



# **Issues regarding Start-ups in Japan**

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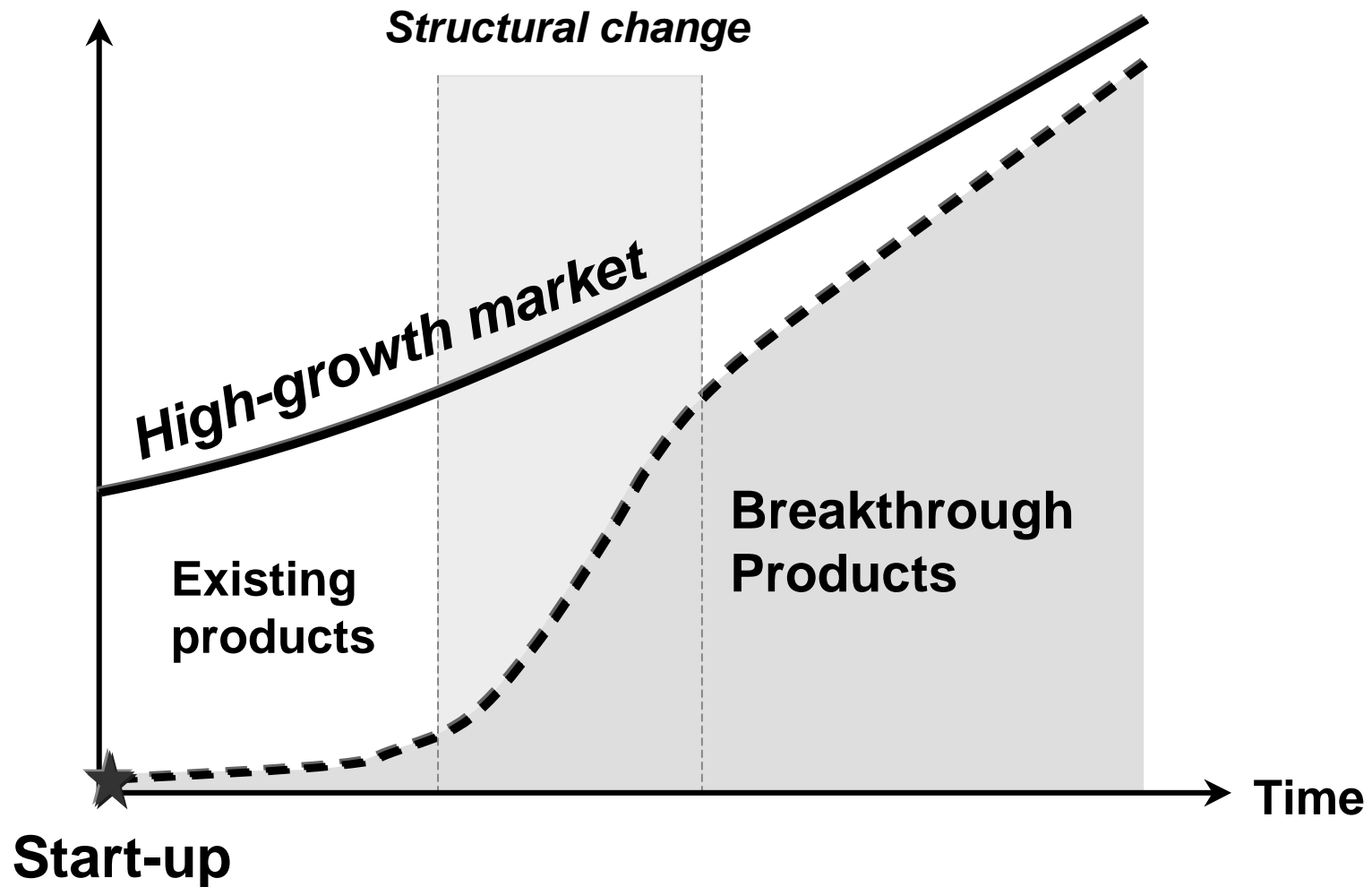


# 1. Introduction of Breakthrough Partners

## BTP Approach

- Find people with impressive business ideas that leverage very competitive core technology in an attractive growth market
- Work with founders to shape, refine, and clarify the company's plan to accelerate towards establishing a successful business with global perspective
- Typically get involved at very early stage of the company to launch the venture on the right foot. Range of roles we play:
  - Effectively co-founders, board directors, interim-CEOs
  - Help lead a transition from a start-up with superior development track record to a company with solid product
  - Help orchestrate a strategic spin-out from leading companies
- Strong “hands-on” involvement from start to exit
  - Clear and concise business plan
  - Product and marketing strategies
  - Organizational development
  - Distribution strategies
  - Corporate partnerships
  - Funding
- Leverage substantial network in Japan and U.S.
- Attempt to capture Huge, attractive “Markets in Transition”

# Major Transitions in Markets: Great Opportunities for Start-ups





# Start-ups We Like

- **Welcome our involvement, and open to involvement by other very experienced people who can contribute to their success**
- **Have vision and sense of mission that are both compelling and pragmatic**
- **Are creating businesses and technologies in sectors that we fundamentally understand, and where we can contribute.**

**The enabling technology areas of interest include:**

- **Consumer networks**
- **Optical networks**
- **Input/Output interface**
- **System-LSI architectures**
- **New Materials**

**The Products that leverage these technologies could be components, systems, software, services, or combinations thereof**

- **Can reach \$50 million revenue by 3<sup>rd</sup> year of product shipment into a market that can grow to \$1 billion or more**
- **Position market and partnership opportunities in Japan and Asia central to their success**
- **Inspire and attract first-class people**



# Experienced Team

## Koji Morihiro, *Managing Director*

- **Cofounder and Managing Director, Breakthrough Partners**
  - **Serve on boards of Inovys, Quest, Innomicro, Fibest**
- **Managing Director, Techfarm Asia Ventures**
- **Partner, Techfarm, 1997-2001**
  - **Trans-pacific business development for many portfolio companies**
  - **Lead investments for Nucore Technologies and Inovys**
  - **Served on boards of successful companies including Cobalt Networks KK (IPO 1999, acquired by Sun Microsystems 2000)**
- **Fujitsu Semiconductor Group Director, Business Development**
  - **14 Years in Silicon Valley and Japan**
  - **Spearheaded many international initiatives and partnerships**
  - **President's Award of Excellence**
- **Cornell University, BS Physics & Materials Science, MS Engineering**



# Experienced Team

## Yuji Akaba, *Managing Director*

- **Cofounder and Managing Director, Breakthrough Partners**
- **Managing Director, Techfarm Asia Ventures**
- **McKinsey & Company, 1986-2000**
  - **Founding partner of McKinsey Practice in Seoul, Korea in 1990 and built a very successful office of over 130 people**
  - **Initiator and leader of E-commerce Practice in McKinsey Seoul and Asia-Pacific offices**
  - **Initiator and leader of Family-owned Business Practice in McKinsey worldwide**
  - **Spearheaded business transformations of leading corporations in Japan, Korea and other Asian countries**
- **Komatsu Limited, 1978-1986**
  - **Design Engineer, responsible for prototype development of steering, suspension, and other control systems for off-road dump trucks**
- **Stanford University, MS in Mechanical Engineering. Degree of Engineer in Mechanical Engineering**
- **Tokyo University, BS in Mechanical Engineering**



# Breakthrough Partners' Strong Network with Key Companies in Japan

## Manufacturers/ Service providers

- Advantest
- Bandai
- Casio
- Citizen
- CSK
- DNP
- Epson
- Funai
- Fuji Film
- Fujitsu
- Hitachi
- Intel Japan
- JVC
- Kyocera
- Mobile Internet Service
- Nikon
- NTT
- NTT DoCoMo
- NEC
- Oki
- Olympus
- Oracle Japan
- Panasonic
- Sanyo
- Sega
- Seiko Giken
- Sharp
- Shinko Electric
- Softbank
- Sony
- Sumitomo Electric
- Tokyo Electron
- Toshiba
- Toyota
- Yusen Broadband Networks

## Trading firms

- Fujitsu Devices
- Innotech
- Innomicro
- Itochu
- ITX
- Kaga Electronics
- Kanematsu
- Macnica
- Mitsubishi & Co.
- Mitsui Trading
- Nissho Iwai
- Nissho Electronics

## Financial investors

- Carlyle Group
- Global Venture Capital
- Globis Venture Capital
- Goldman Sachs  
Goldman / Kyocera
- H&Q Asia Pacific
- Ignite Japan
- Innovation Engine
- JAFCO
- JAIC
- J.P. Morgan
- NIF
- Nikko Capital
- NTT Leasing
- NVCC
- Schroder Ventures
- Sunbridge
- Tokyo Marine & Fire
- Walden International
- Warburg Pincus
- Yasuda Enterprise Development



## 2. Why University Start-ups are Not Successful Yet in Japan

**Basic requirements**

- Are universities creating pragmatic and attractive research results? Are there enough numbers of foreign professors and students who are much more entrepreneurial than typical Japanese?
- Can universities own patents and have incentive to promote university start-ups?
- Are Ph. D course students supported financially so that they are not squeezed to live?
- Can professors secure time to facilitate technology transfer? Are they clear what they can do?
- Do TLO\*s have capable licensing associates?
- Is it encouraged? Are active professors protected from the criticism from their conservative colleagues?
- Are their role models?

**Encouragement and trigger**

University research outcome should be attractive enough for entrepreneurs to consider start-ups

Expect the change when national universities will become an independent entity as of April 2004

Need to change research grant guidelines so that students can be paid salary appropriately

Need to clarify the guideline for external activities (currently it is still discouraged in most cases)

Need to hire competent people at TLOs with competitive compensation

Need to introduce much stronger leadership structure, but change seems quite difficult

Need to create "Stars" and "Champions" on campus, by providing coordinated extra support

1. Basic requirements to promote university start-ups have not been met yet in Japan
2. Inter-ministry collaboration is critical (METI, MEXT, Ministry of Telecommunication, MHLW)

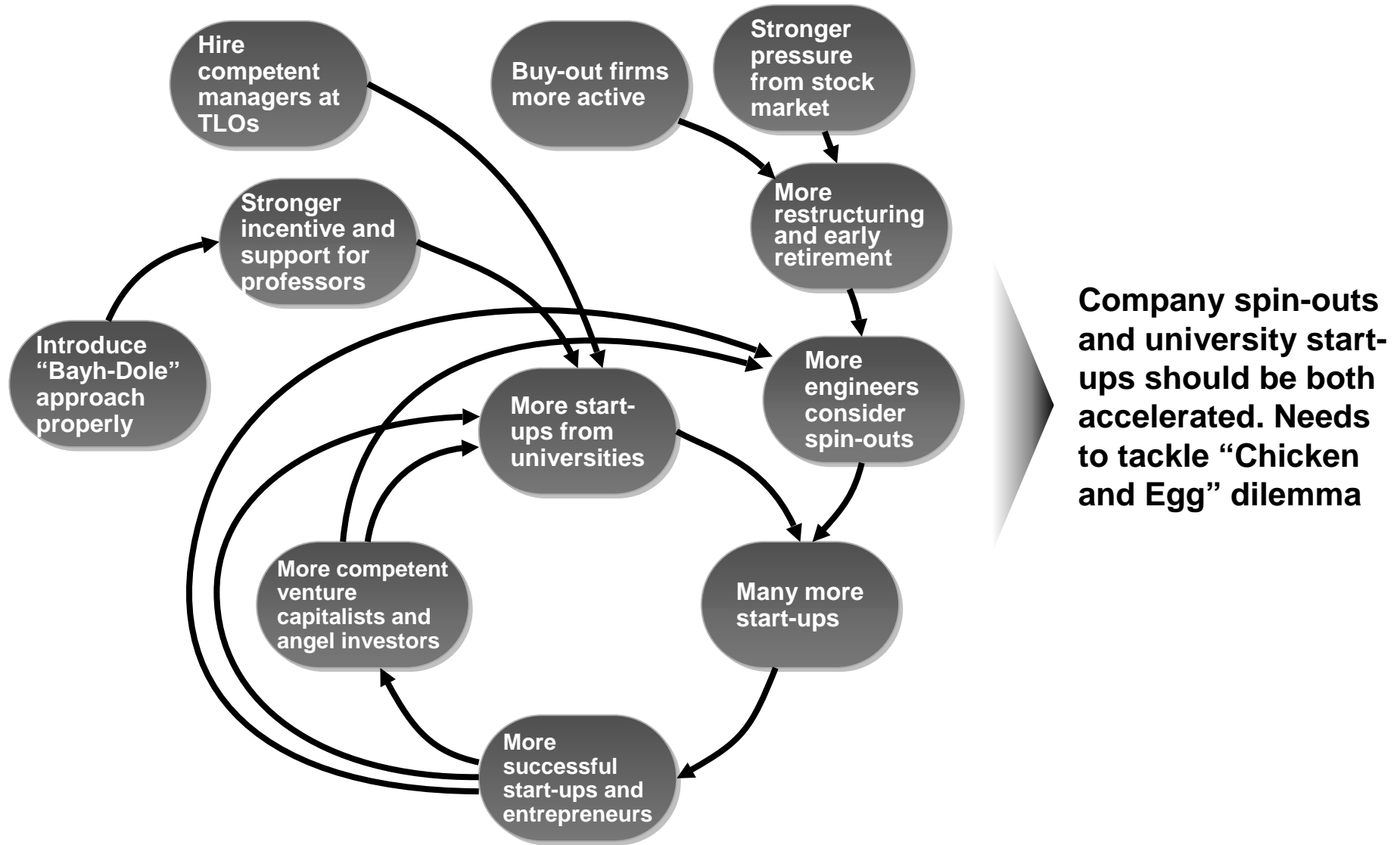
\* Technology Licensing Office

### 3. Challenges for Start-ups\* in Japan

- Limited numbers of entrepreneurs with technology background still ... not so motivated to risk their career in the current challenging environment
  - Many large companies started small, grew rapidly, then eventually became conservative, rigid and bureaucratic that tends to be negative against start-ups and spin-outs in reality
  - Difficult to leverage output from universities and research institutes: not enough supportive nor collaborative culture and system yet
  - Difficult to find high-quality hands-on venture capitals yet
  - Japanese society and culture is negative against failure
- 
- How should we stimulate top-quality engineers to spin out?
  - How should we increase start-ups from universities and research institutes?

\* In this document, “start-ups” refers to start-ups which intend to have clear technology-based differentiation

# How to Facilitate Start-ups?





# Typical Problems Seen at Start-ups\* in Japan

## Lack of clear vision and strategy

- Core technology not reviewed properly from global competition point of view
- Insufficient differentiation. Lack of clear revenue model
- In many cases, stay as a sub-contractor

## Weak management team

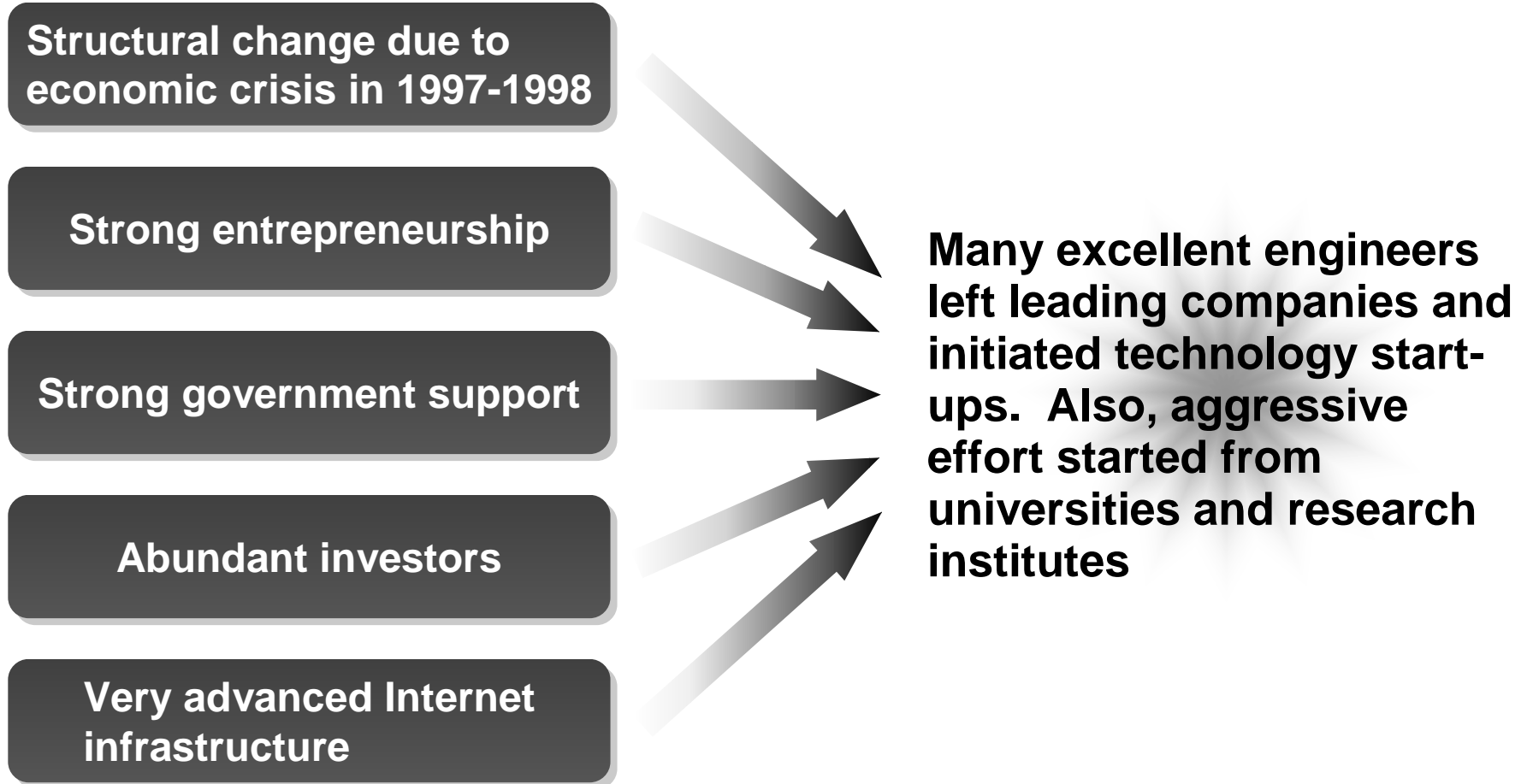
- Limited management perspective and experience
- Typically weak in logical and strategic thinking, and not good at communication both in Japanese and English
- Dominated by Japanese and tends to lack global perspective and required aggressiveness

## Limited utilization of outside support

- Not familiar with venture capitals, angel investors and other external resources
- Not good at utilizing external board directors and advisory board members

\* Interview results with various venture capitalists and entrepreneurs in 2000-2001

# Much More Favorable Situation in Korea



## 4. Recent Changes in Start-up Environment in Japan

Before 2000	After 2000
<ul style="list-style-type: none"> <li>● No proper market for IPO (Average time for IPOs was over 25 years)</li> </ul>	<ul style="list-style-type: none"> <li>● Introduction of Mothers, Nasdaq Japan and regulation changes in OTC market</li> </ul>
<ul style="list-style-type: none"> <li>● No limited partnership, stock option, class stocks</li> </ul>	<ul style="list-style-type: none"> <li>● Major amendment of Commercial Law and related regulations to foster venture activities               <ul style="list-style-type: none"> <li>– limited partnership</li> <li>– Stock options</li> <li>– Class stocks</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>● Engineers stuck to large corporations               <ul style="list-style-type: none"> <li>– Life-time employment. Strong sense of belonging to a company</li> <li>– Changing jobs was considered as a failure in Japanese society</li> <li>– The best engineers were given much freedom to excel</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>● Substantial departures of engineers since 2001               <ul style="list-style-type: none"> <li>– Attractive package for early retirement</li> <li>– Lost loyalty through a series of restructuring activities</li> <li>– Departure from traditional “Company first” notion</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>● “Department Store” mentality in large companies in growing economy               <ul style="list-style-type: none"> <li>– Competed to have wide range of products in all strategic areas</li> <li>– Typically kept all the businesses regardless of individual financial performance</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>● Companies are forced to start substantial restructuring               <ul style="list-style-type: none"> <li>– Lost overall competitiveness</li> <li>– Huge loss from their main businesses</li> <li>– Stronger pressure from stock market</li> </ul> </li> <li>● Buy-out firms have become much more active</li> </ul>

# Recent Changes in Start-up Environment in Japan (Continued)

## Before 2000

- Limited risk money\* to technology start-ups. VCs did not have skills nor intension to provide hands-on support
- Very limited technology transfers from universities
- Inexperienced and limited numbers of angel investors



## After 2000

- Foreign VCs started to demonstrate hands-on support in Japan
- End of Internet bubble triggered shift in interest to core technology
- Traditional Japanese VCs started to change their approach to be more competitive
- TLOs have been introduced and activated in major universities
- Technology transfers from universities has become a national agenda
- Systematic efforts in regional government like Fukuoka started
- Venture CEOs after successful IPOs becoming angel investors



There have been drastic changes since 2000-2001

\* Large spike of investments into “feel good” start-ups during the Internet bubble

# Regulation Comparison for Companies Incorporated in US vs. Japan

	In US	In Japan	
		Until very recently	Current
<b>Regarding incorporation</b>			
<b>Minimum capital</b>	None	<ul style="list-style-type: none"> <li>● ¥10,000,000 (Roughly \$80,000. This is minimum aggregate value of founder's stock)</li> </ul>	<ul style="list-style-type: none"> <li>● No limitation from February 2003</li> </ul>
<b>Minimum price per share</b>	None	<ul style="list-style-type: none"> <li>● ¥50,000/share</li> </ul>	<ul style="list-style-type: none"> <li>● No limitation from October 2001</li> </ul>
<b>Regarding operation</b>			
<b>Flexibility of issuing preferred stocks</b>	High	<ul style="list-style-type: none"> <li>● Limited to preference on dividend</li> </ul>	<ul style="list-style-type: none"> <li>● Class-stocks introduced in April 2002</li> </ul>
<b>Flexibility of issuing stock options</b>	High	<ul style="list-style-type: none"> <li>● No cheap common stock (minimum ¥50,000 per share)</li> <li>● Very limited               <ul style="list-style-type: none"> <li>– Number of shares up to 10%</li> <li>– Beneficiary is limited to management and employees</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>● No limitation from October 2001</li> <li>● No limitation from April 2002</li> <li>● Non-employees can be beneficiary from April 2002</li> </ul>
<b>Flexibility of issuing new stocks</b>	High	<ul style="list-style-type: none"> <li>● Limitation on issuing new shares more than three times of existing stocks at each time (need two to four weeks for the next one)</li> <li>● Limitation on issuing shares to new investors prior to IPO in the fiscal year of IPO</li> <li>● All the convertible bonds and warrants should be executed before the year of IPO</li> </ul>	<ul style="list-style-type: none"> <li>● No limitation from 2002</li> <li>● No limitation from October 2001</li> <li>● No limitation from October 2001</li> </ul>





# Regulation Comparison for Companies Incorporated in US vs. Japan (Continued)

	In US	In Japan	
		Until very recently	Current
<b>Regarding operation (Continued)</b>			
<b>Use of telephone conference to attend board meetings</b>	No limitation	● Not allowed	● Will be changed
<b>Corporate tax</b>	40%?	● 41%	● No change expected
<b>Regarding securing investment returns</b>			
<b>Capital gain tax</b>	35%? (For US tax payers)	<ul style="list-style-type: none"> <li>● 1.05% of total proceeds per transaction (For individuals paying tax in Japan, if they hold the stock 2 years before IPO and 1 year after IPO)</li> <li>● 41% for corporate</li> </ul>	<ul style="list-style-type: none"> <li>● 10% Capital gain tax until 2007, then 20% in 2008</li> <li>● 41% for corporate</li> </ul>
<b>Regarding securing investment returns</b>			
<b>Stock-swap based M&amp;A</b>	Common practice in US	● Not so popular because tax cannot be consolidated	● Tax consolidation was allowed from April 2002

# Recent IPOs in Japan

Company name	Area	Market cap*	Time to IPO
● Thine Electronics	● LCD drivers (about 70% share worldwide)	\$163 M	9 yrs 1 months
● Yozan	● Key RF technologies for 3G, WiFi service	\$103 M	10 yrs 1 months
● Real Vision	● High-performance 3D graphic engine	\$39 M	4 yrs 6 months
● ACCESS	● Browsers for mobile phones	\$266 M	4 yrs 4 months
● Cybird	● Content development for mobile phones	\$156 M	2 yrs 3 months
● Works Applications	● Enterprise software, especially for HRM	\$314 M	5 yrs 4 months
● Rakuten	● E-shopping mall (No. 1 in Japan)	\$939 M	3yrs 2 months
● Monex Securities	● Online trading	\$146 M	1yrs 4 months

 Few distinctive technology companies...relatively easy to capture attention of investors

\* As of February 28, 2003 \$1=¥119



## 5. Issues Related to Venture Capitals in Japan

### ● Poor history

- Majority of venture capitals in Japan were established as a subsidiary of securities firms, banks and insurance companies to capture new customers for their parent companies. The parents did not (still do not seem to) have strong commitment nor intention to develop a healthy venture capital industry
- The structure and organization of venture capitals were typically inappropriate:
  - Very large staff (close to hundred except for JAFSCO with more than 100 staff) who were supposed to rotate every few years among different divisions such as finding, due diligence and administration. Fund raising was done separately
  - Investment decisions were made by large investment committees without any personal commitment
  - Very limited incentive for successful investments (a few hundred dollars)
  - Limited people with strong operating experience in the industry
- Mostly later stage investment until recently. Very limited early-stage investment

### ● Recent effort

- Some effort to upgrade the quality of venture capital activities, but results so far have been limited
- More than a dozen spin-outs from large VCs . . . However, skill issues seem to remain the same in most cases
- Several foreign VCs opened their offices in Japan and started to demonstrate more disciplined approach

## 6. Corporate Venture Capitals and Spin-outs in Japan

### ● Corporate venture capital

- Most large companies like Fujitsu, Matsushita, NEC, Hitachi, Sony, initiated corporate venture capital activities in the last several years
- Results have been not so positive due to the reliance on internal, inexperienced staff, lack of proper incentive mechanism, and weak network in seed finding
- Strong needs still exist in order to secure competitive technologies by investing in high-potential technology start-ups

### ● Spin-outs

- Japanese companies were avoiding restructuring but cannot postpone any more. They started to encourage early retirement and spin-outs in the last few years
- However, most people have been used to work in a large community, and not willing to take their own risk in a start-up. Engineers in large companies are even more risk-averse
- Companies are looking for help to identify spin-out opportunities, organize investors, and to secure hands-on support to their spin-outs



## 7. Implication to the Enhancement of University Start-ups – Japan Case

- In order to enhance university start-ups, the development of non-university ones should come first because:
  - University start-ups are much more difficult to succeed due to the lack of management skills and the basic nature of research-oriented activities in universities
  - Non-university start-ups would develop and provide more entrepreneurs who would then leverage university research outcome
- In order to attract non-university start-ups to regional communities where key universities are located and facilitate their development, several initiatives should be taken including:
  - Well-developed infrastructure such as inexpensive offices with high-speed Internet, helpful advisors, networking events, etc., created around key universities collaborated with respective regional government
  - Purchasing program by the regional government, universities and other public organization
  - Incentive program for venture capitals to invest in high-potential start-ups in the region. For example, co-investment from a government fund to start-ups which were funded by venture capitals. The government fund should also subsidize one third to one half of the invested amount to the venture capitals in case the start-up fails (There is a quite successful example in Germany)
  - The introduction of key financial vehicles such as limited partnership funds, stock options, class stocks to protect investors' rights, etc. which have been critical in facilitating entrepreneurship in the country
- While enhancing non-university start-ups, actions to accelerate the change of universities should be tackled more aggressively including:
  - Hiring more professors with substantial industry experience. Hiring more foreign professors and students
  - Proper financial support to Ph. D students so that they can play more aggressive role to facilitate university start-ups
  - Working guidelines for university-industry collaboration for professors and researchers to avoid confusion and unnecessary debate
  - Well-staffed TLOs. Major subsidy program to TLOs