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New Opportunities versus Old Mistakes: Foreign Companies in Japan’s High-Tech Markets

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G. Fasol (fasol@eurotechnology.com): Background...

- 1996–: Eurotechnology Japan K. K. (Founder and Representative Director)
- 1993–1996: Japan Science and Technology Corporation (JST): Sakigake–Research Project (Spin Electronics, nanowires, quantum transport)
- 1991–1996: University of Tokyo (Dept. of Electrical and Electr. Eng.), Associate Professor, Co–founder of Japanese research initiative on Spin–Electronics
- 1990–1991: Hitachi Cambridge Laboratory, Manager & Chief Scientist
- 1986–1990: Cambridge University, University Lecturer (Tenured Faculty member), Trinity College: Director of Studies
- May 1990: Ecole Normal Superieure (Paris, Professeur Invité)
- Summer 1987, 1988, 1989, 1990: work in Tokyo for 3 months, cooperation between my group at Cambridge Univ and Japanese Institutions
- 1982–1986: Max–Planck–Institute Stuttgart (Staff Scientist)
- 1981–1985: Research Fellow, Trinity College
- 1978–1982: Ph.D. University of Cambridge and Trinity College, Cambridge

G. Fasol: New Opportunities versus Old Mistakes: Foreign Companies in Japan's High-Tech Markets

Executive Summary (1 of 2):

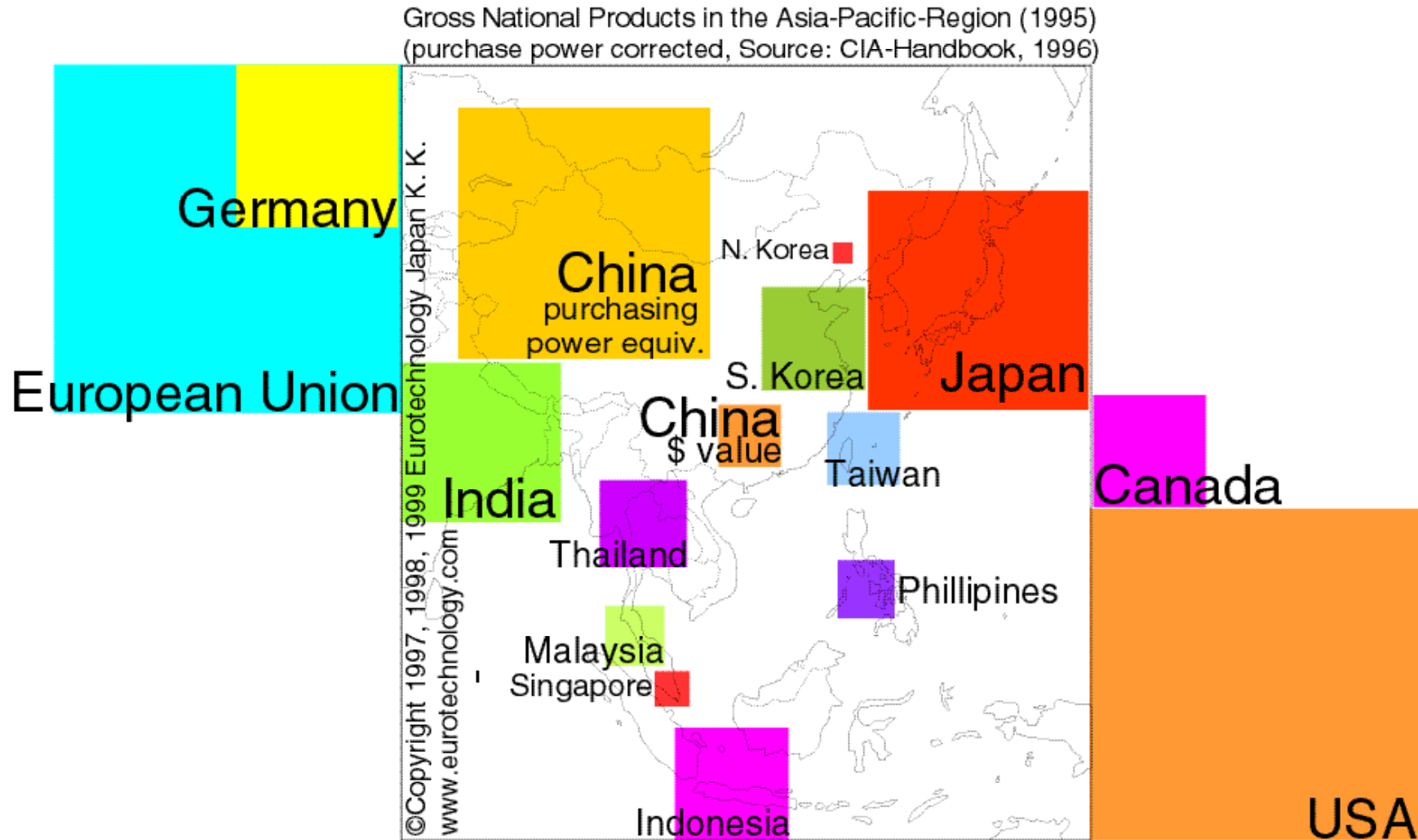
- **Why is Japan important?**
 - Japan is the world's second largest market
 - 60%–70% of Asia's Economy is in Japan
 - 10%–20% of the worlds internet/telecom/e-commerce markets are in Japan
 - Some important recent high-tech breakthroughs come from Japan (e.g. blue LED and lasers
For US-corporations Japan is in general the most important/largest foreign market & competitor & licensing partner
- **“Old Japan” versus “New Japan”**
 - The “old official Japan” may fade into irrelevance, large sections (on the order of 60%) of Japanese society were excluded from equal access to the “old Japan”, e.g.women, Korean residents, foreign nationals, “half”-people...
 - A “new Japan” is emerging: e.g. Nichia, Softbank, Don Quichote, etc.
 - Education is a major problem
 - Foreign corporations should tune into the “New Japan” now...

G. Fasol: New Opportunities versus Old Mistakes: Foreign Companies in Japan's High-Tech Markets Executive Summary (2 of 2):

- **Opportunities which never existed before**
 - Foreign corporations the first time ever can hire top Japanese performers (Caution: only valid for foreign corporations which are excellent not only at home but also **in Japan**)
 - For the first time ever foreign corporations can acquire Japanese corporations on a meaningful scale
- **Some typical mistakes of foreign companies in Japan:**
 - Manage Asia from Singapore or Hong-Kong (that's like managing All-Europe operations from Tel-Aviv...)
 - Hire the wrong people (wrong Japan-CEO, wrong personnel, e.g. too much emphasis on English etc)
 - Partnerships or joint-ventures with wrong partners
 - Enter Japan, build R&D labs etc without first working out strategy and aims
 - Forget to do the homework (there is Gigabytes of information you better learn about Japan...)
 - Be too fascinated by cherry blossom & be too optimistic or too pessimistic about Japan
 - Take things for granted in Japan, which are not:
 - Brand recognition
 - Japanese consumer & customer habits and needs
 - Assume global corporations have the same depth as you are used to elsewhere in the world
 - Etc.

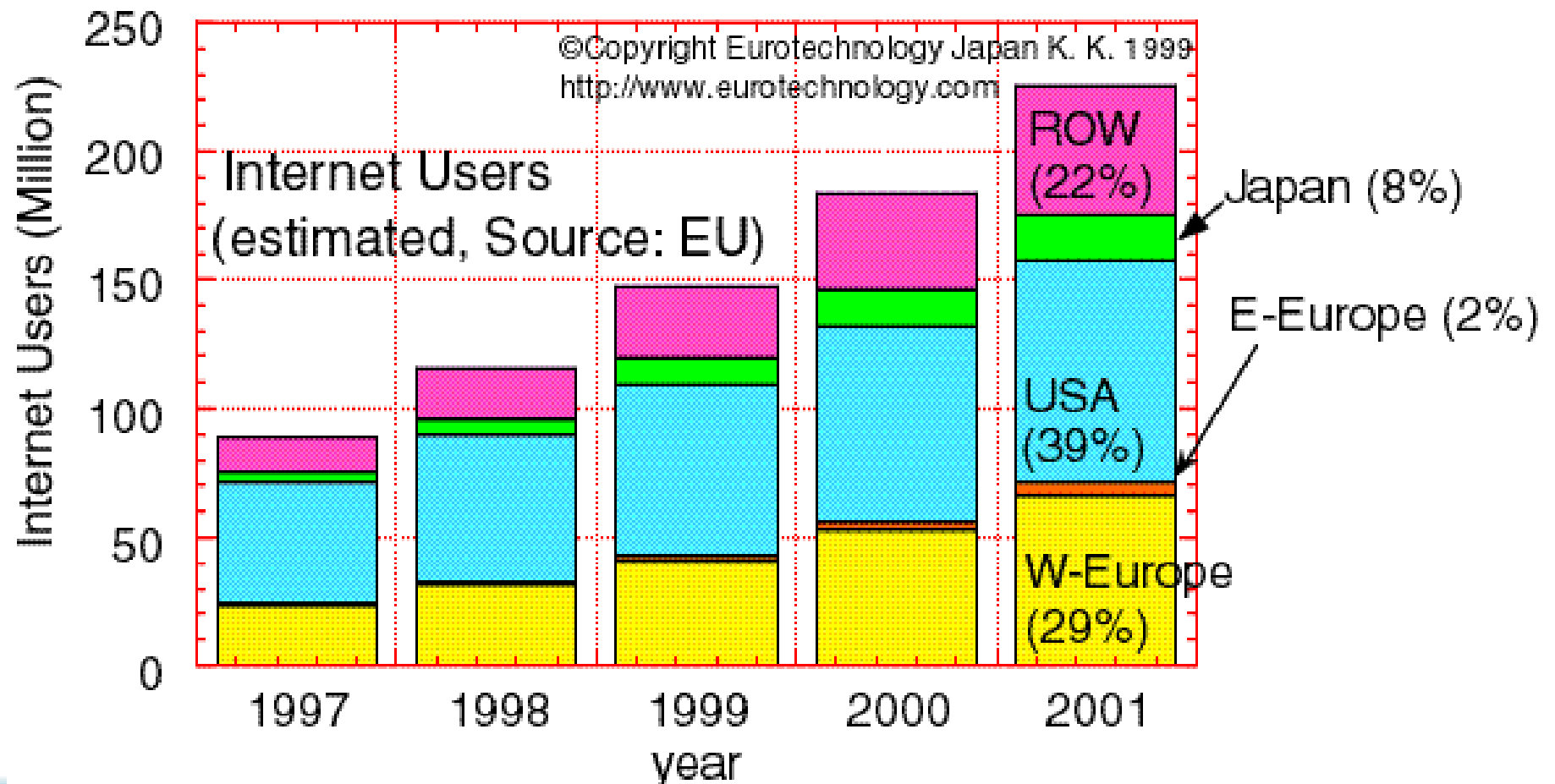
1. Why is Japan important? (1)

- Japan is the world's second largest national market



1. Why is Japan important? (2)

- Approx. 10% of world's internet users (17 million, 2–3 million via mobile)
- Similar ratios: e-commerce, telecom, business-to-business e-commerce



1. Why is Japan important? (3)

Some (by far not all!) important technologies come from Japan:

- Gallium-Nitride blue LEDs and Lasers
 - Have started to replace light bulbs in high value applications (traffic lights)
 - Developed at relatively small company (Nichia) outside the conventional mainstream Japan (Nichia in Shikoku – neither Tokyo University, nor Government lab, nor large corporate Central Research Labs – but “New Japan”)
 - Several years time–delay between invention in Japan and general knowledge outside Japan
 - Still today, Nichia has 1–2 years advance in technology and big advance in Patent coverage
- G3 next generation mobile phone/computing will be first in service in Japan
- NTT–DoCoMo I-mode (1 – 2 million internet users via mobile phone terminal now)
- SONY Playstation or similar has some chance to displace PC/WEB-TV model for mass consumer application at home

2. “Old Japan” versus “New Japan” (1)

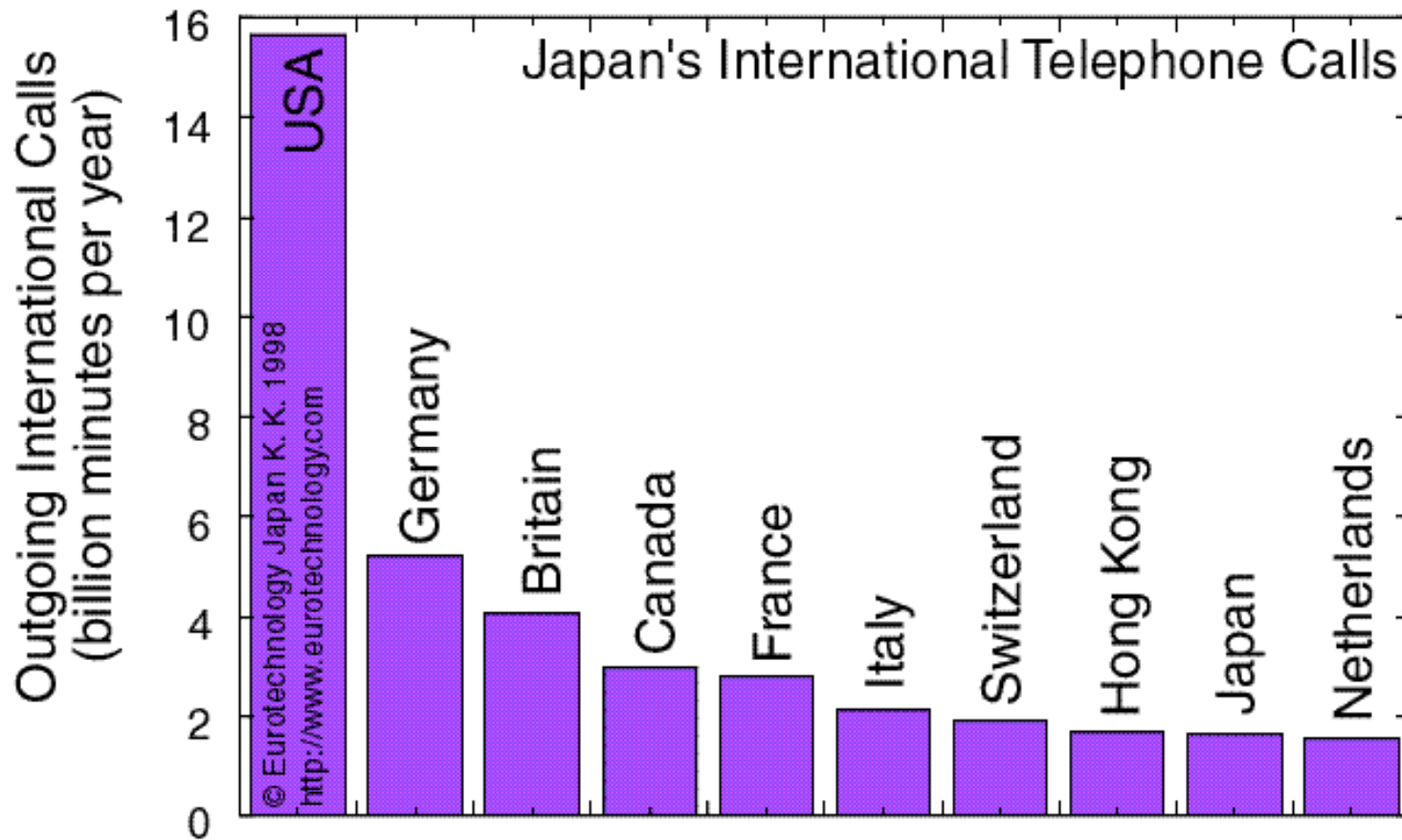
- “Old Japan”
 - Governed by “Elite” = men from a single department of a single University (Law Dept. of Tokyo University) = “race horses” selected to compete and win in entrance exams at a young age, little exposure to outside ideas, over-competitive
 - Government decides investment, no risk analysis, competition-oriented-not customer oriented, “free capital” as consumable, neglect small companies
 - “Strong country” (not rich country, or happy people or comfortable life...!)
 - Women take care of kids, play tennis, travel, shop-men work
 - Aging society: small number of babies – no immigration
 - Well-known educational problems, various “moral” problems/issues
- “New Japan”
 - “Ripplewood-Investments acquires Long-Term-Credit-Bank”
 - Innovation starts to come from outside the government-affiliated main-stream (e.g. Nichia, Softbank, Don-Quichote-Retailer)
 - “Pro-Patent-Big-Bang” ???
 - Japanese women start to aim for meaningful careers, foreign entrepreneurs in Japan

2. “Old Japan” versus “New Japan” (2)

- Educational Issues / Human Resources:
 - Globalization versus inward-focus
 - only 3%–5% of Japanese people speak English / learn English like we learned Latin / many English teachers don't know English
 - International communication (letters, phone, FAX) less than 0.5% of domestic communications
 - Japanese corporations, institutions, Universities 100% Japanese
 - No other advanced industrial country has so little foreign investment
 - Ethics and teaching of ethics
 - Ethics = observing the formal rules on socks and hair-cut in schools???
 - Developing individual potential – Encouraging creativity
 - Many domains lack specialists: too few lawyers, too few computer programmers etc.
- Paralyzed Organizations – Lack of Leadership
 - Organization first / people are exchangeable / Risk avoidance
 - Promotion based on age not merit
 - Corporate governance: Directorship as status symbol not serious responsibility

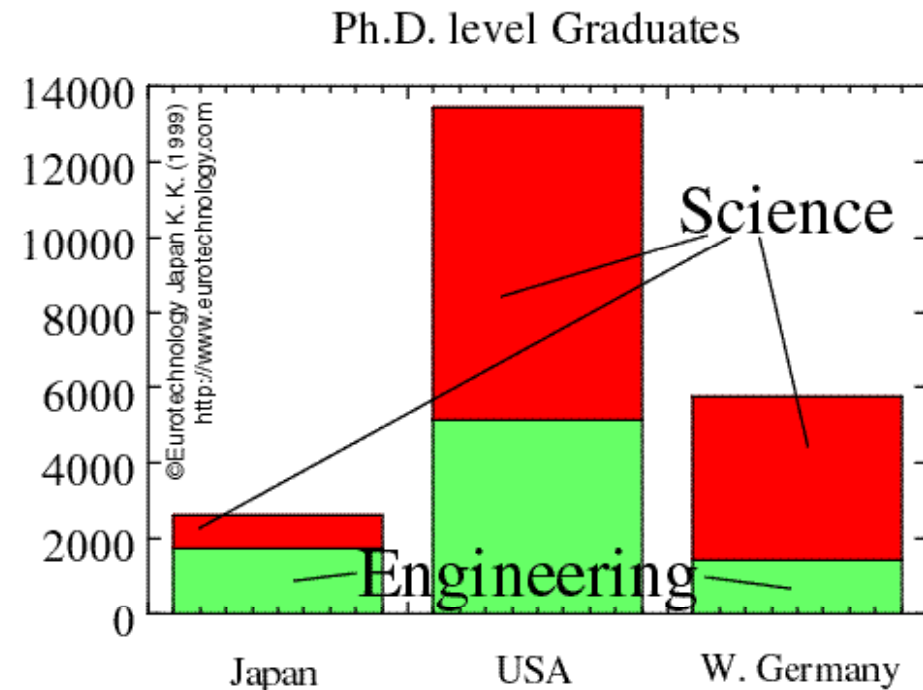
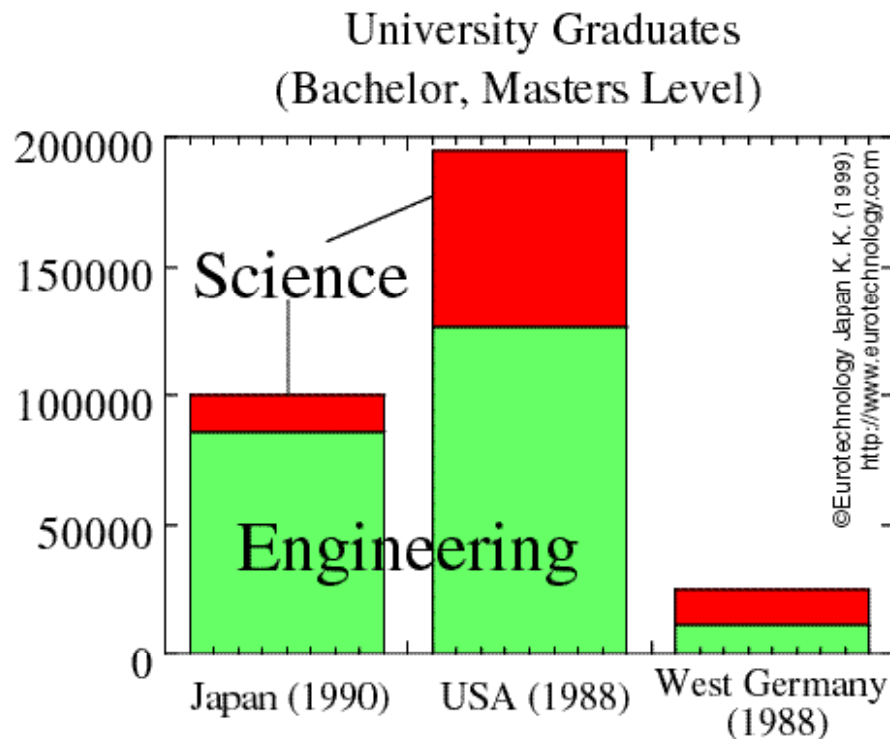
2. “Old Japan” versus “New Japan” (3) – Island Japan

- Japan’s international communications are about 0.5% of national communications (Telecom, Packages, Mail etc)



2. “Old Japan” versus “New Japan” (4) – Human Resources

- Too few specialists in many areas
- Emphasis on 22 year old BAs, training of generalists in large corporations
- Very few PhDs, one single Law School (success rate at entrance exam < 1%)
- Relatively low numbers of professionals, lawyers, etc
- Foreign corporations need special hiring techniques



2. “Old Japan” versus “New Japan” (5) – Competing Organizational Patterns

- Nichia’s Blue Laser versus Government Project
- Which model should a foreign corporation chose for R&D in Japan?
 - Nichia model for results, Consortium model for building contacts etc.

Diagram of Nichia's Hierarchy for the GaN-Blue Laser Research

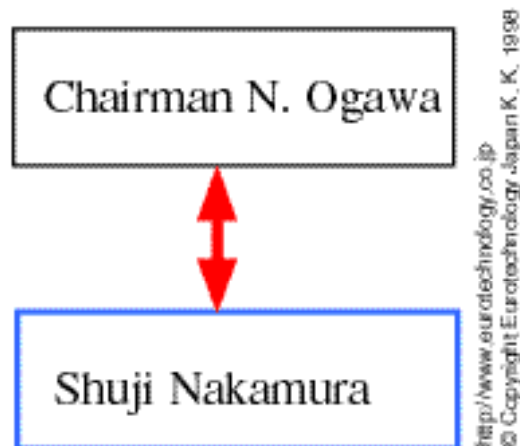
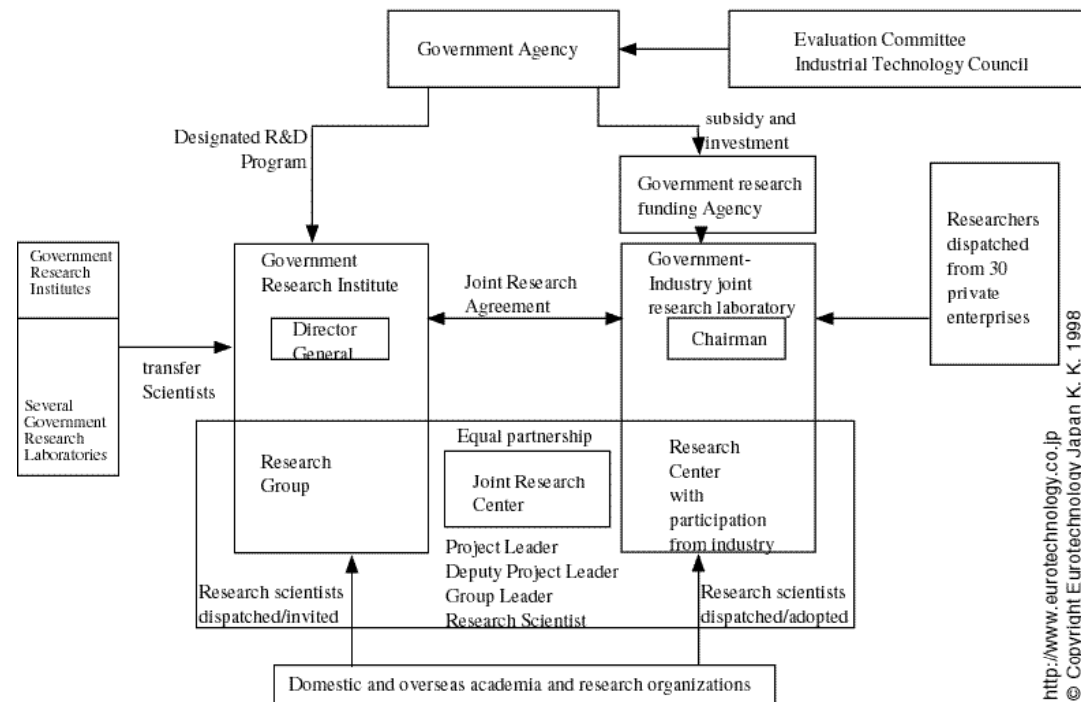
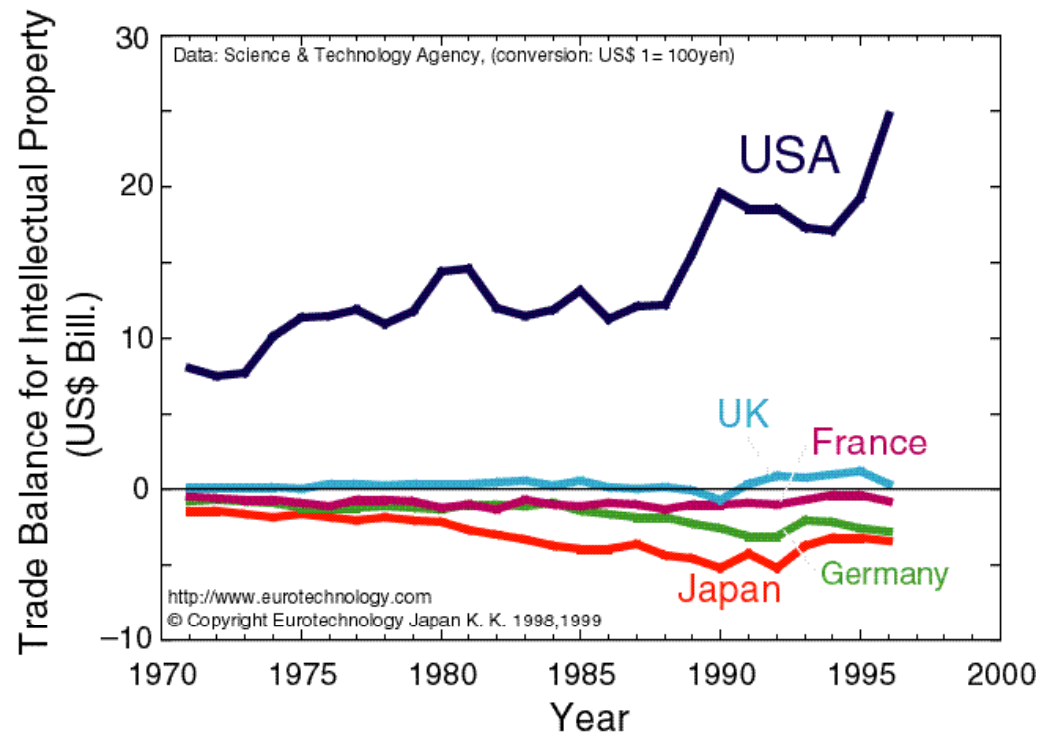
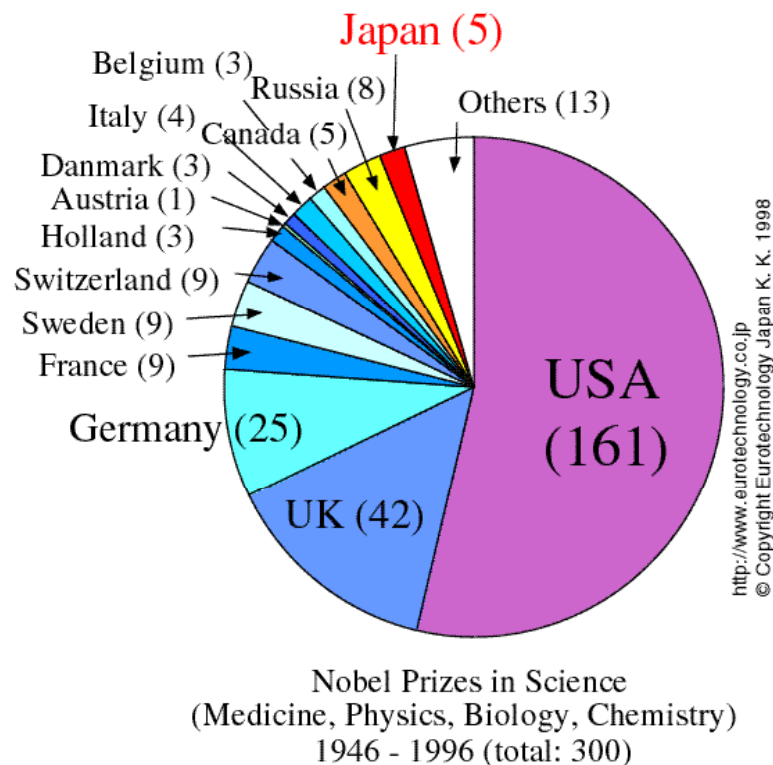


Diagram of a Typical Japanese Government Research Project



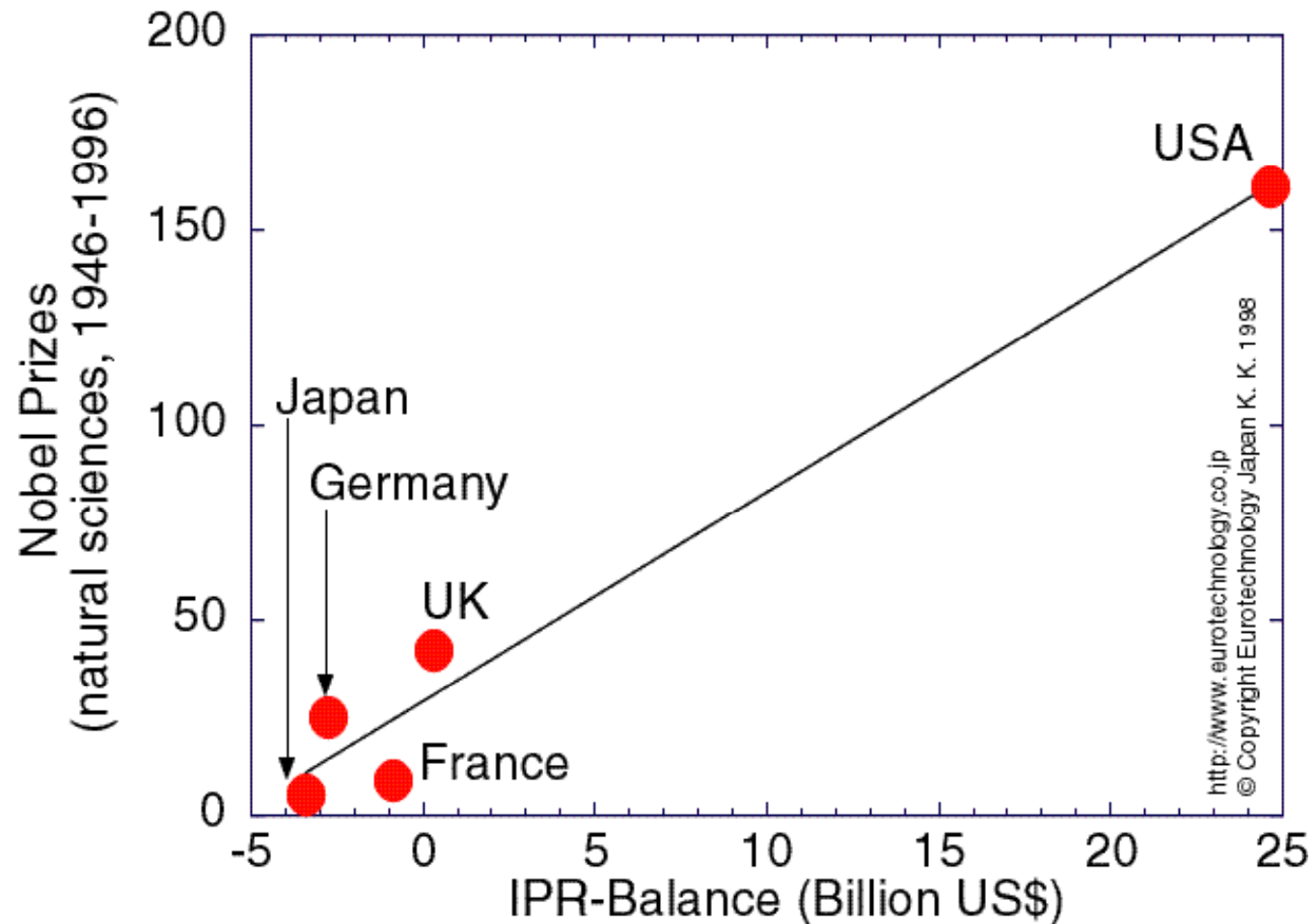
2. "Old Japan" versus "New Japan" (6) – Creativity

Nobel Prizes versus IPR-Trade Balance



2. “Old Japan” versus “New Japan” (7) –

Nobel Prizes and IPR Trade Balance seem to be correlated



2. “Old Japan” versus “New Japan” (8) –

**Factors which suffocate creativity in Japan’s traditional institutions
Foreign companies should avoid these issues in their subsidiaries**

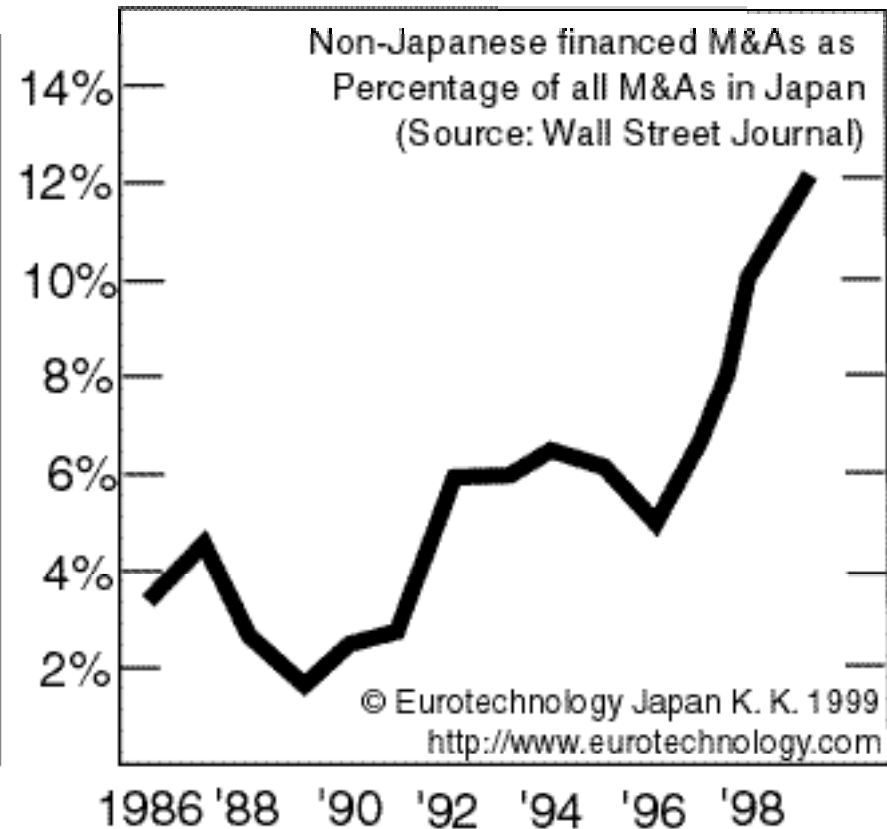
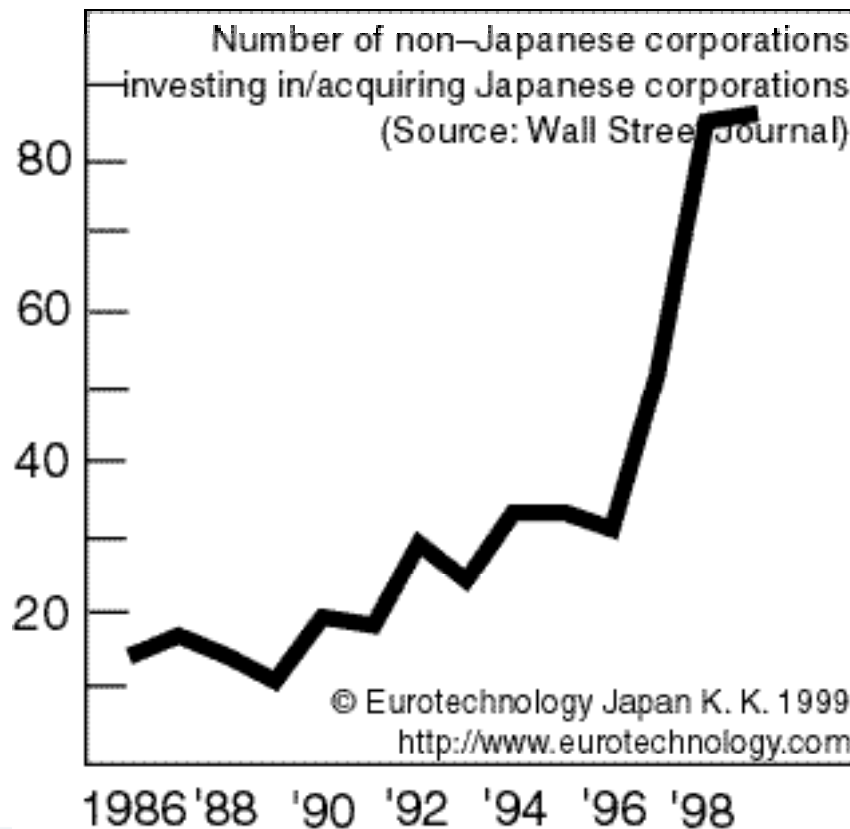
- Over-aged and top-heavy “management”, which avoids risks
- Over-competitiveness: Focus on competition instead of creating own ideas
- Excessive hierarchies: focus on power & control not on results
- Decisions taken by people who don’t understand the technical issues. Decision making administrators are rotated at short intervals between totally different jobs (for example: administrating primary schools one year–deciding University physics research grants the following fiscal year).
- “Management” (senior people) had to wait many frustrating years to reach positions of some influence. Old people (in the 50s and 60s) take “revenge” on young people for own suffering when young and fresh. Social vicious circle, which is very difficult to break.
- “Ashi o hiparu” (=pull back by the legs). A common Japanese social phenomenon in traditional Japanese organizations. All Japanese people are familiar with this social phenomenon but do not tell foreigners about it.

3. Opportunities which never existed before (1)

- Foreign inward investment welcome for the first time ever
 - GE invested US\$ 15 billion over the last 5 years, Renault/Nissan
 - Opportunities also exist for small and medium foreign corporations to establish Japan–business by acquiring small Japanese beach–head, abundance of small corporations (15 –100 people)
- Foreign corporations for the first time can hire top performing Japanese employees
 - However, only excellent foreign corporations with excellent presence in Japan are attracting top Japanese talent
- For the first time there seems to be a (slow) trend in the direction of opening Japan up to foreign services and management principles

3. Opportunities which never existed before (2)

- Japan has an exceptionally small proportion of foreign investment
- Recently, foreign investment in Japan is slowly picking up
- Only M&A increases foreign investment substantially within finite time



3. Opportunities which never existed before (3)

- Japan seems to start caring about global standards, slowly... hesitatingly... in some areas...
 - Mobile communications G3
 - Ericsson, Nokia, Lucent, opened R&D labs to develop future multimedia/broadband mobile communication equipment in cooperation with NTT-DoCoMo
 - Internet (first ISP was foreign – easier to shut down...)
 - Environmental (car exhaust standards etc)
 - Health/Pharmaceuticals: NOT YET... (many advanced pharmaceuticals available routinely in US or Europe are not admitted in Japan—only 20% of modern global pharmaceuticals are admitted in Japan!)

4. Typical mistakes of foreign corporations in Japan (1)

- Manage Asia from Singapore or Hong-Kong (that's like managing All-Europe operations from Tel-Aviv...)
- Hire the wrong people (wrong Japan-CEO, wrong personnel, e.g. too much emphasis on English etc)
- Partnerships or joint-ventures with wrong partners
- Enter Japan, build R&D labs etc without first preparing strategy and aims
- Forget to do the homework (there is Gigabytes of information you better learn about Japan...)
- Be too fascinated by cherry blossoms & be too optimistic or too pessimistic about Japan due to lack of information
- Take things for granted in Japan, which are not

4. Typical mistakes of foreign corporations in Japan (2)

- Organizational issues
 - Why should you chose a traditional Japanese organizational form for your subsidiary in Japan when many successful Japanese corporations are trying to leave the traditional pattern?
 - Tuning into the “New Japan” may be a better idea to use young Japanese talent

4. Typical mistakes of foreign corporations in Japan (3) Partnerships

- Chose the right partner in Japan or go alone
 - Going alone in Japan is a much more realistic option than in the past
 - Key is information and the right people, sufficient commitment and top management involvement of foreign corporation
- Typical problems with Joint–Ventures
 - Foreign partner has too little information and too little preparation: Joint-Venture cannot replace diligent preparation and lack of information
 - Divergence of interest
 - Joint–Venture to gloss over lack of commitment by foreign corporation for Japanese market
 - Inappropriate partner: small foreign corporation partners with 10 000-times bigger trading company
 - Lack of bi-cultural man-power: no communication between partners

4. Typical mistakes of foreign corporations in Japan (4) Engagement in Japan must have a clear purpose

- Case study: Foreign R&D lab (applies to several cases!)
 - Huge global corporation plans R&D lab in Japan (in US, in Europe) at top management level, however no clear plan is made.
 - After the decision is taken, lower management levels start working on the question of what to do in this lab.
 - Big R&D building (5 floors, many million \$) is built far from railway station.
 - Researchers are headhunted from big traditional Japanese corporations, they give up their permanent jobs
 - Bus service needs to be organized all day to bring researchers to and from distant railway station
 - 2....3 years pass
 - Top management decides to close R&D lab
 - Researchers scramble to find jobs at distant small Universities, etc. cannot go back to the jobs they left...

4. International High-Tech Cooperation is no aim in itself—there must be a clearly defined aim (5)

- Recently a Commission of the US Academy of Science examined US-Japan cooperations in technology areas.
 - One of the most important results was: **‘US-Japan technology cooperation is no aim in itself‘**
 - What should the aim be? The US-Commission concluded that **the aim should be to create high-paying employment in the USA**
- Other countries, e.g. EU and Japan should make similar determinations of clear aims to be achieved
- The same applies to industry, and is not always observed
- Japanese organizations have great difficulties attracting and managing foreign staff. Foreign organizations sending researchers/staff to Japan need to learn these issues and are advised to co-manage their members in Japan.

Summary

- Japan is important as the second largest market, as a competitor, partner, creator of technology and for global standards
- I see an “Old Japan” and a “New Japan”. Some of the “Old Japan” cannot be repaired, and must be replaced by “New Japan” for growth to resume. I advise foreign companies at least to keep in touch with the “New Japan” or even be part of the “New Japan”. My company is part of the “New Japan”.
- Foreign companies are advised to prepare their business in Japan thoroughly. It saves much time, money, brand-image to avoid well-known mistakes. Preparation is worth every penny.
- There must be a clear target for any business activity in Japan, including R&D.