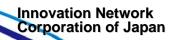
Innovation Network Corporation of Japan

# The significance, issues and future of the Industry and Company support policy

Innovation Network Corporation of Japan Naohiro Nishiguchi,
Executive Managing Director
December 2009

### Agenda



- What is happening in Japan now?
- The role of the Innovation Network Corporation of Japan
- What can be done in the field right now?

- Innovation Network Corporation of Japan
- Japanese companies have a large global share in the field of materials and electronic components.
- Technologies used in these areas have the potential to become solutions in the fields of environmental industry and life science, such as batteries and bio-pharmaceuticals.
- On the other hand, although the technology and components are superior on an individual basis, there are issues in terms of breaking down the barriers of organizations, turning them into products and making them into businesses.

#### Global market size (yen) 1000 trillion Sales and global share of major products and components (2007) (11%, 8.9 tril. yen) Automobiles (32%, 54 tril. yen) Computers and Raw steel (16%, 7.2 tril, ven) (9%, 7.6 tril, ven Figures: (global share of Japanese companies, sales of Japanese companies) 100 trillion Size of bubble: amount of sales made by Japan-based companies ectronic compone (32%, 4.8 tril. yen) TVs Final product (electronics) (29%, 19 tril, ven) 139%, 6.0 tril. yen AV equipment Final product (automobiles) (9%, 2.7 tril. yen) Components, equipment (electronics) Electronic parts miconductors Components (automobiles) 43% 9.4 tril. yen) Servers, storage (10%, 735,3 bil, ven) Telecommunication Medical, bio related (16% 4.9 tril ver Other Flat LC panel TVs \_(44%, 3.0 tril. yen) 10 trillion Display devices Car audio and (34%, 1.2 tril. yen) (41%, 1.5 tril. yen) (58%, 2.2 tril, ven) DVD-R, DVD-RW drives (83%, 483.0 bil. yen) Digital still cameras (75%, 1.8 tril.yen) Digital still/video cameras Machine tools (17%, 2,7 tril, ven) Small motors for automobiles (47%, 870.0 bil.yen) Plasma display TVs ind generation equipment (3%, 100 bil. yen) Various electric motors Automobile air (52%, 1 tril. yen) (63%, 1.2 tril. yen) conditioners (89%, 595.1 bil. yen) Multi-purpose machines Game software (45%, 530.0 bil. yen) (69%, 730 bil. yen) Optical pick-ups (90%, 482.6 bil. yen) (37%, 732.0 bil. ven DVD players/recorders 1 trillion Silicone-based solar cells (41%, 342.0 bil.yen) Car navigation Protective film for (30%, 360.0 bil. yen) Semiconductor Camera modules for (100%, 283,7 bil, ven) exposure equipment Multilaver (43%, 270.0 bil. yen) Polarization plates ceramic capacitors mobile phones (64%, 473.0 bil. yen) (78%, 614.1 bil. yen CVT transmissions for automobiles Li-ion secondary cells (92%, 400.7 bil. yen) for mobile phones (46%, 159.9 bil. yen) Image sensors for DSCs (27%, 85.1 bil. yen) 100 billion Positive and negative electrode (81%, 125.0 bil. ven) materials for lithium cells (78%, 137,8 bil, ven)) Project report on the "Quantitative Survey and Analysis of the International Composite semiconductors Competitive Position of Japanese Companies Project", by Fuji Chimera Research 84%, 49.7 bil. yen) Institute, Inc., a project commissioned under the industrial technology research RF modules (95%, 63.9 bil. ven) project consignment fund of fiscal year 2008., "Global Production Forecast of the Spattering Blu-ray disc drives Electronics and Information Industry" by JEITA, and others. (100%, 37.0 bil. yen) (92%, 91.7 bil. ven) 10 billion 80 100 Global share of Japanese companies



### To establish a policy, we need to know

- What is the goal of the policy?
- How shall we design the process?
- Can we identify any shortfall in the private sector?
- Can we identify any excess in the private sector?

1

#### **Promoting "Open Innovation"**

 Enhancing capacity of Japanese business to create values by promoting "open innovation" – the networking of technologies and expertise across industries and firms

2

#### Creating new industries for next generation

 Networking Japanese technological and industrial prowess to create new sustainable industries for next generation

3

#### Providing growth capital and bring returns to the public

 Providing risk and growth capital (patient-risk money) to support commercialization of technologies and innovation with broad impact, while earning returns on capital through a clear exit strategy and paying them back to the public



#### Enhancing value of investment portfolio companies

 Making best use of management resources and networks (combining expertise from academic, financial and industrial professionals) to enhance the value of investment portfolio companies

### The role of INCJ



### **■** Compliance with investment criteria

- Social importance, growth potential, innovation

## Working together with private companies and funds (the three complements)

- Complementary timeline, space and credit

# Achieve long-term profitability through distributed investment

 Undertake distributed investment to ensure that there is not too much bias on a specified field or subject.

### Japan's Challenge: Industrial innovation = Open innovation: matching the changes to the industrial structure



- The vertical innovation model, which previously comprised the victory pattern of Japanese companies, has reached the point where further evolution is necessary. With globalization, progress in digitalization and information networks, cross-border M&A has now become free and possible.
- Under these circumstances, a new combination blending the technology and business of diverse business fields (= open innovation) holds the key to the competition.
- The trigger point for creating value in the value chain is shifting toward services and materials.
- Taking such shifts in value creation into consideration, it is necessary to swiftly achieve a combination that includes the different industry fields, thereby leading to the transformation of industrial structure.

#### Changes in the external environment

- Rapid globalization of the market
- Growth in digitalization
- Exponential increase in information sharing with the development in communication methods represented by the internet
- Shift of the trigger point of value creation to materials and services

## Achieving new business models and industrial structure

- The rapid set-up of business is the factor for differentiation
- It will be important to form alliances with others and involve other companies = combination power
- It is essential to achieve the above two points from a global perspective

### **Target Investment Opportunities**

- Create new sets of industry/market for next generation.
- Enhance capacity to combine sets of technologies from different domains for new products/services and maximize values of our technological potentials.
- Actively provide patient risk money to support innovative projects.

Three investment opportunities for innovative projects.

#### Opportunity 1

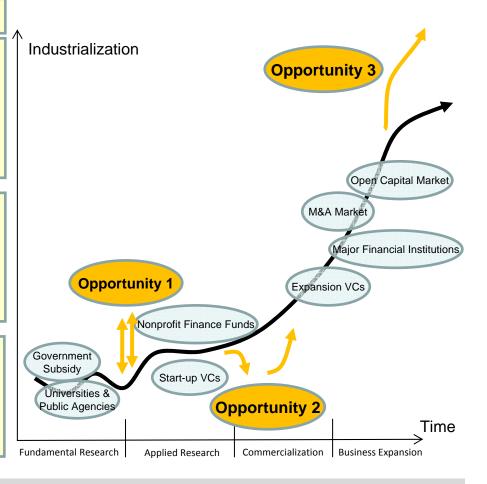
- Investment for technologies developed by universities and research organizations university.
- Identify, bundle and commercialize uncommitted patents with long term perspective.

#### Opportunity 2

- Investment for start-up companies or spin-off companies.
- Purchase shares from VCs and make additional investment.
- Maturate and bundle technologies for commercialisation.

#### Opportunity 3

- Investment for new project companies that bundle technologies from different domains/companies.
- Support growth of such new innovative project companies.



# Information hub, industrial capital & human resource development

Innovation Network Corporation of Japan

- The Innovation Network Corporation of Japan (INCJ) consistsof human resources with rich, diverse experience in investment, finance, technology, business, public administration and other fields. It is currently creating a network of private companies, including investor companies (currently 19 companies), technology assessment expert organizations, public administration agencies, universities, research institutes and others.
- With the INCJ at the hub of the network, it will support the establishment and deployment of business strategy and the assessment of technology from the market side for the growth of the business of the investment target companies.
- Furthermore, through specific business structuring and investment activities, it will work towards developing synergy in business management experience, and business creation and investment knowledge, and the development of human resources.

#### **Investment Target** Provide medium- to long-term Industrial capital, Information hub function industrial capital human resource development **INCJ Network** echnical assessment seen from the market perspective Creation of investment projects through **INCJ** Eureka Think Tank the combination of technology, etc. (ETT) Establish a business strategy and tactics for business growth · Proposals for financial management and business restructuring such as M&A Private investor companies Universities, TLOs Industrial Innovation Public sector Technical assessor professionals Committee Public administration Business company Investment organizations professionals professionals Research Institutions Banking and securities professionals

### **Definition of Innovation**



- Innovation is not only the invention of new technology. It is the creation of new value with social objectives from new ideas, and is a self-activated human, organizational and social transformation that brings about major social change.
- It means the creation of new value by incorporating new technology and thinking in conventional items and structures to bring about major social change.

### How does innovation occur?



What value does it have for the customer?

Formal knowledge

What value does it have for the customer?





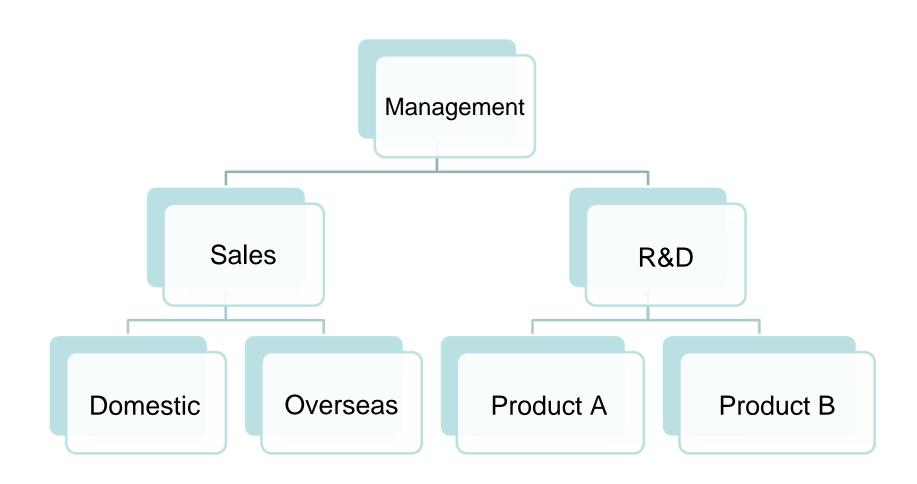
Implicit knowledge

**Innovation** 



# Where are the pitfalls?





# Summary



- Departure from the pattern of winning in component technology but losing out in overall concept and initiative.
- Brush up enterprise building power.
  - Get out of the foxhole
- Management with unity, bringing together the best of the public and private sectors, supplementing what is missing and getting rid of the excess.

Innovation Network Corporation of Japan



## We appreciate your support

### < Contact >

### **Innovation Network Corporation of Japan**

Marunouchi Kitaguchi Bldg. 1-6-5, Marunouchi, Chiyoda-ku, Tokyo Telephone: +81-3-5218-7200