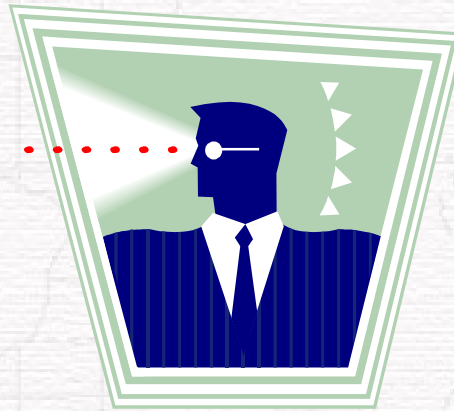


我國工業區現況與未來展望介紹

Current Status and Future Outlook of Industrial Park in Taiwan



Industrial Parks Division,
Industrial Development Bureau,
Ministry of Economic Affairs

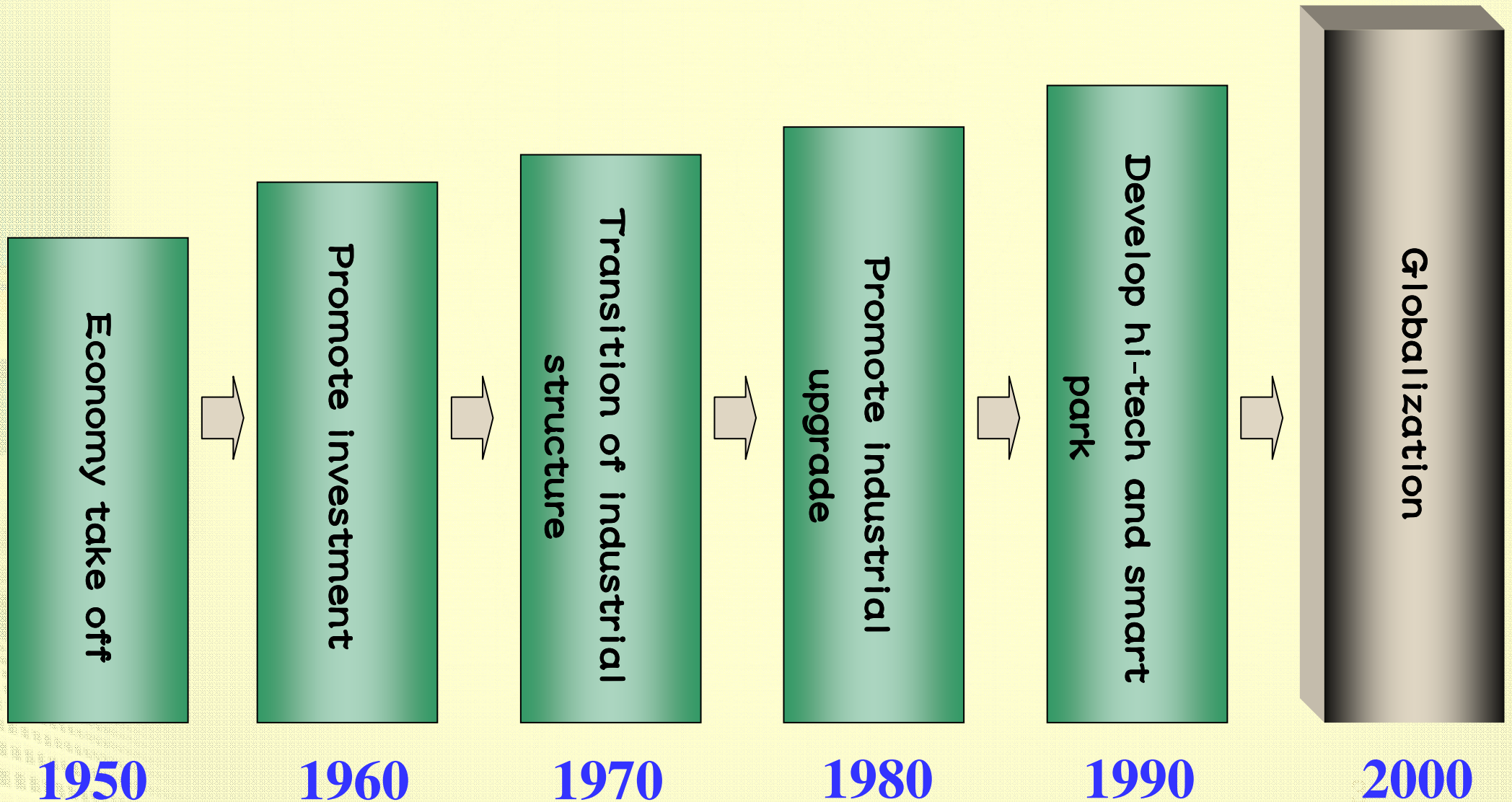
Director, ***Tsung-Hsiung Kuo***,
Oct. 23, 2007



Outline

- 1. Evolution of the development policy for industrial district**
- 2. Overview of the development for industrial district**
- 3. Challenges for industrial district**
- 4. Analysis of transition trends**
- 5. Functions of existing service upgrade mechanism**
- 6. Directions for future development**

1. Evolution of the development policy for industrial district



1. Evolution of the development policy for industrial district

1. The decade before 1949

(1) Economy and industry policy : agriculture support industry, industry develop agriculture

(2) Industrial development policy : labor intensive import substitution

(3) Major milestone

▶ 「**Statute for Promoting Investment**」 in 1960

(4) Industrial district development policy

▶ **Uncertain**

1. Evolution of the development policy for industrial district

二、 First decade to promote investment

(1) Economy and industry policy : labor intensive export

(2) Industrial development policy : encourage investment, develop export industry for overseas market

(3) Major milestone

▶ 「EPZ guideline」 in 1965 , establish 「EPZ」 in 1969

▶ IDB, MOEA in 1970

(4) Industrial district development policy

▶ Improve investment environment in Taipei and Koushung

▶ Develop relevant industry to cope with major economic construction

1. Evolution of the development policy for industrial district

3. Transition of economic and industry structure

(一) Economy and industry policy : adjust economic structure, promote industry upgrade

(二) Industrial development policy : heavy chemical engineer industry, second import substitute and export expansion

(三) Major milestone

➤ **10 construction in 1973**

➤ **12 construction in 1977**

➤ **「Science Park guideline」 in 1979**

➤ **Establish Hsin-Chu science park in 1980**

(四) Industrial district development policy

➤ **from 「static」 attitude for application, to proactive development by government's 「dynamic attitude」**

➤ **Special industrial district for petrochemical and young entrepreneur to cope with economic projects**

1. Evolution of the development policy for industrial district

4. Promote industry upgrade

- (1) Economy and industry policy : Promote technology intensive high tech industry
- (2) Industrial development policy : develop strategic industry with technology intensive, alliance intensive, high added value and low energy intensity
- (3) Major milestone
 - ▶ **14 major constructions in 1984**
 - ▶ **abolish 「 Statute for Promoting Investment 」 in 1990**
- (4) Industrial district development policy
 - ▶ **Government turned conservative due to energy crisis and overstocked land**

1. Evolution of the development policy for industrial district

5. Develop high tech and smart park

- (一) Economy and industry policy : incubate industrial potential, promote industry upgrade
- (二) Industrial development policy : Develop high tech industry
- (三) Major milestone
 - ▶ 「Promote industrial upgrade articles」 in 1991
 - ▶ National six-year project in 1991
 - ▶ 「Smart park guideline」 in 1996
 - ▶ Cross century national project - 「Asia operation center」 in 1997
- (四) Industrial district development policy
 - ▶ Develop 「off-island industrial district」 to cope with higher land price and environmental consciousness
 - ▶ Smart parks such as Nankang software park, Yunlin science and technology park, and Tainan science and technology park for the mission of 「Asia manufacture center」

1. Evolution of the development policy for industrial district

6. Globalization

- (一) Economy and industry policy : To build Taiwan as green silicon island
- (二) Industrial development policy : Manufacture center with high added values
- (三) Major milestone
 - ▶ **Join WTO**
 - ▶ **Promote corporate operation headquarter**
- (四) Industrial district development policy
 - ▶ **Transition of existing industrial district for global operation center**
 - ▶ **Empower to streamline Taiwan province : central government responsible for policy and regulation; local government collaborate with private sector to develop industrial district**

2. Overview of the development for industrial district

- 、 Category of industrial district
 - (1) General — no designated sectors, open for general public
 - (2) Designated mission
 - 1. **Yu-Shih — young entrepreneur**
 - 2. **Special industry — designated sector for strategic demand, such as petrochemical (Tofen, Dasher, Linyuan); Wood (Shulin); Automobile (Fenshan, Pintung); Waste metal (Dafa); and electroplate (Chunbin)**
 - 3. **Basic industry — basic industry covers energy (power), raw material (mineral, steel and petrochemicals) such as Yunlin off-island basic industrial district**

2. Overview of the development for industrial district

- (3) Science and technology park and smart park
- ▶ **McKinsey & Company recommend Taiwan should set up intelligent network of industrial parks to support the demand from manufacturer and advanced industry**
 - ▶ **Executive Yuan approved “Asia operation center” project in 1995, Smart parks such as Nankang software park, Yunlin science and technology park, and Tainan science and technology park for the mission of comprehensive development and balance regional development, promote industrial upgrade and enhance global competency for the foundation of Asia operation and manufacture center which could attract investment on hi-tech and high value added industry**



2. Overview of the development for industrial district

二、Current status

Region	Item	Size (Hectare)	Company	Employee	Major cluster
North (East)		2,730	4,992	228,345	Electronic
Central		2,433	3,141	103,884	Machine tools
South		4,156	3,108	120,929	Steel
Total		9,319	11,241	453,158	

Source : Performance of industrial district , IDB, MOEA Oct. 2007

3. Challenges for industrial district

1. Insufficient and obsolete infrastructure

- ▶ 41 industrial districts are more than 20 years old

Time	Over 26 years	21~25	16~20	11~15
Number	26	15	10	4
North	7	7	3	1
Central	7	3	3	2
Soouth	11	4	4	0
East	1	1	0	1

3. Challenges for industrial district

2. Cross discipline competition

Item \ Type	Industrial district	Science park	EPZ
Authority	Industrial authority agencies	NSC	EPZ administration center, MOEA
Development format	1. Authority : developer obtain loan from bank and sell the factory to pay back 2. Public and private land owner : Raise capital by developer 3. Entrepreneur : Capital raised by private sector	1. Capital from government bank and bank loan then issued by NSC 2. Business obtained land within or in the proximity of industrial park then file application to NSC for land incorporation approval by executive yuan	1. Early funding from Sino-US foundation 2. Current funding from surplus, bank loan and mostly from open bidding and outsourcing

3. Challenges for industrial district

Item \ Type	Industrial district	Science park	EPZ
Standard factory	<ol style="list-style-type: none"> 1. self owned and self built 2. constructed by authority agency then sale or rent 	Rental only	<ol style="list-style-type: none"> 1. sales oriented 2. rental as alternative
Administrative management	<ol style="list-style-type: none"> 1. Service center to manage sewage, public facilities and general service with single window for relevant documentations 2. service does not issue licenses 	<ol style="list-style-type: none"> 1. Administration bureau to provide relevant services and issue license 2. Tax waiver zone by custom, fire and police department to provide necessary service 	<ol style="list-style-type: none"> 3. Administration bureau to provide relevant services and issue license 1. Tax waiver zone by custom, fire and police department to provide necessary service



3. Challenges for industrial district

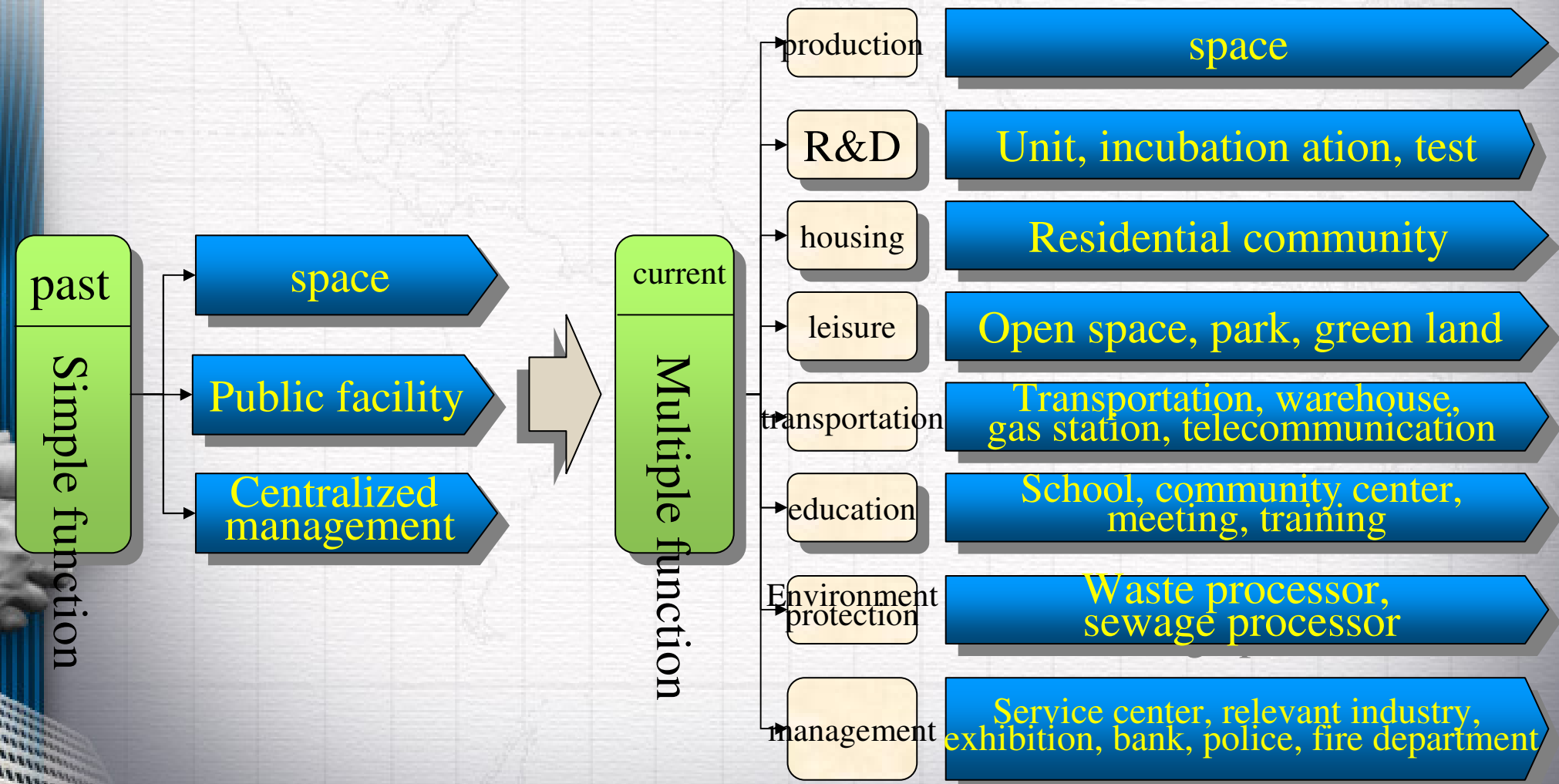
3. Threats from developing countries

- ▶ Advantages of late comer
 - ▶ **Late comer can avoid redundant error and copy advanced experience**
 - ▶ **Due to lower economic scale they have low cost on land and labor to position with better attraction**
- ▶ Under comparative profit impact, local company relocate offshore to cost down; while anchor company relocation will lost its cluster effect and increase the cost of remaining company which also lost their orders and eventually close down
- ▶ Shortage on the funds for maintenance and sewage management will deteriorate the financial balance of administrative mechanism

4. Analysis of transition trends

1. Transition of planning concept

(1) From industrial district to industrial park



4. Analysis of transition trends

(二) Organic adjustment of existing industrial district

- ▶ IDB set up : 「Industrial district land reform guideline」 in 2001 based on article 30 of industrial upgrade promotion protocol
- ▶ **Enterprise can file land reform : total 133 applicants with 56.9 hectares and total investment at 12.28 billion dollars**



4. Analysis of transition trends

(3) Emerging concept on regeneration for renewed competency

- ▶ The ever changing environment has put pressure on the software and hardware in industrial district for transition
 - ▶ In hardware, the life cycle for public facility can not match up with the demand and need to be replaced
 - ▶ In software, relocation challenges the drive for industrial transition

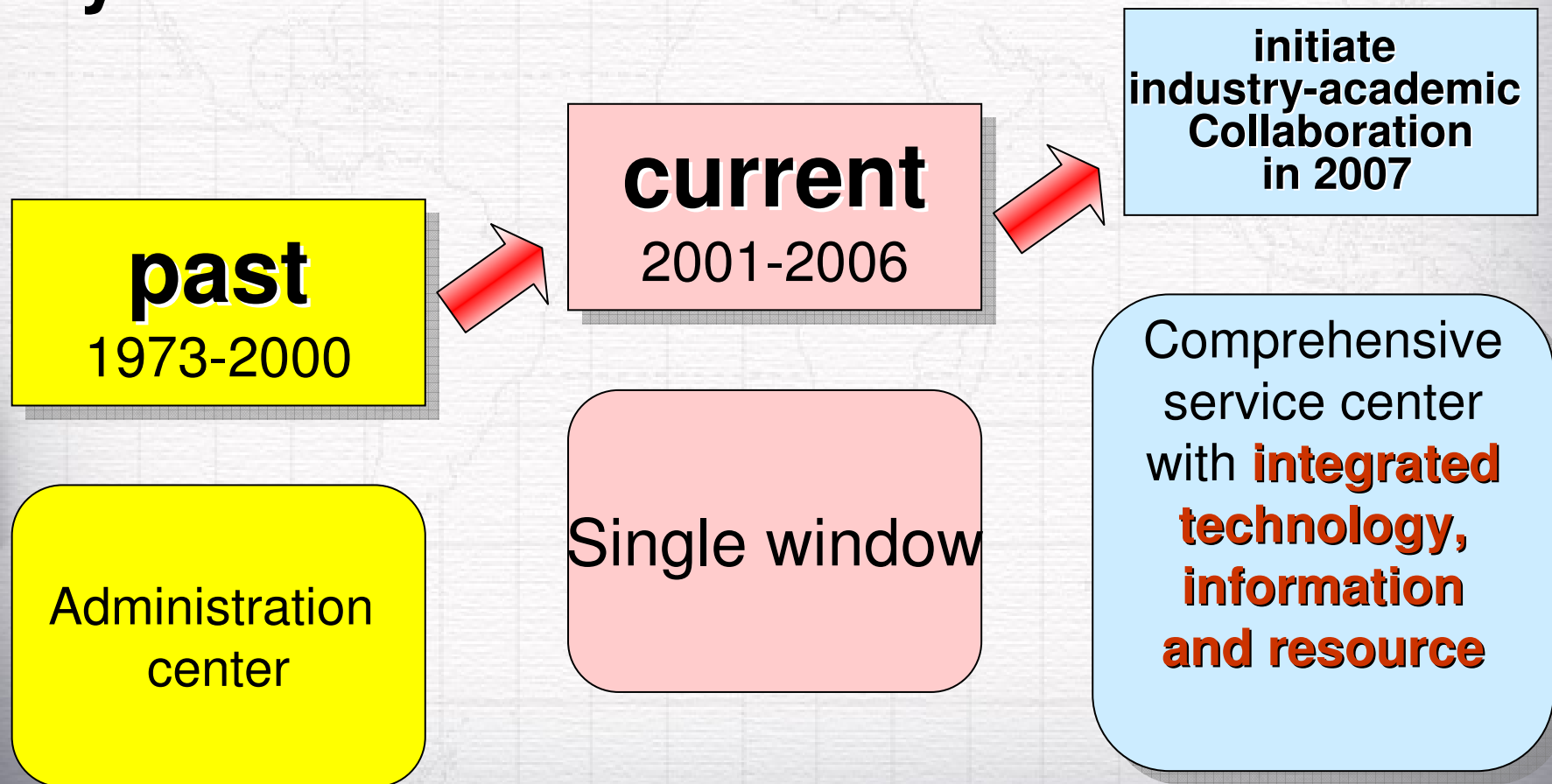
4. Analysis of transition trends

二、 Transition of rental and sales system

- ▶ Automation changes the cost structure
- ▶ Changing concept on the land ownership by business entity
- ▶ Due to the impact of global distribution, foreign company favors rental land
- ▶ 「Rental incentives for industrial district」 (006688 protocol) transform land supply system into 「coexisted rental and sales」

4. Analysis of transition trends

3. Transition of service and administration system



5. Functions of existing service upgrade mechanism

1. Assist transition (regeneration)

(1) land reform

(2) tourism promotion – assist tourism factory

- ▶ I-tai in Dawulu industrial district – 「bathroom museum」
- ▶ Chushihdin in Tucheng industrial district – 「nougat museum」
- ▶ Chishen in Maeluen industrial district – 「stone dream workshop」



5. Functions of existing service upgrade mechanism

(3) Encourage active regeneration

▶ IDB initiated 「environment regeneration by enterprise」 since 2003 with budget to execute relevant process

1.Improve scenic and environment quality

2.Supervise environment regeneration and relevant mechanism

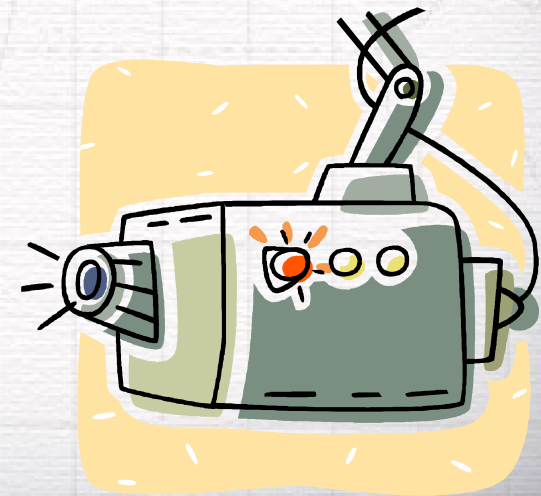
3.maximize and innovate the utility of public resource

4.focus consensus on community awareness and passion on environmental concern

5. Functions of existing service upgrade mechanism

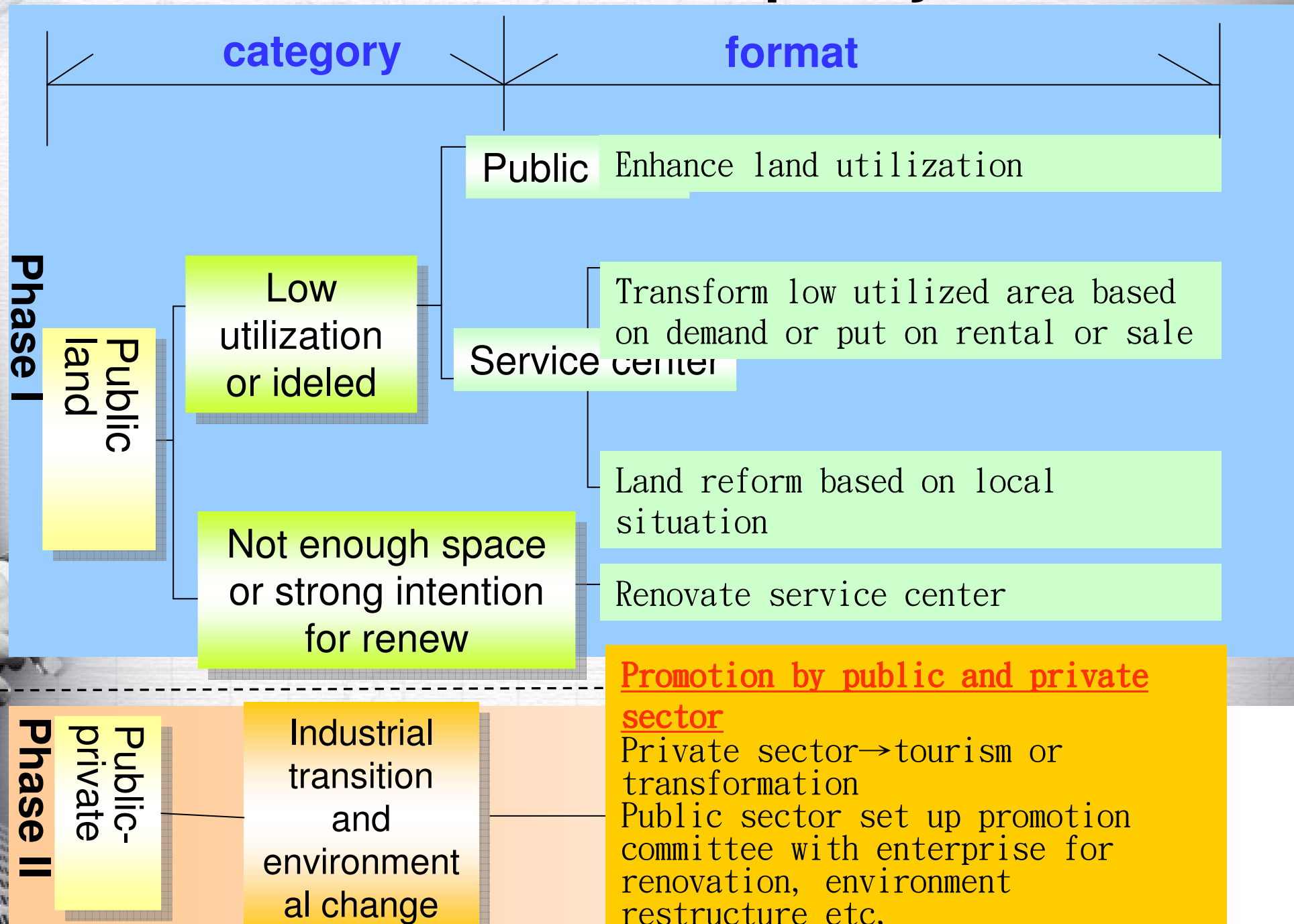
2. Environmental renovation

- (1) improve public infrastructure
- (2) enhance utility of service center
- (3) green environment
- (4) security system



6. Directions for future development

1. Directions of renewed policy



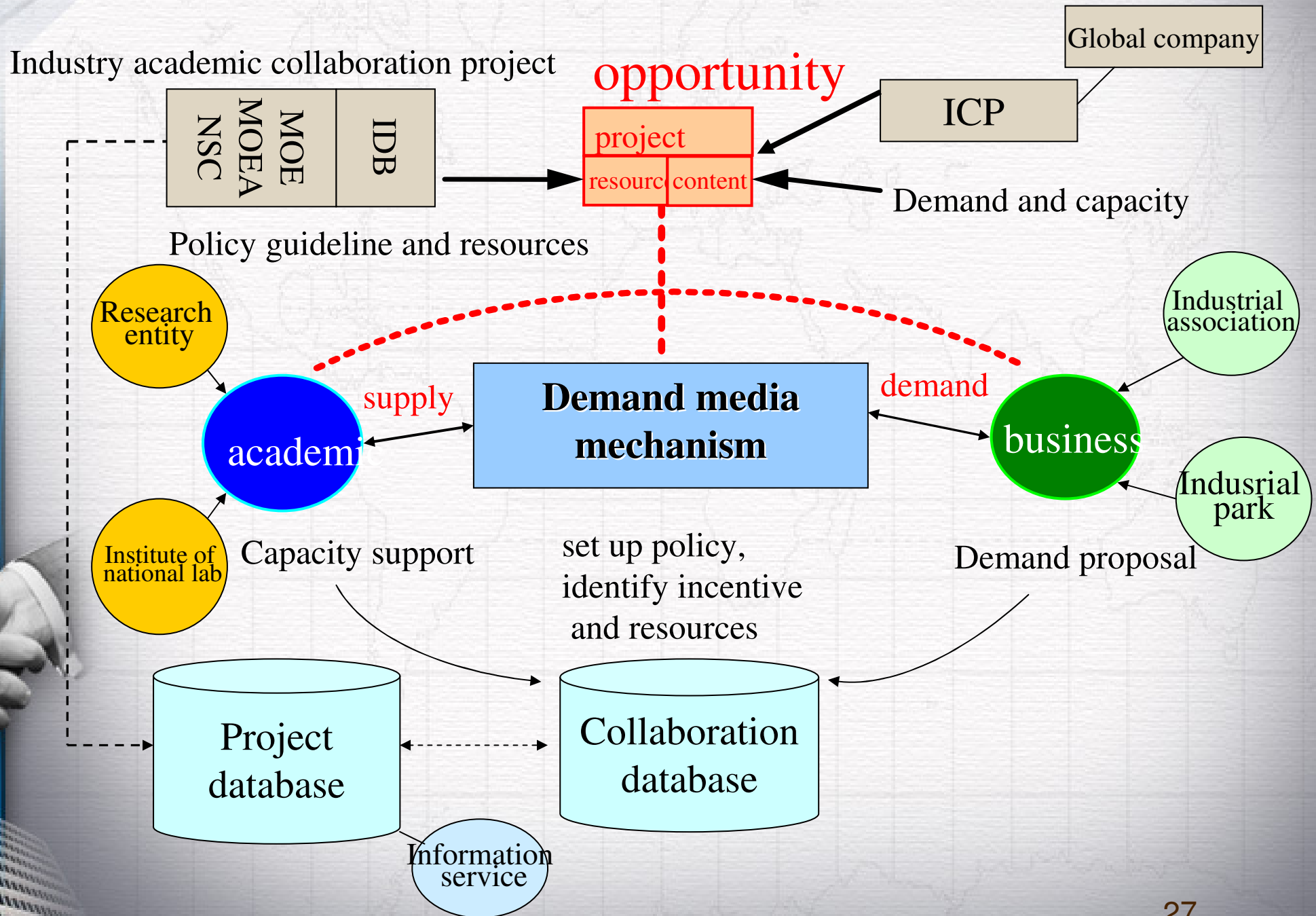
6. Directions for future development

2. Direction for industrial transition – industry and academic collaboration

- ▶ School as contact window, lack integration mechanism and information
- ▶ Special project by IDB since 2007 via service center in industrial district



6. Directions for future development





6. Directions for future development

3. The direction of legislation for industrial district regeneration

- ▶ incentive for civil regeneration :
construction area incentive, construction area transfer
- ▶ Long term financial loan
- ▶ Subsidy for regeneration within urban development area

The background features a collage of business-related images. In the top left, a black pen with a gold tip is visible. Below it, a small globe shows the Americas. A large, detailed handshake is positioned on the left side. In the bottom right, there is a colorful illustration of a man in a white shirt and tie standing on a large yellow dollar sign, with other business figures in the background. The central text is set against a yellow rectangular background.

Thanks for your attention