Looking Back on Japan’s Industry-Academia Collaboration and Support on Startups

November 14, 2018

Satoshi Noguchi
Director-General
Trademark and Customer Relations Dept.
Japan Patent Office
My Background

- **2015-2018 (Former Position)**
  Director, Human Resources Division
  National Institute of Advanced Industrial Science and Technology (AIST)

- **2014-2015**
  Director, Information Services Industry Division,
  Ministry of Economy, Trade and Industry (METI)

- **2012-2014**
  Director, Economy Policy Department, Kanto Bureau of
  Economy, Trade and Industry

→ Today’s presentation shows my opinions and suggestions based on these experiences as well as official comment from JPO’s Director General.
History of Development of Industry-Academia Collaboration in Japan

1998: Act on the Promotion of Technology Transfer from Universities to Private Business Operators (TLO Act)

- Build TLOs to systematically support utilization of research results in universities
  → Make Academia be aware of technology transfer to Industry, for the first time in Japan’s postwar history!

1999: Act on Special Measures concerning Industrial Revitalization (Established the Japanese version of the Bayh-Dole Act)

- Returns the profits earned from utilizing the outcome of research entrusted by Government to Universities
  → Increases the incentives to make Academia utilize the outcome of research

2003: Intellectual Property Basic Act
2004: Incorporation of National Universities

- The right to obtain patent for research results belongs to the university.
- IP headquarters were set up in universities. The university itself files a patent application.
  ➔ Establish the principle of self-responsibility among universities, with providing incentives to them.

2006: Revision of the Basic Act on Education

- In addition to Education and Research, Social contribution by providing the outcome of research was clearly defined as third mission of universities.

There were various initiatives taken during this period…

2018: The Investment for the Future Strategy 2018

- The right to obtain patent for research results belongs to the university.
- IP headquarters were set up in universities. The university itself files a patent application.
  ➔ Establish the principle of self-responsibility among universities, with providing incentives to them.
Current State and Issues of Industry-Academia Collaboration in Japan in 2018

Current State

Large-scale research (research expense is more than JPY 10 million) with private companies accounts for only 4% of all research

→ Although the number of small-scale joint researches increased, their impact on society remains small.

Size of Joint Research Expenses between Universities/Research Corporations under the MEXT and Private Companies (Per case)

The size of joint research expenses in Japanese universities is approx. 2 million yen per case.

Issues

Universities do not have personnel who has a skill to manage large-scale joint research with Industry

- There are no personnel that can plan large-scale researches and/or negotiate with companies.
- Since universities are basically vertically segmented organizations, it is difficult to gather excellent personnel across departments and to make a “dream team” in the university.

Examples of Specific Initiatives

● To set up a strategic special zone in universities

Introduce (1) a flexible & independent personnel/salary system, and (2) an IP management system customized to the counterpart company in universities

● To employ a group of experts (creative managers) that can respond to individual company’s needs

(1) Experts that can plan/propose large-scale researches
(2) Experts that are skilled in IP strategies
(3) Experts that are skilled in financial management

● To utilize corporate funds through the matched funding scheme
Support for Startups and Its Issues in the Past

Past Initiatives and Current State

- In the first stage on support for startups in Japan (from 1970’s to 2000), it was limited to financial support (budget, tax system, etc.)
- From the second stage (about 5-7 years ago), it has shifted to human support for entrepreneurship and building ‘Ecosystem’.
- Recently, the number of startups increased to some extent, but we still do not have enough startups that will lead and/or represent Japan.

Issues

- There is no symbolic startup whom every Japanese people remembers as a role model;
- There aren’t enough Japanese startups that go and start business abroad. So startups cannot gather large amount of risk money;
- Large companies in Japan have never been familiar with nor had a good relationship with startups; etc.
“It is necessary to generate a role model of startups in Japan, and to enhance public recognition of the importance of being a startup and fostering startups.”
**Example of Specific Initiative**

**J-Startup (Program to support development of startup companies)**

After selecting top 92 Startups aiming at unicorn companies, the Government of Japan and the private sector work together to provide intensive support to them.

- Generate several role models of startup among top 92 companies
- Provide financial support by Certified VCs as well as comprehensive support by large companies.
- Support global activities (Ex. Displaying their products at events)

© 2018 Ministry of Economy, Trade and Industry
Example of Specific Initiative by JPO

IP Acceleration Program for Startups (IPAS)

- Sending an IP expert team to 10 companies selected.
- Support to build IP strategies customized to their business style and needs

10 selected Companies (Below)

- AXELSPACE
- MDR
- METCELA
- aceRNA Technologies
- CAULIS
- Jaksak
- SONAS
- Kyulux
- DeepFlow Co., Ltd
Thank you!