Broadband Korea: Case study summary
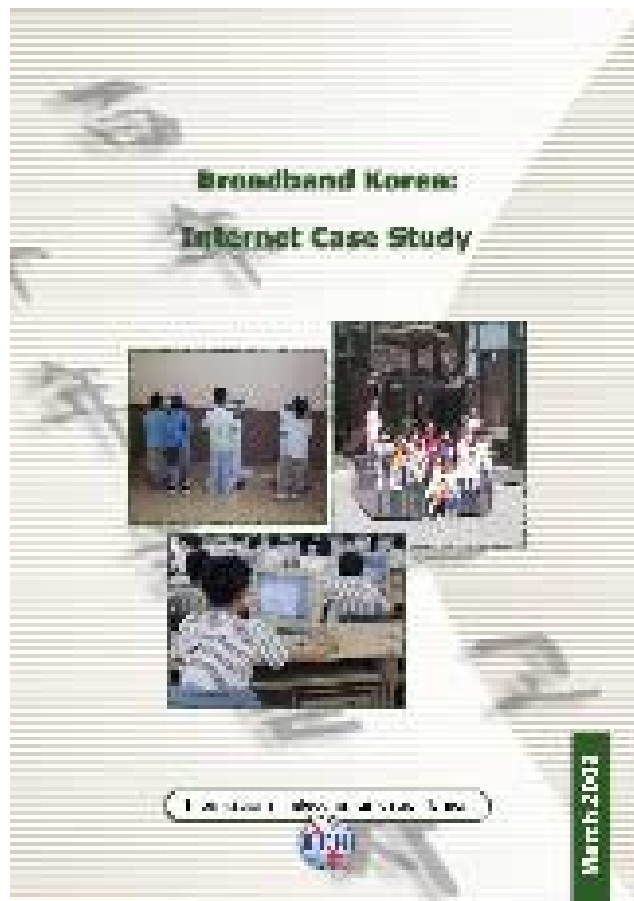
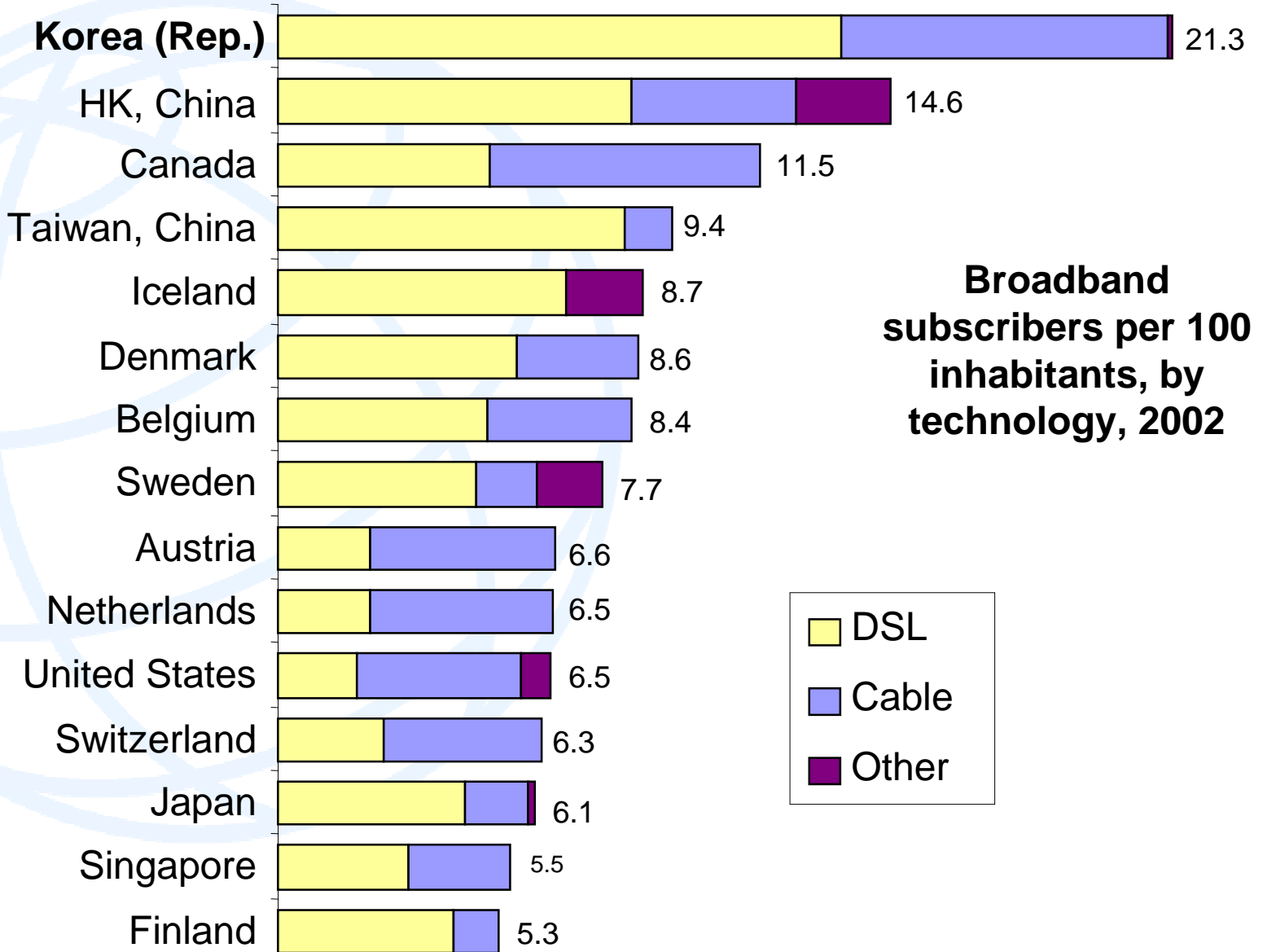**Tim Kelly**
Michael Minges
Vanessa Gray

Korea: #1 worldwide in broadband

Broadband subscribers per 100 inhabitants, by technology, 2002

Country	Value
Korea (Rep.)	21.3
HK, China	14.6
Canada	11.5
Taiwan, China	9.4
Iceland	8.7
Denmark	8.6
Belgium	8.4
Sweden	7.7
Austria	6.6
Netherlands	6.5
United States	6.5
Switzerland	6.3
Japan	6.1
Singapore	5.5
Finland	5.3

Legend:
- DSL
- Cable
- Other

2

Just how far ahead is Korea?
Broadband subscribers, end 2002, million

10.1m — Rep. of Korea, Population 47 m

10.7m — European Union, Population 380 m

Legend (top to bottom): Denmark, Italy, Finland, Portugal, Spain, Ireland, Lux & Greece; Austria; Sweden; Belgium; Netherlands; UK; France; Germany

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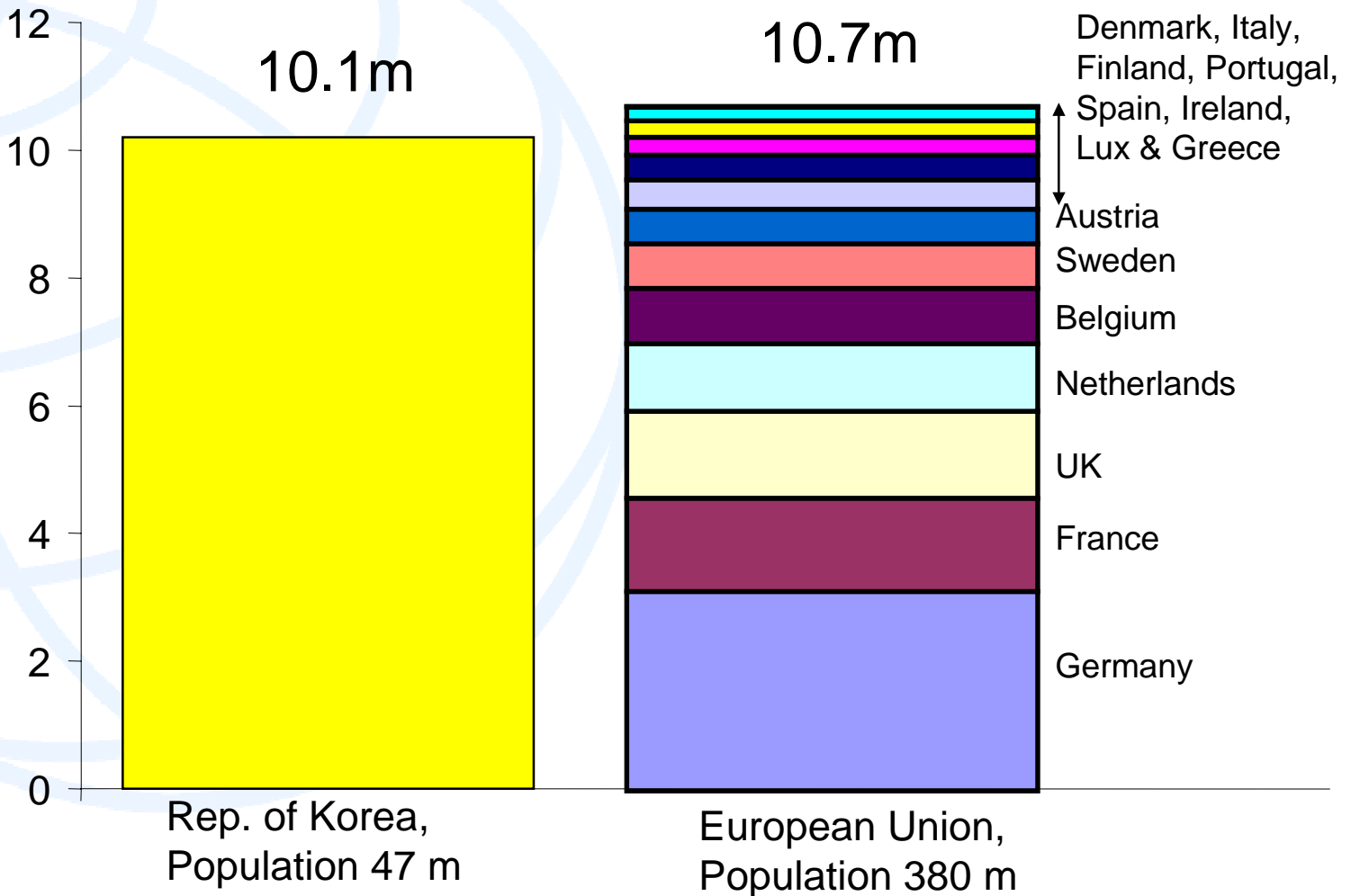
Secrets of Korea's success (1)
Government policy push

Maximise ability of all citizens to use ICTs

E-Korea Vision 2006 (2002-2006)

Vision of a creative knowledge-based society

CYBER KOREA 21 (1999-2002)

Ten priority areas
Annual action plans

National Framework Plan for Informatization Promotion (1996-2000)

National information superhighway

Korea Information Infrastructure Initiative (1995-2005)

Administration, defence, public security, finance & education

National Basic Information System (1987 – 1996)

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Focus on manufacturing

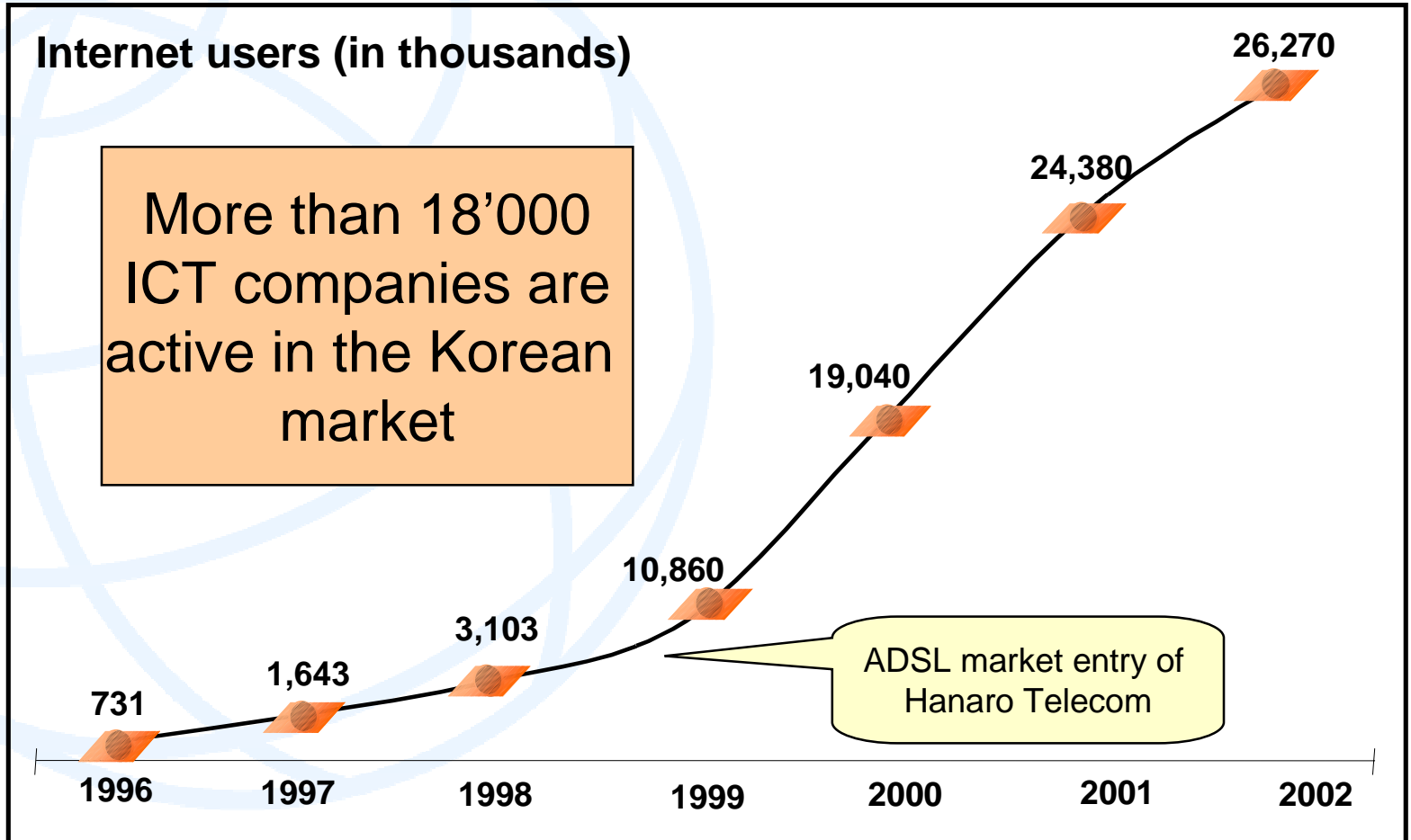| Measures to nurture IT Industry (1987 – 1985) |
|---|
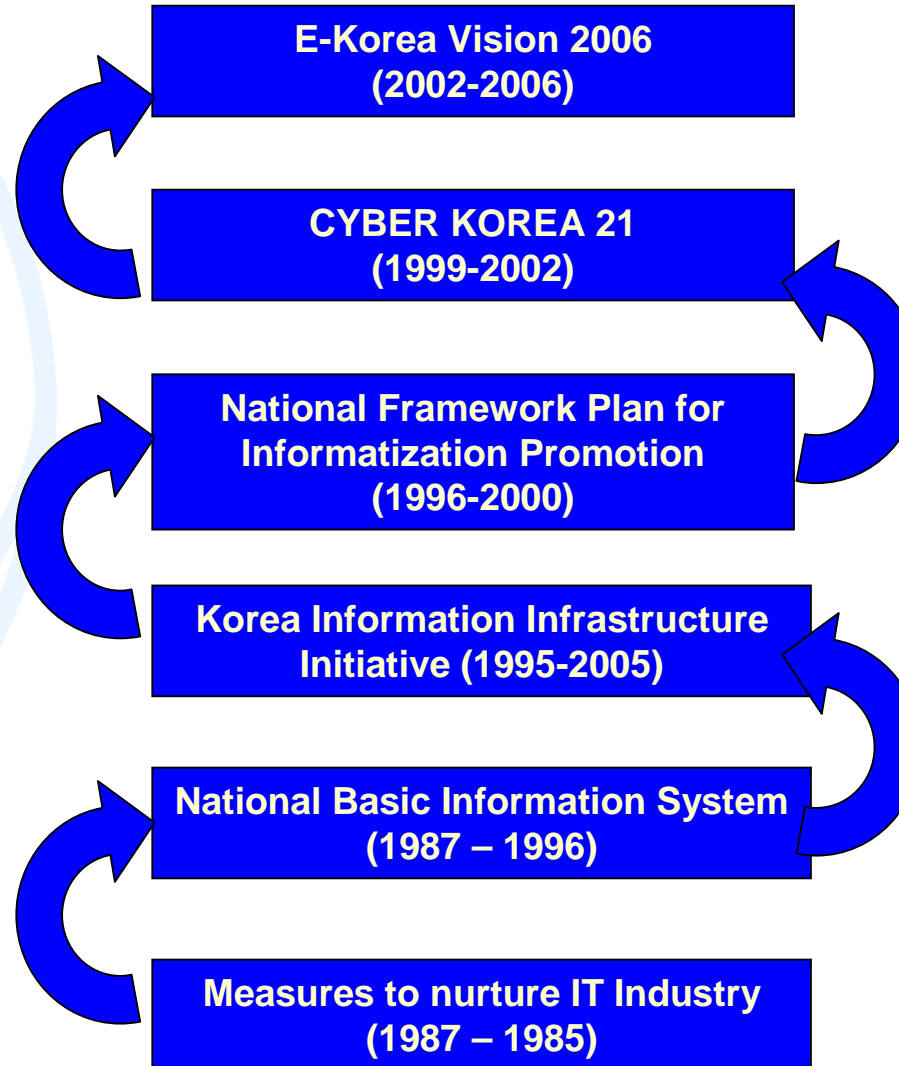
Outcome of public policy drive:
A highly ICT-literate society

- **Home PC-ownership: >78%, of which >86% are Internet users**
- **>90% of Internet users have broadband access**

Year	PC Penetration at home (78.5%)					No Internet Access	No PC at home
	Internet Access at home (68.1%)						
	Dial-up	ISDN	xDSL	Cable modem	Other		
June 2002	3.0%	0.5%	**55.5%**	**8.8%**	0.3%	10.4%	21.5%
Dec 2001	5.5%	0.8%	**45.1%**	**11.3%**	0.5%	13.6%	23.1%

Source: Adapted from KRNIC.

Secrets of Korea's success (2)
Infrastructure competition

Internet users (in thousands)

More than 18'000 ICT companies are active in the Korean market

- 731 — 1996
- 1,643 — 1997
- 3,103 — 1998
- 10,860 — 1999
- 19,040 — 2000
- 24,380 — 2001
- 26,270 — 2002

ADSL market entry of Hanaro Telecom

Source: Adapted from KRNIC.

Outcome of infrastructure competition:
Diversity and choice

Broadband service penetration (in '000s of subscribers)

Technology	Max. Down Speed	1998	1999	2000	2001	Nov. 2002
xDSL	Up to 8Mbit/s	1	170	2'070	4'387	5'664
Cable modem	Up to 10Mbit/s	13	190	1'390	2'530	3'554
Metro Ethernet & B-WLL	Up to 10Mbit/s	-	-	540	875	1'181
Satellite	Up to 1Mbit/s	-	10	20	12	6
Total Subscribers ('000s)		14	370	4'020	7'805	10'405
% of total household		0.1%	2.6%	29%	56%	63%

Source: Adapted from Korean Ministry of Information and Communications.

Secrets of Korea's success (3)
Attractive pricing options

Provider	Price per 1 Mbit/s
SwissCom (Bluewin)	139.00
Iceland (Islandssimmi)	72.60
Canada (Bell Sympatico)	30.60
US (Comcast)	28.60
Singapore	21.90
HK, China (PCCW)	12.70
Korea (Hanaro/KT)	2.90
Japan (Yahoo BB)	1.80

Price per 1 Mbit/s, April 2003
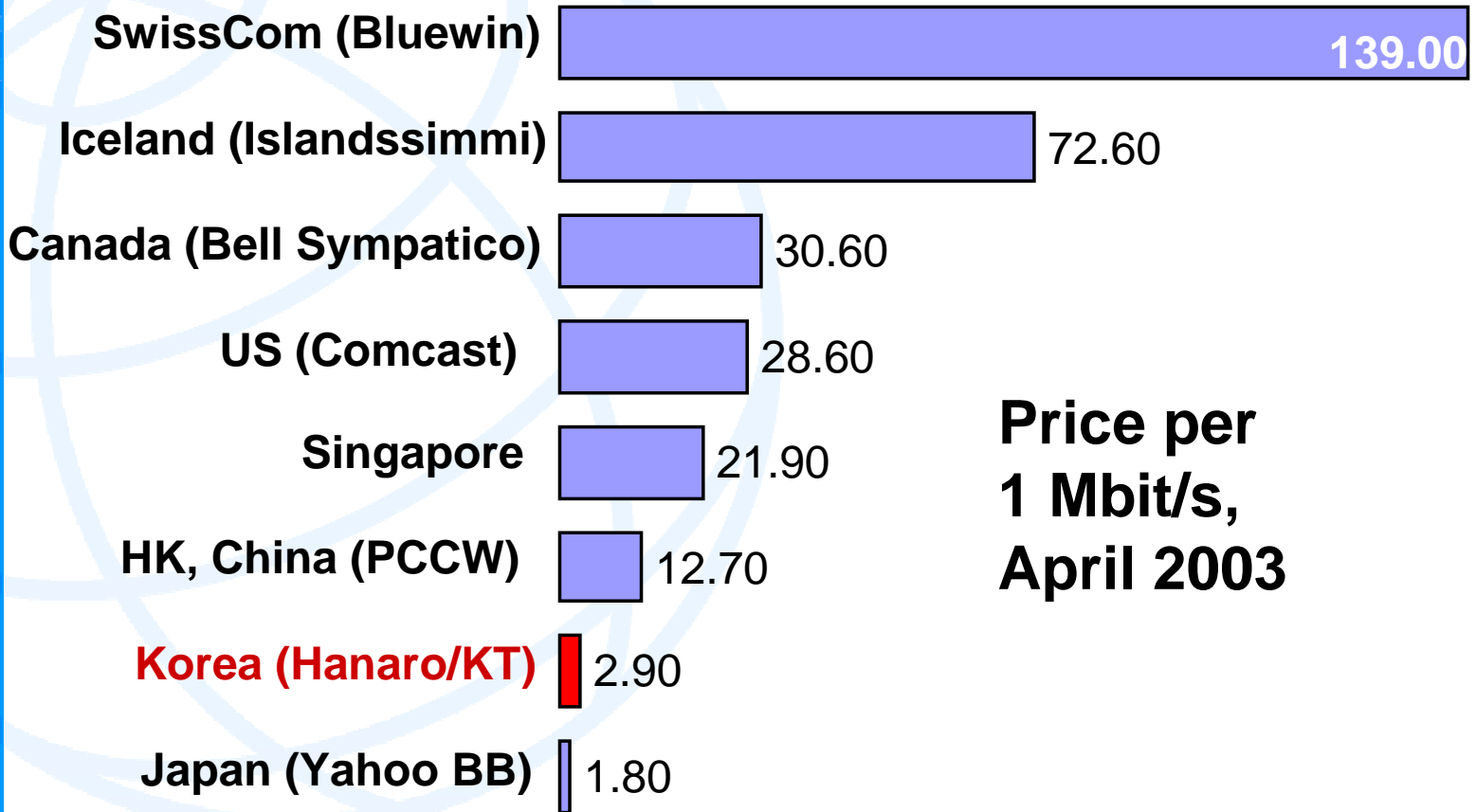
Outcome of lower prices:
Higher spending on ICT services

Korea (Rep.)

Hong Kong SAR

Global average

Telecom spending as a % of national GDP

6%

5%

4%

3%

2%

1%

0%

1991   2001

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Source: ITU World Telecommunication Indicators Database.
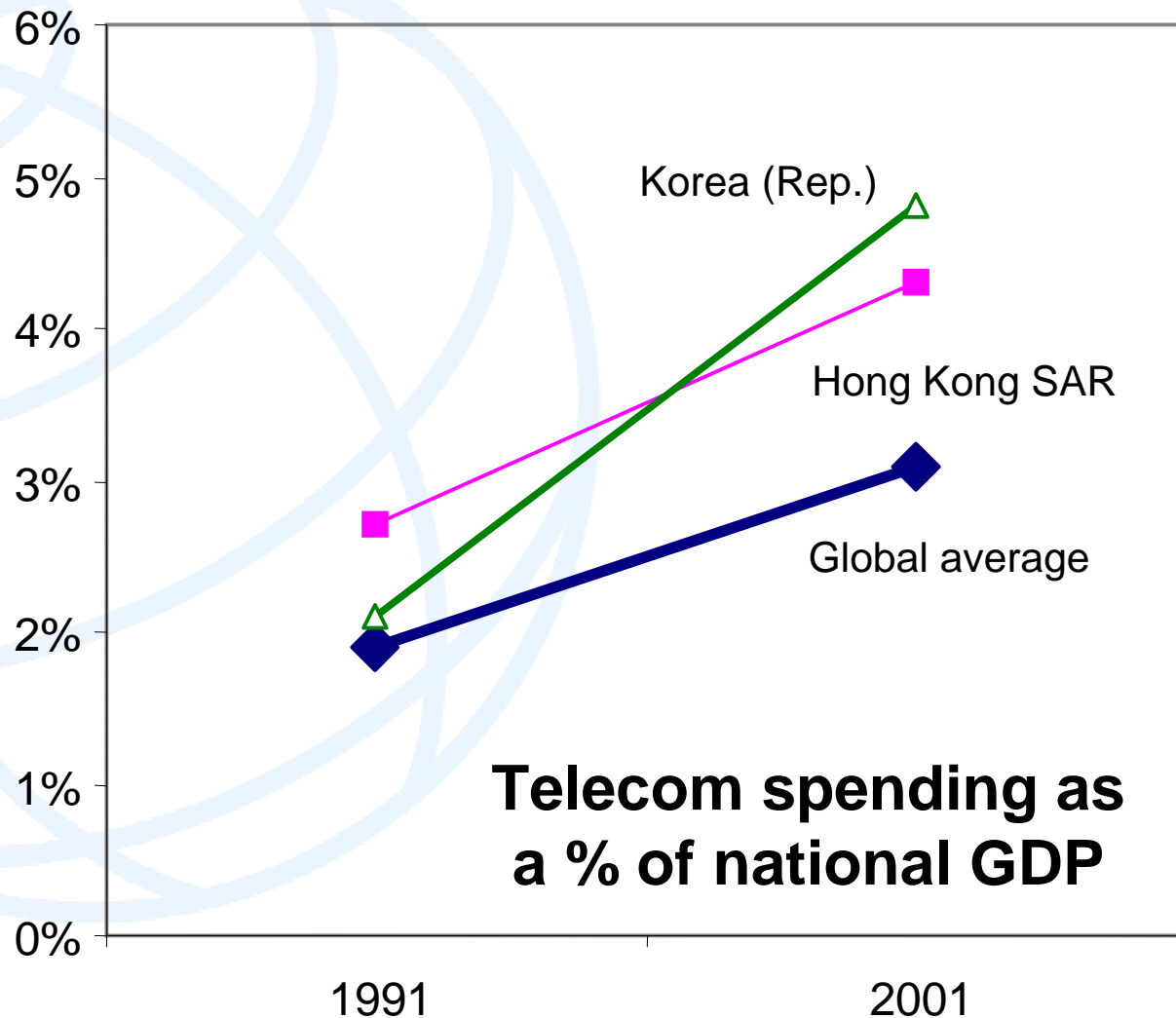
More secrets of Korea's success

- **Emphasis on education**
  - ➢ **Broadband seen as family investment in education**
- **Highly-urbanized population**
  - ➢ **80% living in urbanized areas**
  - ➢ **48% of housing stock is apartment blocks**
- **Favourable regulatory environment**
  - ➢ **Local loop unbundling**
  - ➢ **Government support for facilities-based competition**
- **Local manufacturing and local content**
  - ➢ **Emphasis on R&D**
  - ➢ **High performance IP backbone**
  - ➢ **Korean content (e.g., DAUM website) and games**
- **Government support**
  - ➢ **Spectrum fees and other remain within sector**

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