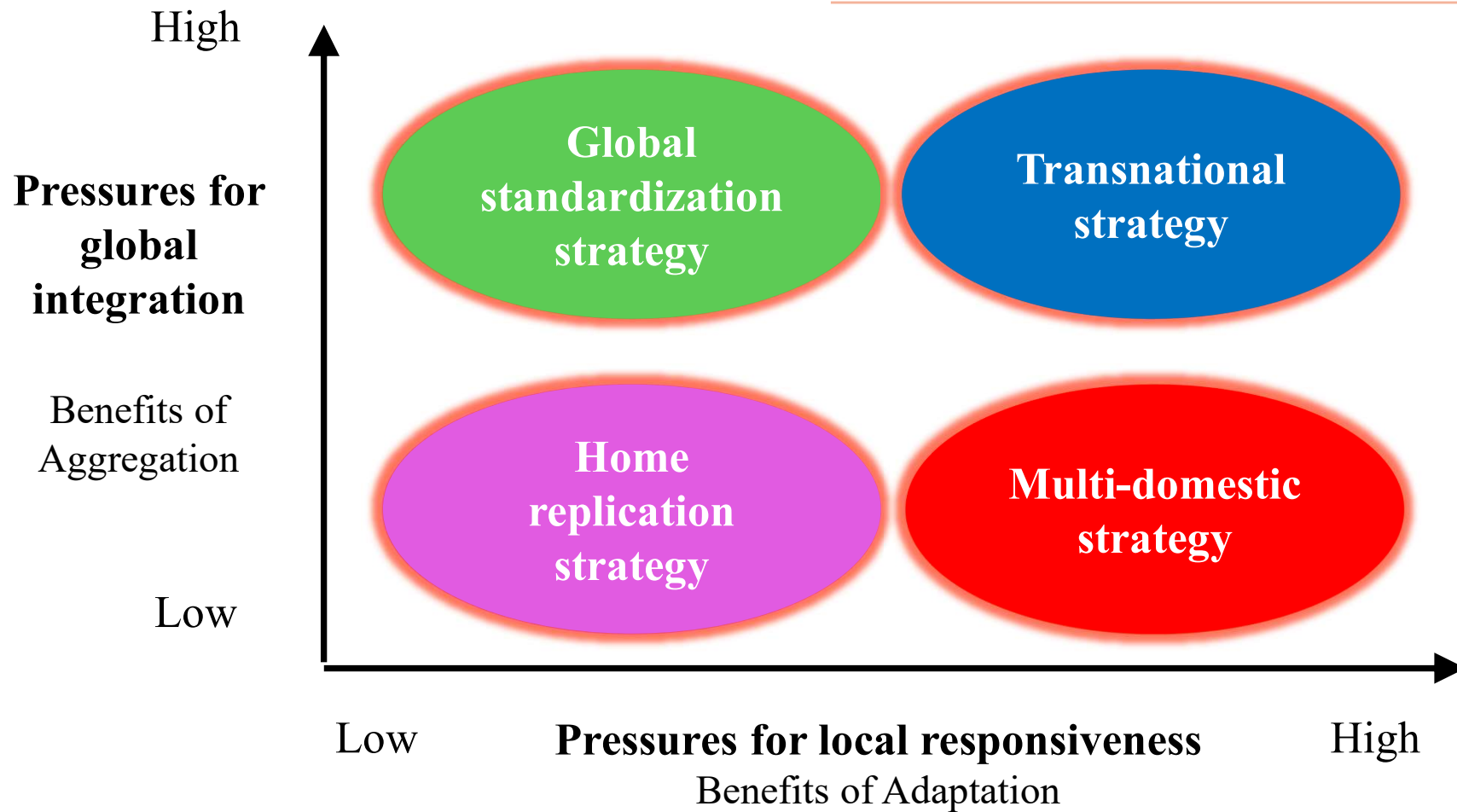
# Organizational Structures in MNEs



## ■ The GI-LR Framework



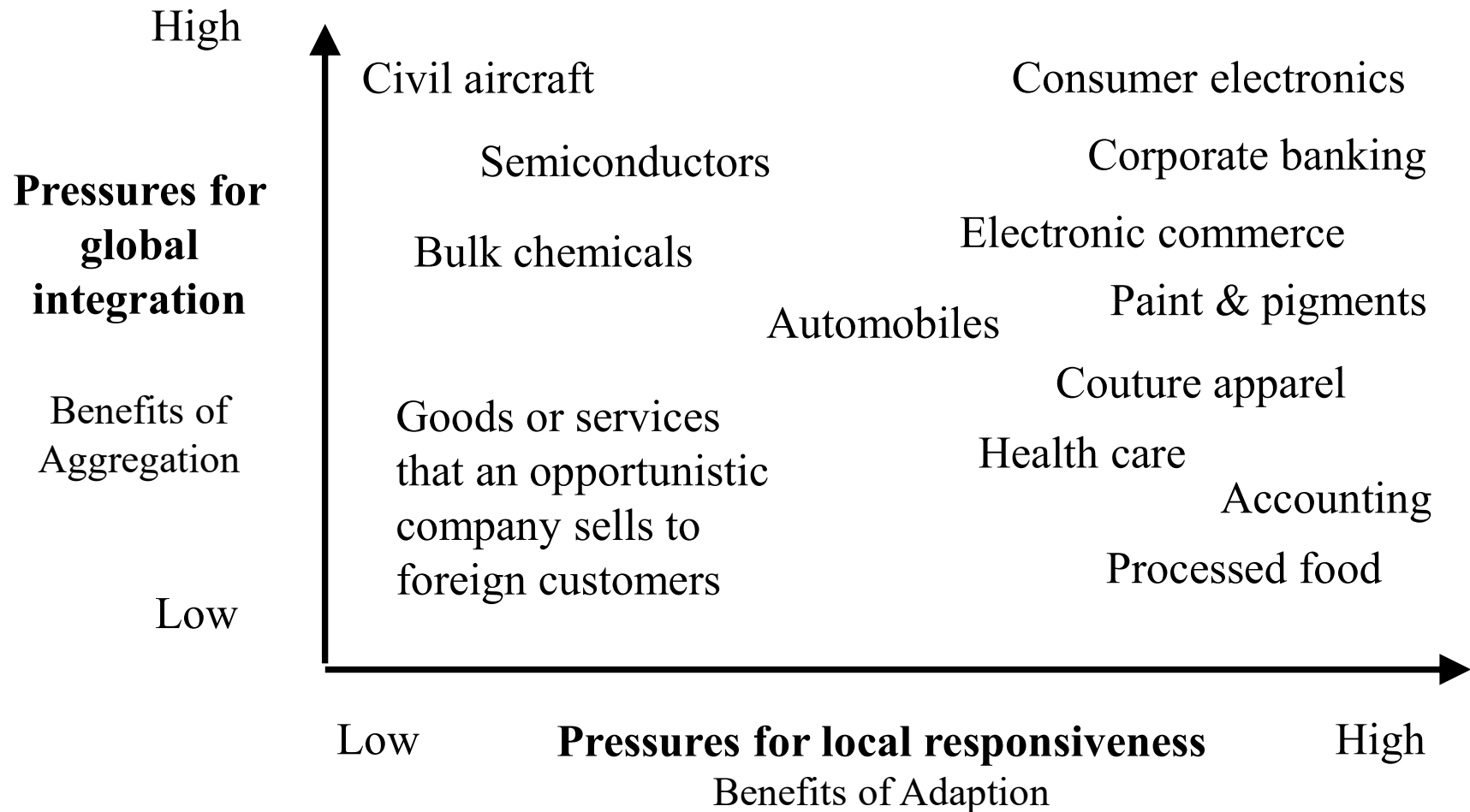
How to simultaneously deal with two sets of pressures for **global integration** & **local adaptation**



# Organizational Structures in MNEs



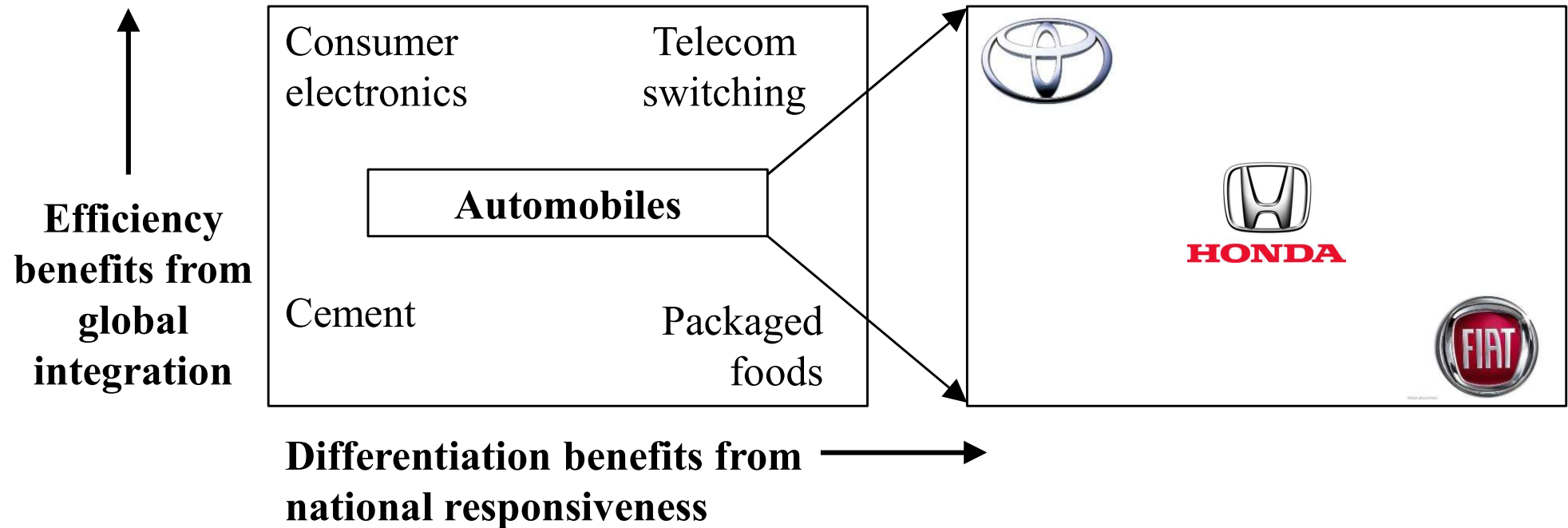
## ■ The GI-LR Framework



# Organizational Structures in MNEs



## ■ The GI-LR Framework



Source: Bartlett & Ghoshal (1989).

# Organizational Structures in MNEs: 4 Strategies



## ■ Home Replication Strategy



- ❖ ... leverages home country-based **core competencies** (*e.g.*, production scales, distribution efficiencies & brand positioning).
- ❖ ... allows **limited local customization**.

## ■ Multi-domestic Strategy



- ❖ ... adjusts products, services, & business practices to **meet the needs of local markets**.

## ■ Global Standardization Strategy ZARA

- ❖ ... champions **worldwide consistency & standardization**.

## ■ Transnational Strategy



- ❖ ... endeavors to be **cost efficient, locally responsive & learning driven simultaneously around the world**.



# (1) Home Replication Strategy

## ■ Value Chain

- ❖ R&D or branding are **dictated by HQ** (e.g., Google).

## ■ Benefits

- ❖ **Easy to transfer** (1) core competencies & unique products to foreign markets where rivals are unable to compete & (2) skills & ideas from HQ to subsidiaries.

## ■ Costs

- ❖ **HQ's ethnocentric orientation** => misleading foreign-market opportunities & threats.
- ❖ Lack of local responsiveness.
- ❖ Blindsided by an unexpectedly innovative rival (e.g., Naver in South Korea & Baidu in China).

## (2) Multi-Domestic Strategy



### ■ Value Chain

❖ VC design is the prerogative of the local subsidiary, **NOT** the unilateral declaration by the parent company.

❖ Local operations have the authority to **adapt value activities** to **local contexts** (e.g., economic, political, legal, & cultural factors).

### ■ Benefits

❖ Lower exchange-rate risk, higher potential for innovative products from local R&D, higher growth potential (due to entrepreneurial zeal).

❖ Maximize **local responsiveness**.

### ■ Costs

❖ **Duplication** of products & processes to local markets => **cost** (↑)

❖ **Too much** local **autonomy**.



# (3) Global Standardization Strategy



## Value Chain

❖ Facilities in **low-cost locations** that create the platforms for efficient operations.

❖ **HQ coordinates** dispersed activities by **standardizing products**.

## Benefits

❖ A **high-quality** product for a **lower price**.

❖ Economies of scale & shared product development.

❖ Leverage **low-cost advantages**.

## Costs

❖ Lack of local responsiveness.

❖ **Slow response** to disruptive market changes & product breakthroughs (due to too much centralized control).



## (4) Transnational Strategy



### ■ Value Chain

- ❖ A sophisticated framework of **integration, differentiation, & learning**.
- ❖ Promoting **knowledge flows** from the idea generator to idea adopters.
- ❖ **Knowledge/lessons diffused** throughout an MNE's worldwide operations.
- ❖ **Subsidiary networks** as a point of competitive advantage.

### ■ Benefits

- ❖ Engages in **global learning & diffusion of innovations**
- ❖ Leveraging **low-cost** advantages.

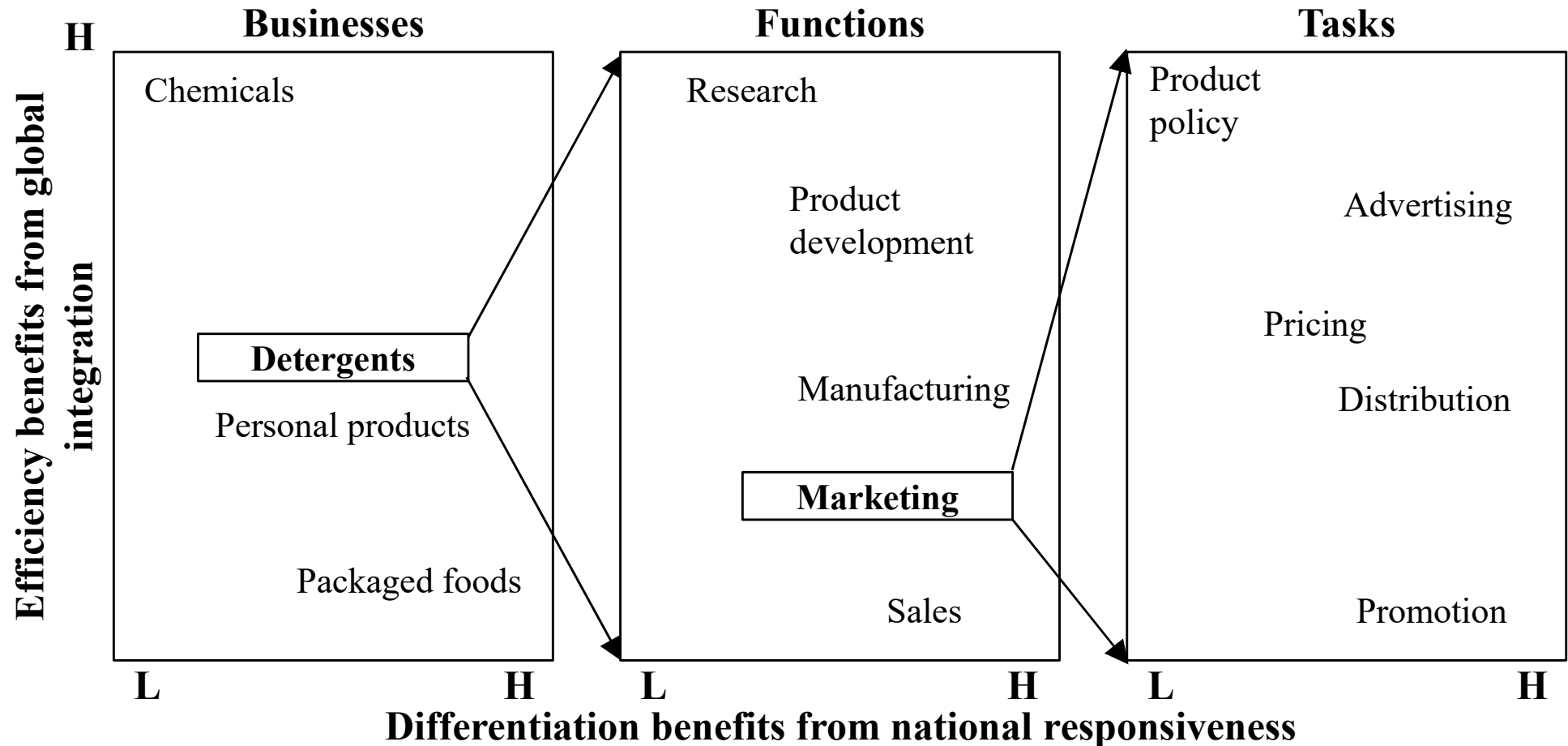
### ■ Costs

- ❖ **Difficult to configure & tough to coordinate.**
- ❖ Developing a **network mindset** among employees & installing the requisite information systems is **costly**.

# Organizational Structures in MNEs



## ■ The GI-LR Framework: The Case of Unilever



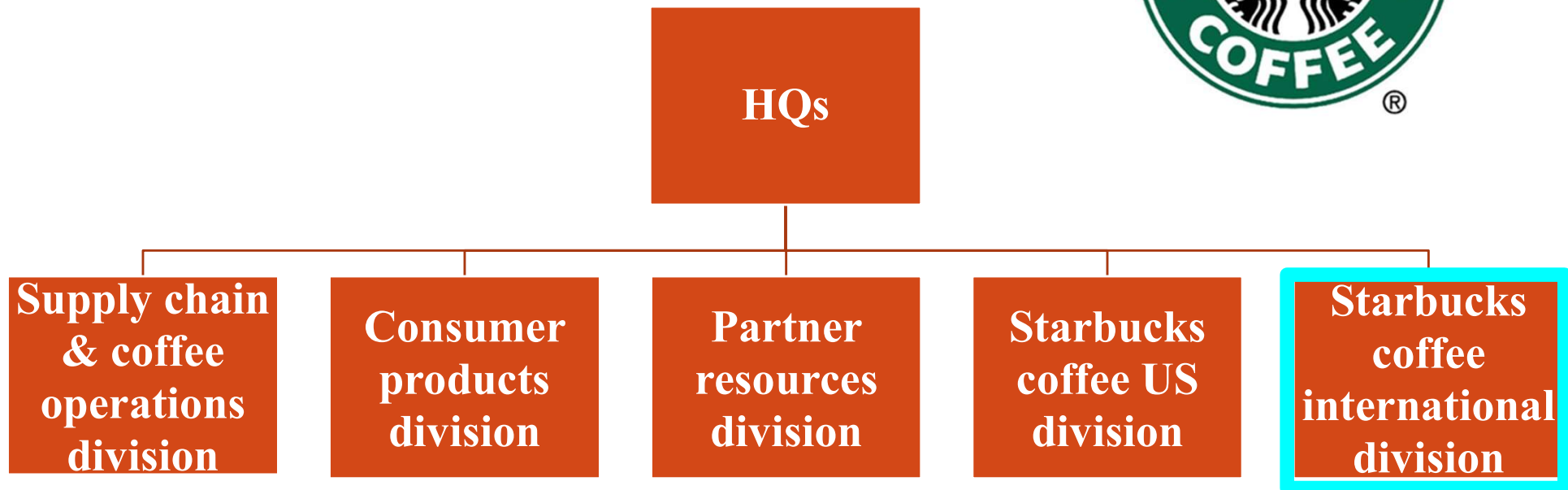
Source: Bartlett & Ghoshal (1989).

# Organizational Structures in MNEs



## International Division Structure

... is a structure that is typically set up when firms initially expand abroad, often engaging in **a home replication strategy**.



### 2 Major Problems

- (1) Foreign subsidiary managers are **not given sufficient voice** relative to the heads of domestic divisions.
- (2) The ID structure serves as a 'silo' whose activities are **not coordinated with the rest of the firm**.

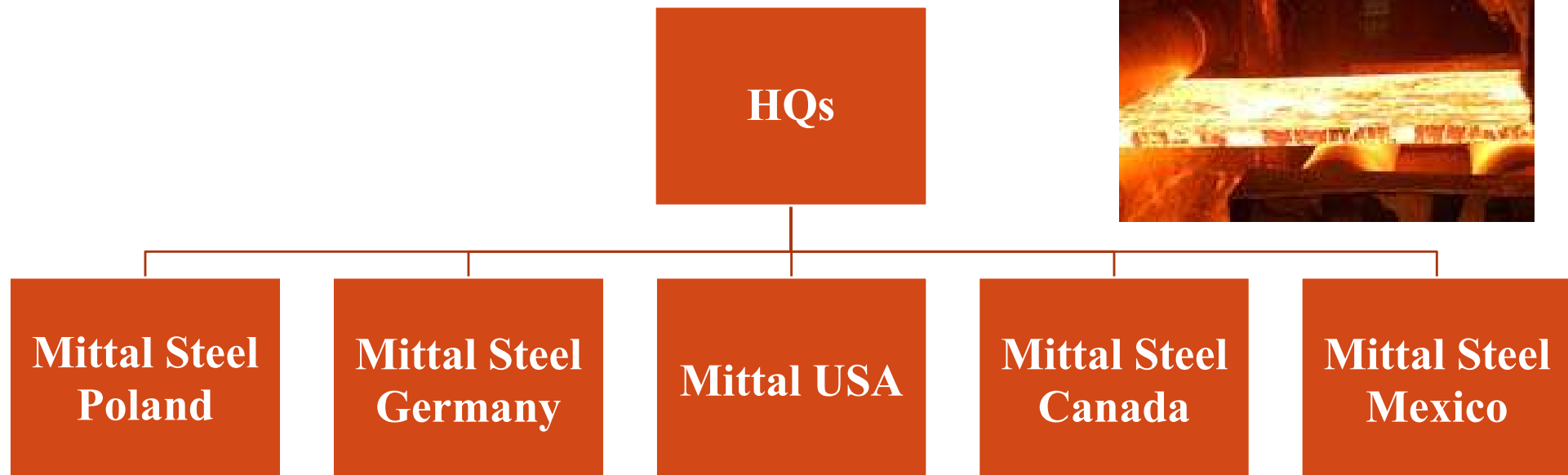
# Organizational Structures in MNEs



## ■ Geographic (Area) Division Structure

... is a structure that organizes the MNE according to different geographic areas & fits the most for **a localization strategy**

# MITTAL



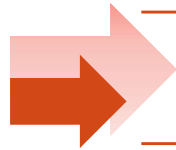
### Key Points

- (1) In contrast to the limited voice of subsidiary managers in the international division structure, **country & regional managers carry a great deal of weight** in a geographic area structure.

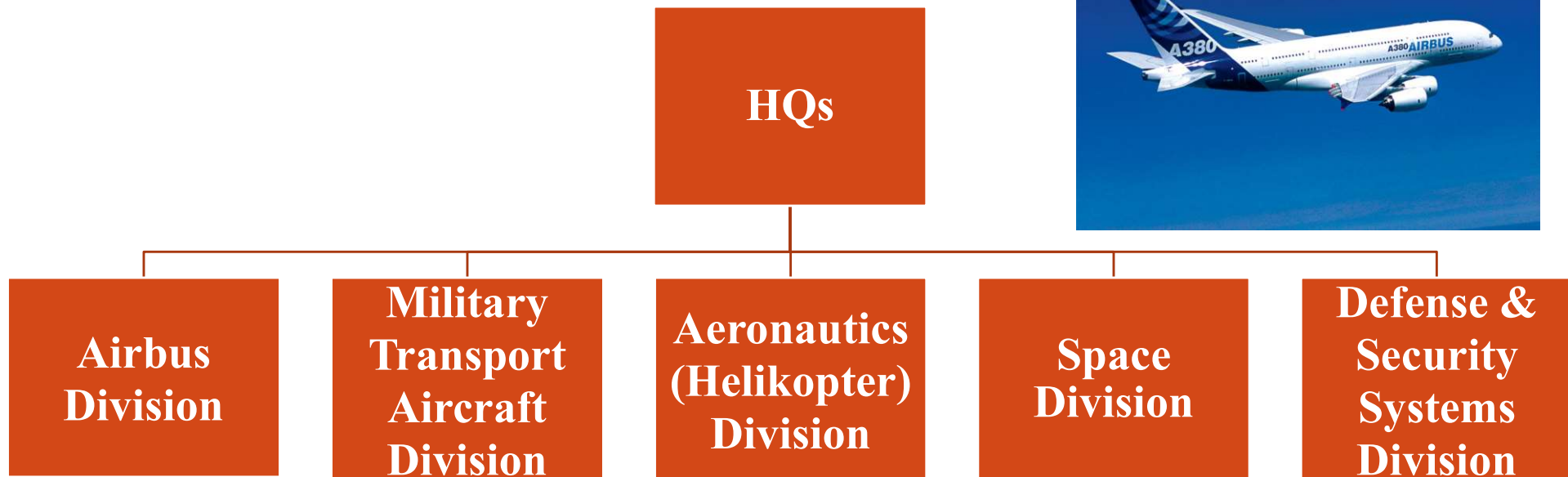
# Organizational Structures in MNEs



## ■ Global Product Division Structure



... is a structure that is the opposite of the geographic area structure & supports the **global standardization strategy**.



### Key Points

- (1) This structure greatly facilitates attention to pressures for **cost efficiencies** because it allows for consolidation on a worldwide basis & **reduces inefficient duplication** in multiple countries.

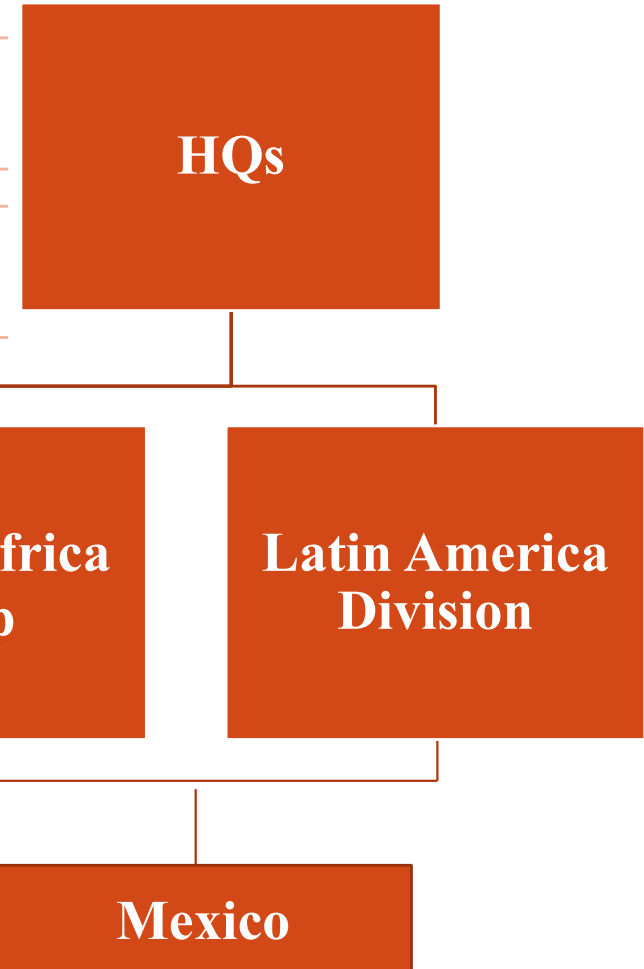
# Organizational Structures in MNEs



## ■ A Hypothetical Global Matrix Structure

➔ ... is an organizational structure based on both **geographic area** & **global product division** structures.

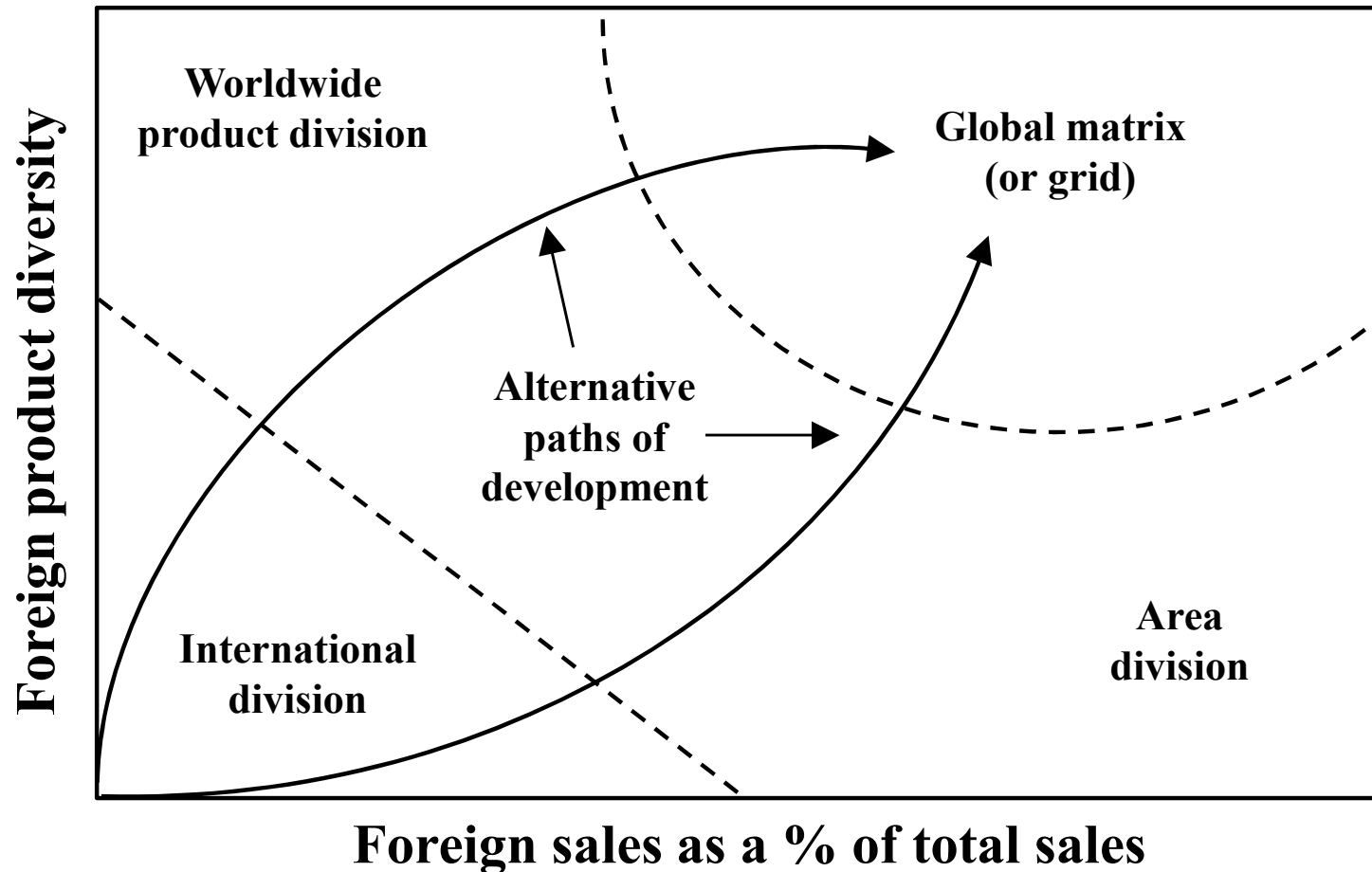
➔ This structure supports the goals of the **transnational strategy**. However, it is difficult to deliver in practice.



# Organizational Structures in MNEs



## ■ Stopford & Wells' International Structural Stages Model



Source: Barlett & Beamish (2018); Original source: Stopford & Louis (1972).





1. Introduction (The Case of ‘Big Four’)

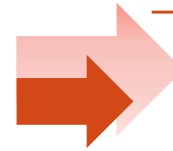
2. Organizational Structures in MNEs

 **3. Managing Knowledge in Global Firms**

4. Implications for Practice



## ■ Knowledge Management



To design & carry out the structures, processes & systems that **actively develop, leverage & transfer knowledge**.

### (1) EXPLICIT KNOWLEDGE

- > ... is **codifiable** (that is, can be written down & transferred with little loss of its richness)
- > Virtually all the knowledge **captured, stored & transmitted by IT** is explicit.

### (2) TACIT KNOWLEDGE

- > ... is **non-codifiable** & its acquisition & transfer require hands-on practice.
- > ... is evidently more important & **harder to transfer & learn**.
- > It can only be acquired **through learning by doing** (e.g., driving)



# Managing Knowledge in Global Firms



## ■ Knowledge Management

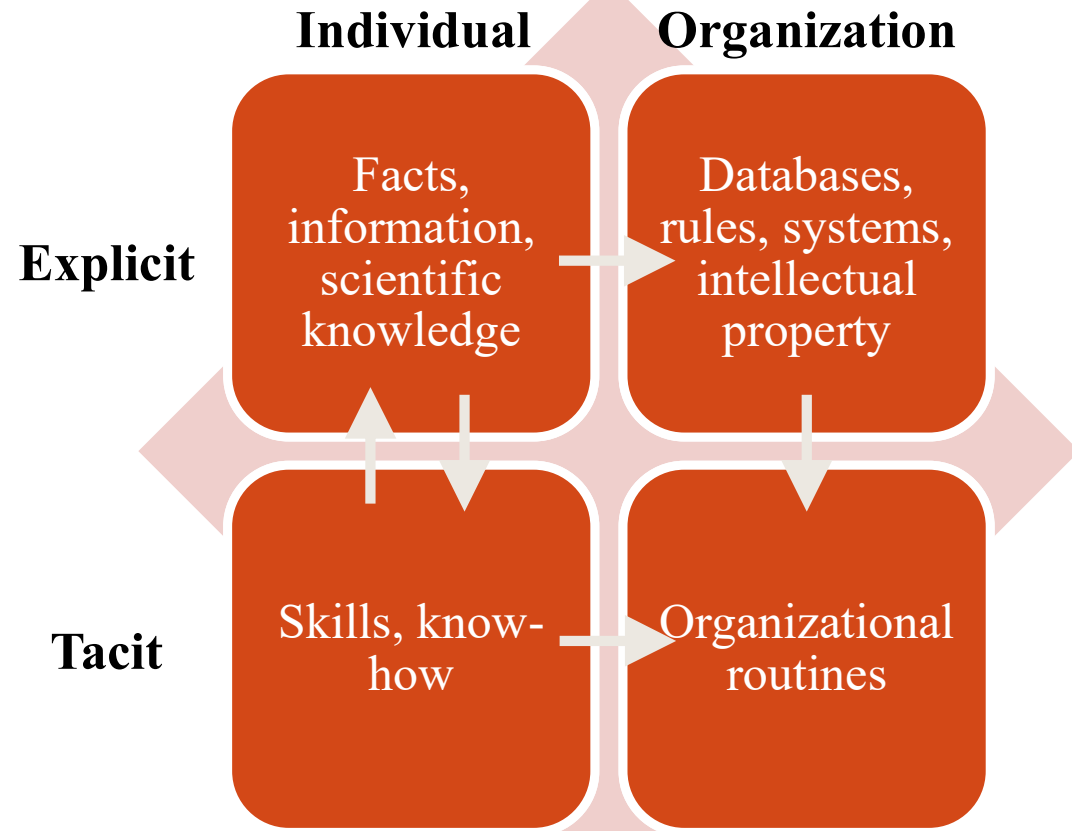


**Professor Dr. Ikujiro Nonaka**

*“Knowledge management requires transmission of different forms of knowledge.”*

**TYPES OF KNOWLEDGE**

## LEVELS OF KNOWLEDGE



Imagine **a professional football team** !

# Managing Knowledge in Global Firms



## ■ Knowledge Management in '4' Types of MNEs

Strategy	Home replication	Localization	Global standardization	Transnational
<b>Interdependence</b>	<b>Moderate</b>	<b>Low</b>	<b>Moderate</b>	<b>High</b>
<b>Role of foreign subsidiaries</b>	Adapting & leveraging parent <b>company competencies</b>	Sensing & exploiting <b>local opportunities</b>	Implementing <b>parent company initiatives</b>	Differentiated roles by subsidiaries to <b>integrate</b> worldwide operations
<b>Development &amp; diffusion</b>	<i>Knowledge</i> developed at the <b>centre</b> & transferred <b>to subsidiaries</b>	<i>Knowledge</i> developed & retained within <b>each subsidiary</b>	<i>Knowledge</i> mostly developed & retained at the <b>centre &amp; key sites</b>	<i>Knowledge</i> developed <b>jointly &amp; shared worldwide</b>
<b>Flow of knowledge</b>	Extensive flow of <i>knowledge</i> & people <b>from HQs to subsidiaries</b>	<b>Limited flow</b> of <i>knowledge</i> & people in both directions	Extensive flow of <i>knowledge</i> & people <b>from centre &amp; key locations to subsidiaries</b>	Extensive flow of <i>knowledge</i> & people in <b>multiple directions</b>



## ■ Selected Challenges in Knowledge Governance

### 1 Knowledge retention

#### Challenges

Can the firm keep the knowledge it has accumulated?

#### Common obstacles

Employee turnover & knowledge leakage

#### Challenges

Is knowledge communicated effectively between people & business units?

#### Common obstacles

Inappropriate channels, language barriers

### 3 Knowledge transmission

### 2 Knowledge sharing

#### Challenges

Are people willing to share knowledge with others inside the firm?

#### Common obstacles

‘How does it help me?’ syndrome & ‘knowledge is power’ mentality

#### Challenges

Do potential recipients appreciate & utilize knowledge available elsewhere in the organization?

#### Common obstacles

Lack of absorptive capacity

### 4 Knowledge utilization



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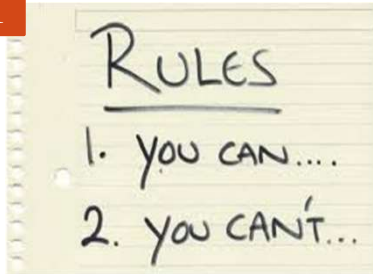
**4. Implications for Practice**

# Implications for Practice



## ■ What Should Managers Care About?

1



- ❖ Understand & master the **external rules of the game** affecting the organizational structures of MNEs in home/host countries !
  - Local rules may require localization of product design or the establishment of separate entity with partially local ownership.

2



- ❖ Managers need to understand & be prepared to change the **internal rules of the game** governing MNE management !
  - Excessive centralization kills local initiative, innovation & undermine context-sensitive adaptation.
  - Decentralization undermines the MNE network to create synergies.

3



- ❖ Managers need to actively develop **learning & innovation capacities** !
  - “Act local, think global”.
  - Failing to do so may be very costly (e.g., the case of Bridgestone/Firestone).

**Peng, M. & Meyer, K. (2011).**  
*“Subsidiary Initiative at Schenck Shanghai Machinery”*

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# “Subsidiary Initiative”



## ■ Discussions

### ❖ Questions

- From a **resource-based perspective**, what **resources** are needed to develop a machine for a **distance market**, such as **China**, & where in the MNE are those to be found?
- **What kinds of adaptations** are needed to compete in the ‘**good enough**’ segment in **China**?
- **What internal processes** do MNEs (*e.g.*, Schenck) need to **develop & manufacture different product specifications** for different market segments across a wide range of countries?

# *International Research & Development (R&D)*

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# International Research & Development (R&D)



## ■ What is 'R&D'?

- ❖ Basic research, applied research, product or process development.
- ❖ Research & Development (R&D).
- ❖ Research is often conducted in research institutes
- ❖ Development is often conducted in business divisions.

## ■ R&D Internationalization is slower than other activities!

- ❖ Johanson & Vahle's (1977) Uppsala model: Firm international expansion pattern = Exports → sales subsidiaries → production sites → R&D units.
- ❖ **Why so late?**
  - Basic research & applied research are **NOT OFTEN** constrained by the market.
  - The usual routine work is **NOT** clear.
  - It is difficult to transfer superiority from the base in the home country.

Source: Oki (2017).

# International Research & Development (R&D)



## ■ Activities from Development to Mass Production

Name of Activity	Contents
Basic Research	<u>Theoretical and experimental research</u> to gain new scientific knowledge that underlies products & processes.
Applied Research	<u>Research from practical use</u> rather than basic research. Of the knowledge discovered by basic research. There are many studies seeking practical application.
Product Development	Activities to <u>plan products, formulate specifications, &amp; incorporate them into detailed design based on the results of basic and applied research.</u>
Product Prototype	Activities to <u>make products</u> according to the design created in product development & <u>check whether the products satisfy the functions.</u>
Process Development	Activities to <u>design a product line for a particular product model.</u>
Process Prototype	Activities to <u>actually create the process designed in process development</u> & <u>check whether the product can be made.</u>
Mass Production Start-Up	Activities to fine-tune the process to meet the cost & defect rate targets based on the designed process & bring it to mass production.
Mass Production	Activities to produce for customers.

Source: Oki (2017).



## ■ Key Functions Held by 293 Japanese Manufacturing Corporations that Mass-Produce in Southeast Asia

Activities Carried Out by Overseas Subsidiaries	Number of Overseas Subsidiaries Engaged in Activities	% of Overseas subsidiaries Engaged in Activities
Mass production start-up	265	90.40%
Process Improvement	236	80.50%
Process Development	183	62.50%
Product Improvement	145	49.50%
Product Development	55	18.80%
Basic Research	18	6.10%

❖ Mass production start-ups account for 90% of the surveyed Japanese MNCs. However, only 6% of them get involved in basic research activities.

Source: Oki (2017).



## ■ Recently, the R&D Internationalization is Accelerating!

- ❖ **The period 2000-2010:** The number of overseas R&D bases of Japanese MNCs has expanded to **less than three times** (↑)
- ❖ **Toyota:** USA (1973 & 1977) → Europe (1987 & 1993), → Thailand, Australia, & China (2000 & later).
- ❖ **WHY do MNCs need to globalize their R&D Activities?**
  - To carry out R&D that meets local needs.
  - To obtain “knowledge & technology that can only be obtained in that country”. (**Example:** Establishment of a research institute on the west coast of the US, where IT human resources are abundant, promotion of joint research with well-known overseas universities, acquisition of overseas venture companies etc.)
  - Make up for the shortage of human resources on the home country-side.

Source: Oki (2017).



## ■ Overseas R&D Units: Kuemmerle's (1999) HBE vs. HBA

### ❖ HBE-Oriented Overseas R&D Units

- **Demand factor:** Responses to customers' interests & demands.
- Introduced superior technology from the base in the home country & utilized it in a form tailored to the local area.
- Close collaboration within local subsidiaries & MNCs is important.
- **Example:** Panasonic China Life Research Center (Mainly local staff except the director).
  - ◆ Collect information by conducting group interviews, home visit surveys, & relevant surveys.
  - ◆ Planning a “tanning drum type washing machine with a sterilization function” (Understanding that local people are sensitive to viruses).
  - ◆ Panasonic washing machine share = 3% (2007) → 18% (2008).

Source: Oki (2017).



## ■ Overseas R&D Units: Kuemmerle's (1999) HBE vs. HBA

### ❖ HBA-Oriented Overseas R&D Units

- **Supply factor:** Acquire knowledge & technology that are difficult to obtain in the home country in overseas markets.
- **Knowledge cluster:** Industry, universities, & governments.
- Entering the local research community by having a local R&D base → Absorption of tacit knowledge is possible.
- **Example:** TOYOTA RESEARCH INSTITUTE INC – **AI Research**
  - ◆ Toyota established in January 2016 in **Silicon Valley, USA**.
  - ◆ An urgent need to accumulate knowledge & technology related to AI for Toyota aiming to develop self-driving cars.
  - ◆ Close collaboration with **Stanford University**.
  - ◆ **Head of TRI:** Gil Bratt, a leader in robotics & AI research who directed robot projects at the Defense Advanced Research Projects Agency of the US Department of Defense.

Source: Oki (2017).





## ■ What Determines the Location of Foreign R&D Centers?

- ❖ Agglomeration of corporate R&D centers;
- ❖ Agglomeration of research units by local universities & governmental organizations;
- ❖ Agglomeration of suppliers of parts & materials;
- ❖ Market size & growth;
- ❖ Distance between strategic units in the MNC networks;
- ❖ Costs of factor endowments; &
- ❖ The level of intellectual property rights protection.

Source: Oki (2017).



## ■ Internationalization of R&D in China & India

	Myth	Reality
Learning from abroad	Advanced technology comes from the West; India and China are adopters of the Western technologies	Not always. Joint collaboration with the Western companies is rapidly increasing in quantity, both in India and in China
Low cost technology development	Technology development in India and China is very cheap	Not always. Especially in China, overcoming the difference in custom and standard is sometimes even more costly
Role of repatriates	The returnees from the West with higher education and excellent working experiences play a major role in enhancing the technological standard and entrepreneurial spirits in India and China	Not always. The role of the repatriates is quite important in both countries, but also sometimes exaggerated. In both China and India, repatriates also include second-class scientists and engineers who cannot survive in the US. In China, local managers complain that even low-quality repatriate engineers often demand high salaries

Source: Asakawa & Som (2008).



## ■ Internationalization of R&D in China & India

	Myth	Reality
Standardization	China is more interested in setting its own local standard rather than conforming to the international standard	Not always. China is increasingly interested in participating in setting both local original and international standard.
Only for local innovation	The purpose for conducting R&D in Asia is only for local adaptation rather than global innovation	Not always. There are quite a few examples of global innovation originated from R&D in India and China. For example, just to name a few, Adobe's PageMaker 7.0 was entirely developed in India by Indian staff and is widely used in the entire world. As for China, Nokia's N2100 and N6108 were developed locally and introduced to the global market

Source: Asakawa & Som (2008)..



## ■ Changes in the Balance between Autonomy & Information Connectivity in Overseas R&D Units

### ❖ Autonomy

- Decision-making power (Selection of research projects, budgeting plans, selection of equipment, recruitment, performance evaluation & promotion of researchers, decision to team up with counterparts etc.)

### ❖ Control

- Power to promote technology transfer from the home country & other countries & to decide the strategic direction of research topics.

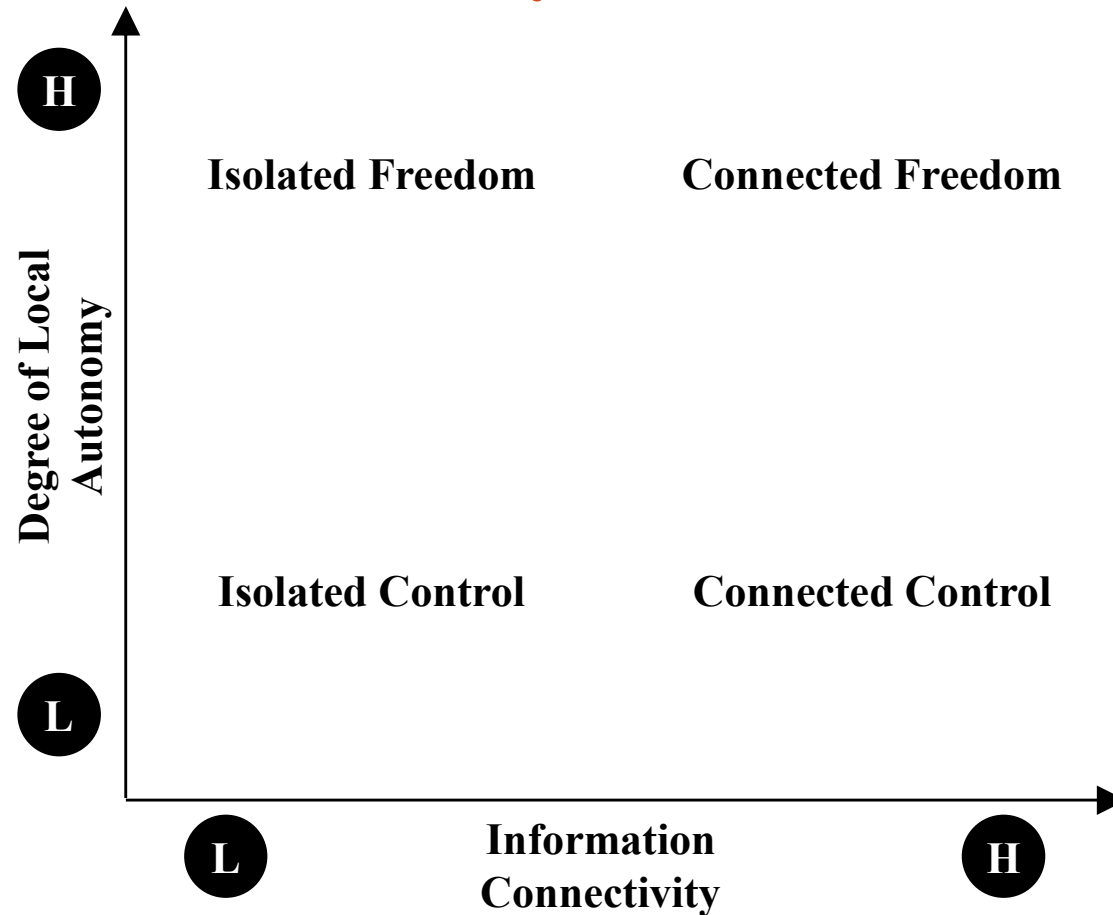
### ❖ KEY POINTS

- The parent company needs to keep the balance between autonomy & control. **Asakawa's (2001)** paper published in *Research Policy* discusses the dynamic change in this balance depending on the role of foreign subsidiaries → **3 possible stages.**

Source: Oki (2017).



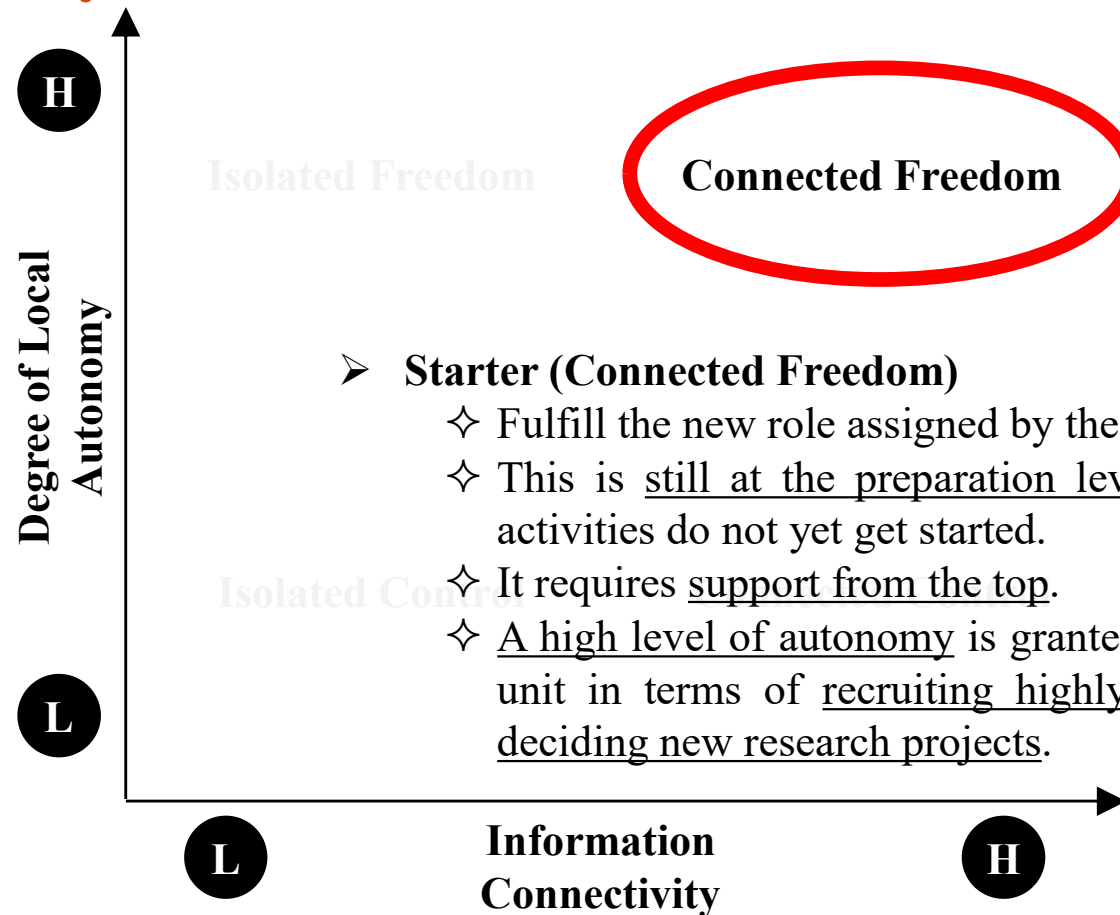
## ■ Typology of Overseas R&D Units from a View of the Balance between Autonomy & Information Connectivity



Source: Asakawa (2001).



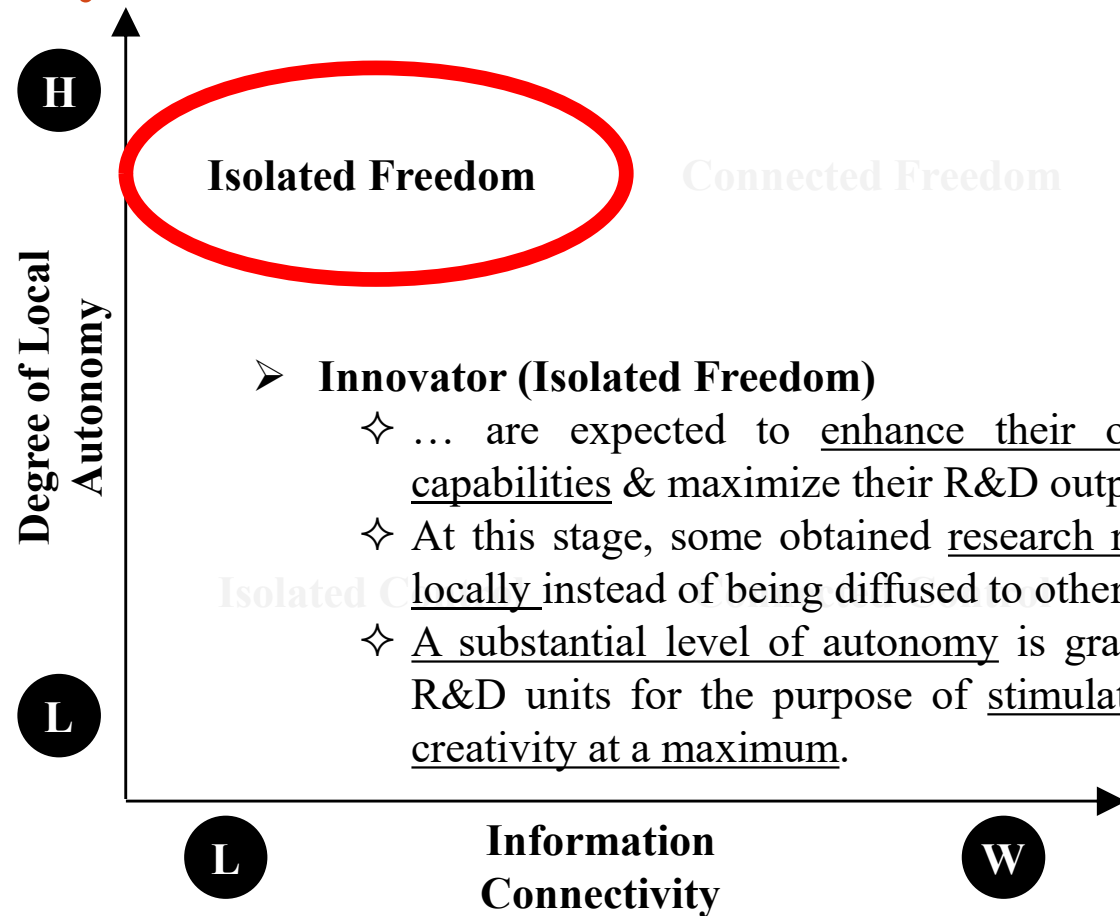
## ■ Changes in the Balance between Autonomy & Information Connectivity in Overseas R&D Units



Source: Asakawa (2001).



## ■ Changes in the Balance between Autonomy & Information Connectivity in Overseas R&D Units



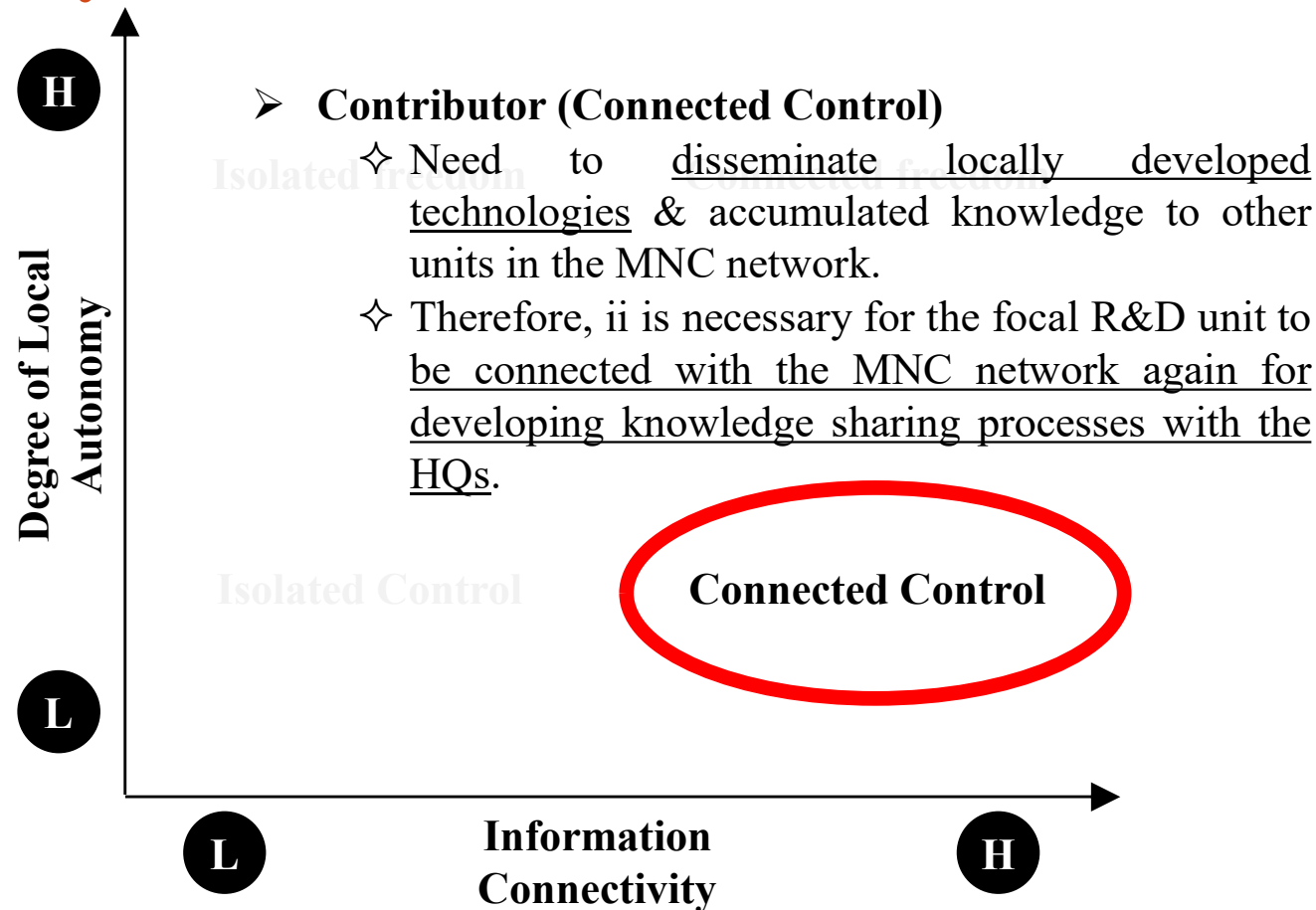
### ➤ Innovator (Isolated Freedom)

- ✧ ... are expected to enhance their own local R&D capabilities & maximize their R&D outputs.
- ✧ At this stage, some obtained research results even used locally instead of being diffused to other intra-firm units.
- ✧ A substantial level of autonomy is granted to the local R&D units for the purpose of stimulating their unique creativity at a maximum.

Source: Asakawa (2001).



## ■ Changes in the Balance between Autonomy & Information Connectivity in Overseas R&D Units

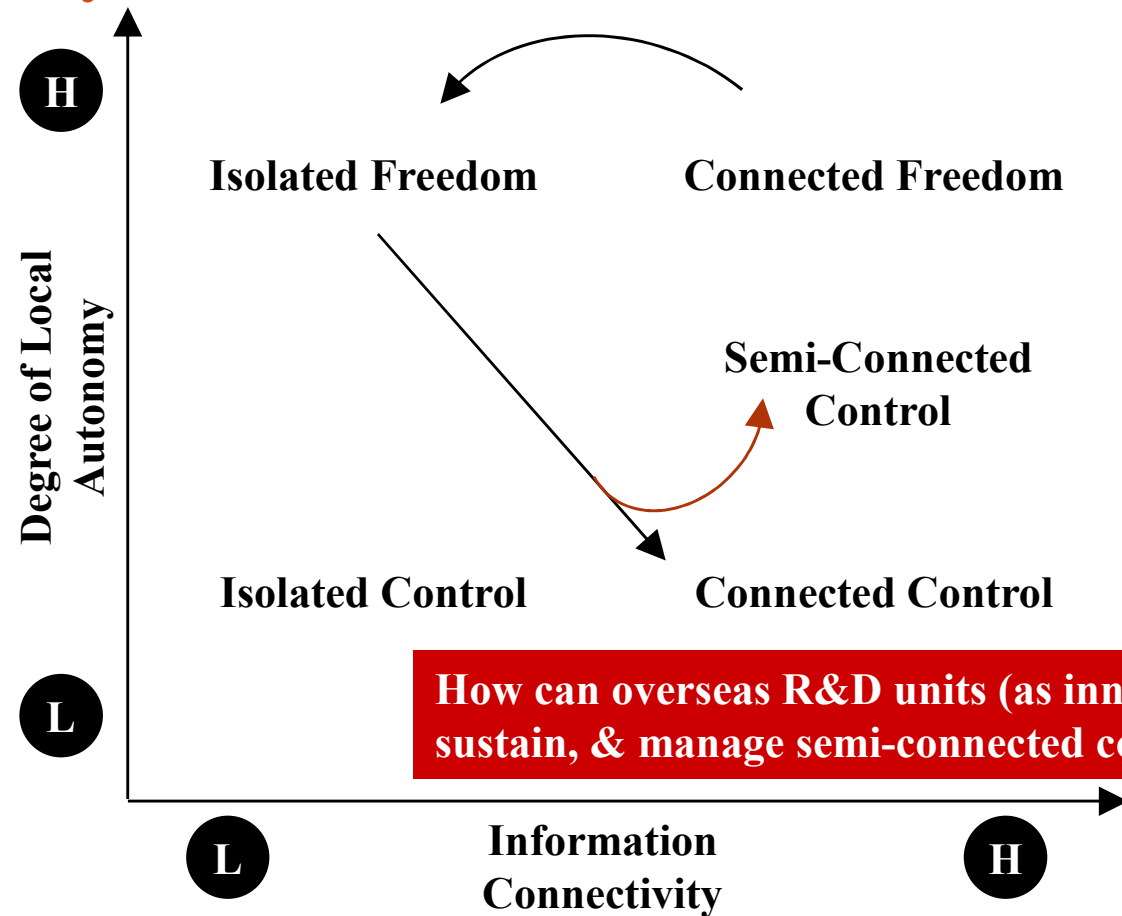


Source: Asakawa (2001).





## ■ Changes in the Balance between Autonomy & Information Connectivity in Overseas R&D Units



Source: Asakawa (2001).

# The End of Today's Lecture



ご清聴有難う御座いました。

**Thank you so much!**

**Merci beaucoup!**

**Vielen Dank für Ihre Aufmerksamkeit!**

**Grazie mille!**

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