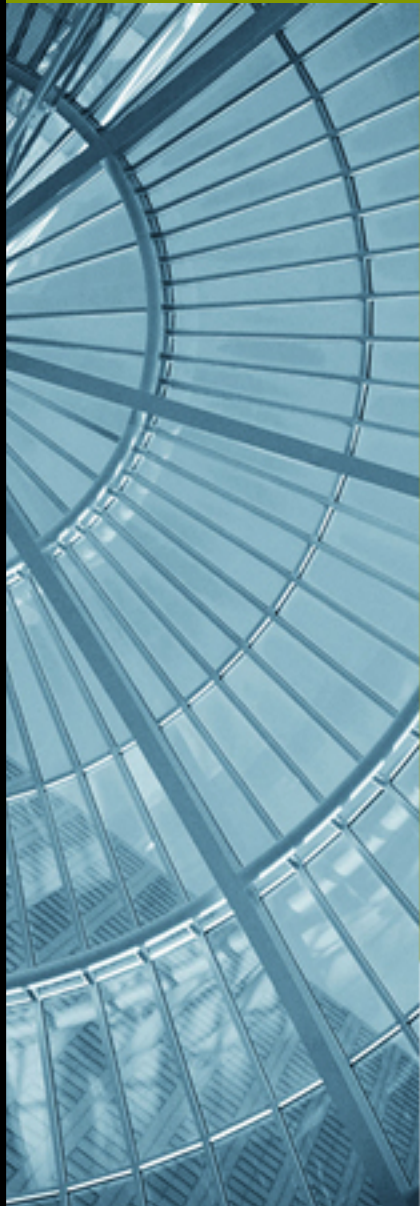


The SYBASE logo is displayed in white, serif, all-caps font against a solid green rectangular background.

SYBASE®



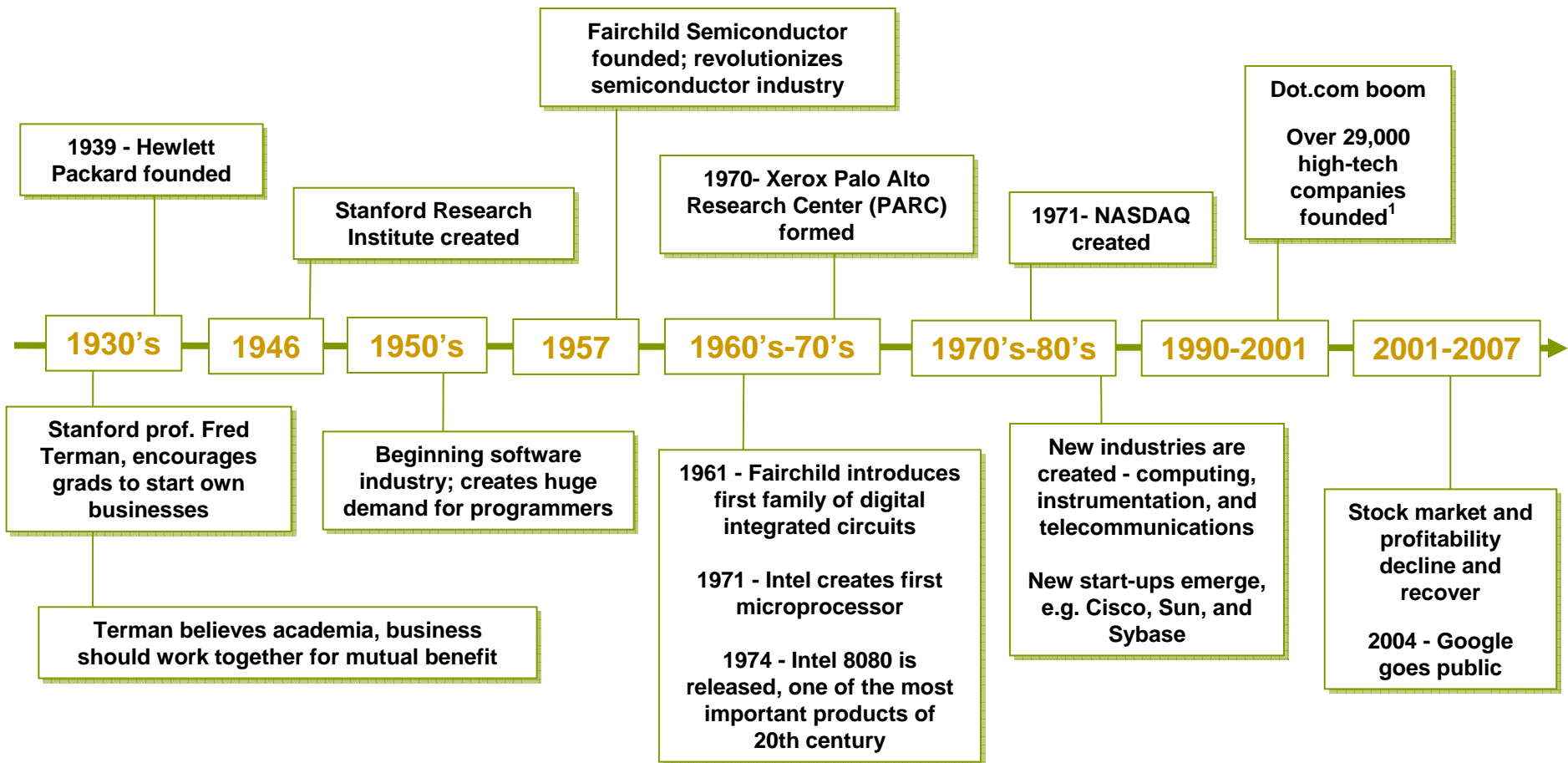
Innovation in Silicon Valley

The shift to an innovation-based economy – what Korea can learn from the Silicon Valley model

John Chen, Chairman, CEO and President, Sybase
Asia Innovation Forum 2007
April 10, 2007



History of Silicon Valley



Silicon Valley's Resiliency

Downturns

Upturns

'70s	Military spending downturn	Intel established for Integrated Circuit
'80s	Mainframe and Timeshare Systems fade	Cisco, Sun, and Sybase founded on Distributed Computing
'90s	Netscape gets sold	Yahoo establish internet portal
'00s	Sun decline with Dot-Com	Google goes IPO

Multiple periods of downturn are followed by new market creation

Evolution from Agricultural Capital to Technology Capital

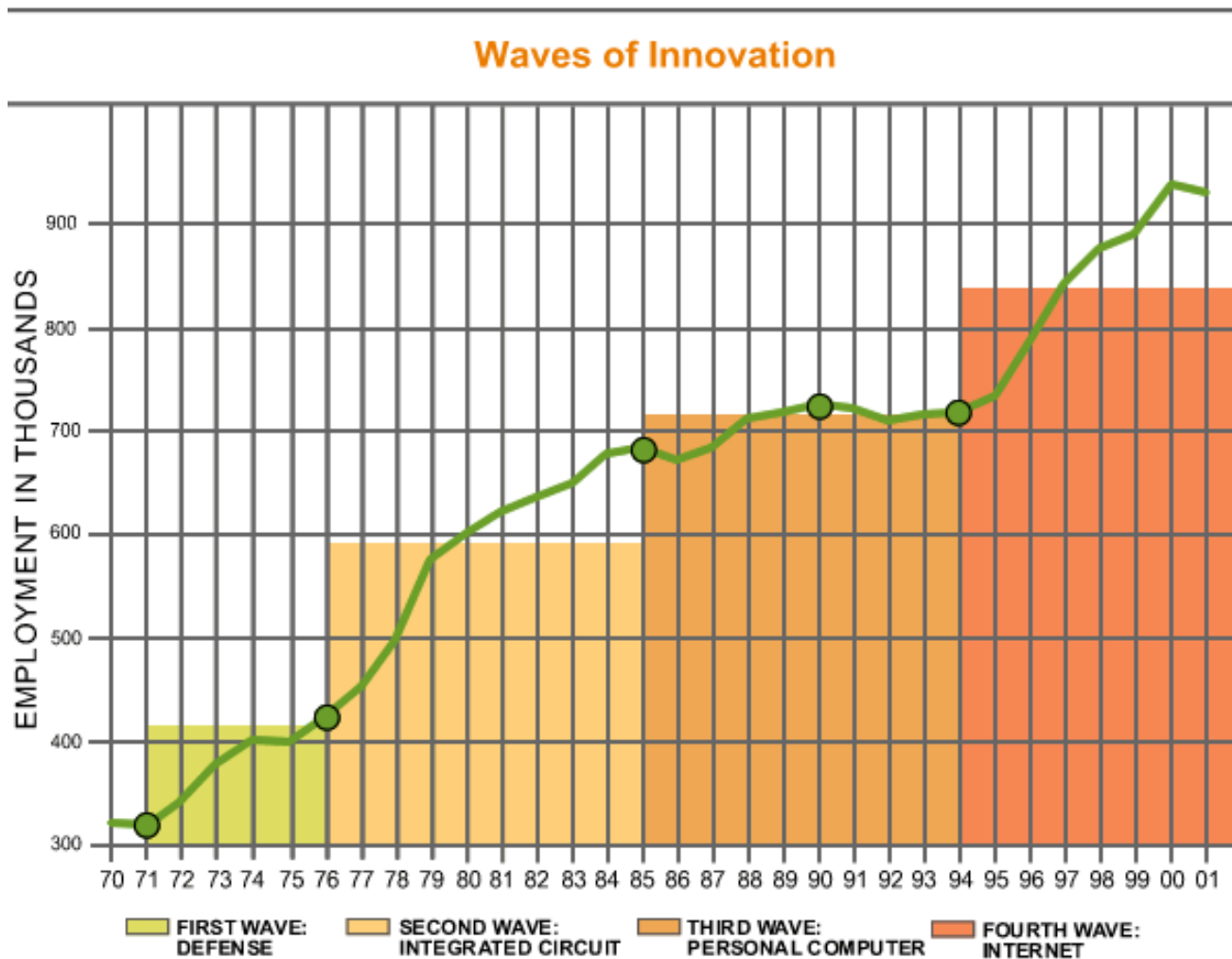


Long complex evolution shaped by:

- Research, innovation, entrepreneurship
- Collaboration between government, universities, and businesses
- Emergence of new forms of financing, such as venture capital
- Evolving government and commercial demand for electronic and biomedical products
- Support ecosystem for start-ups (investment bankers, law firms, incubators, etc.)
- Presence of best practices in law, ease of doing business, rewards for success

Silicon Valley was the 10th largest fruit producer in the U.S. in the 1950's

Silicon Valley's History Waves of Innovation



Silicon Valley's Makeup

- <1% of U.S. population
- 44% with bachelor's degree
- 55% S&E talent are **foreign born**, 3 times the national share
- 48% are bilingual versus 19% for all of U.S.
- 52.4% Silicon Valley tech firms founded by **immigrants**: compared to 38.8% for California: 25.3% for US
- 6 of top 10 U.S. cities for patents
- 2.1% of US GDP; 16% of CA GDP
- 14% of the world's venture capital in 2005
- 20% of the world's software and hardware firms
- No.1 for World Competitiveness in 2005

Source: Joint Venture Silicon Valley Network

5 Key Ingredients for Innovation



- **Culture of innovation**
 - “Technological Trailblazers” – always searching for the ‘next big thing’
 - Risk takers – attracted to risky ventures that had the potential for great rewards
 - Freedom to fail and the willingness-to-take-a-chance
 - Technology incubators / entrepreneurial support networks
- **Skills**
 - Development of knowledge-based region centered around universities and research institutes
 - Highly skilled workforce (organic and inorganic)
- **Capital**
 - Access to venture / risk capital
 - Efficient capital flows
 - Investor confidence
- **Collaboration between public and private sectors**
 - Intellectual property protection
 - Movement between academia and business
 - Partnerships between government, universities, and businesses
- **Global best practices**
 - Favorable environment for doing business
 - Transparency
 - Rule of law, accounting, financial practices

Korea is becoming of age on Innovation



- **Culture of innovation – on course and accelerating**
 - ✓ World's highest broadband usage; world's best laboratory for broadband services
 - ✓ Korea ranked 8th on ability to innovate; Japan 5th, Singapore 13th, China 75th

- **Skills – attract more foreign talent and students**
 - ✓ Higher education enrolment 63%, higher than OECD countries in 2004
 - ✓ 3rd in math, 4th science latest OECD survey

- **Korea ranked 38th in World Competitiveness Scoreboard 2006, down 9 places from 2005**
 - Japan 17th, Taiwan 18th, China 19th
 - WCS criteria includes **foreign high-skilled workers; international experience; employee training; education (including English proficiency)**

2006 Record Year for International Patents

Korea Achieved 2nd Highest Growth Rate

	2006 Estimate	2006 Percent	2006 Growth
U.S.	49,555	34.1%	6.1%
Japan	26,906	18.5%	8.3%
Germany	16,929	11.7%	5.8%
Rep. Korea	5,935	4.1%	26.6%
France	5,902	4.1%	2.8%
U.K.	5,045	3.5%	-0.8%
Netherlands	4,393	3.3%	-2.7%
China	3,910	2.7%	56.8%
Switzerland	3,403	2.3%	3.8%
Sweden	3,123	2.1%	8.7%

Source: World Intellectual Property Organization's (WIPO)

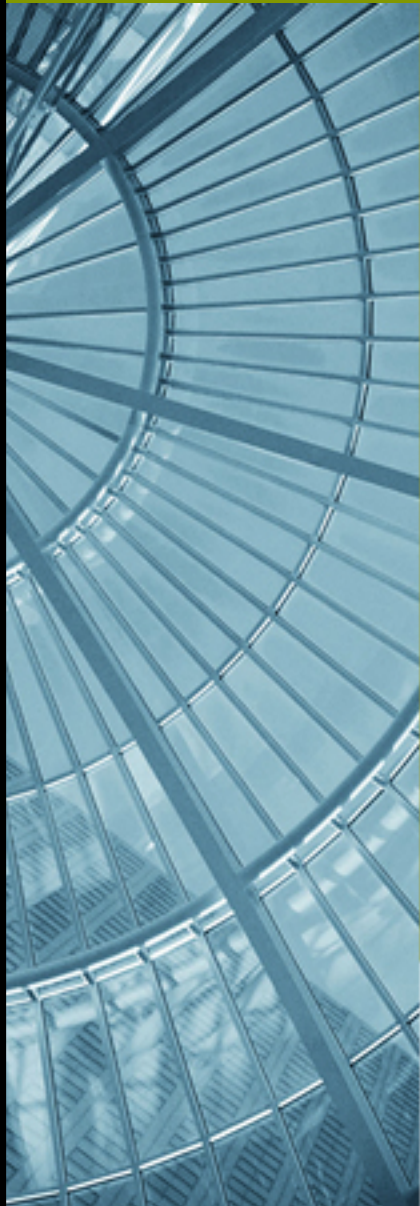
Korea needs improvement on Collaboration and Global Best Practices



- **Capital – attract more FDI and encourage Corporate Investment**
 - ✓ R&D 2.6% of GDP (\$1.1trillion) 2005, or \$29.5 billion
 - U.S. 2.6% GDP (\$12.2 trillion), or \$336 billion
 - Japan 3.2% GDP, or \$132 billion
 - China 1.4% GDP, or \$150 billion
 - **Korea ranks 29th** out of 32 developing countries for **FDI performance**, by United Nations Conference on Trade and Development (UNCTAD)
 - **FDI inflow Korea declined by 7%** to \$US7.2 billion; compared with China growth of 19% to \$72.4 billion, Singapore growth of 36% to \$20 billion (UNCTAD 2005)
 - **FDI maybe spread too thin:** manufacturing 30%, sales 20%, retail 17%, R&D 11%, IT 1%
- **Collaboration between public and private sectors – strengthen internally and globally with Silicon Valley & other high tech world industries**
 - % of University R&D funds from industry down 3% from 1992
- **Global best practices – continual improvement needed**
 - **Korea ranked 23rd** on Ease of Doing Business and **116th** on Starting a Business by World Bank for 2006



SYBASE®



Innovation in Silicon Valley

The shift to an innovation-based economy – what Korea can learn from Silicon Valley model

**John Chen, Chairman, CEO and President, Sybase
Asia Innovation Forum 2007
April 10, 2007**