

Interview with Kazuhito Hashimoto, Professor, Department of Applied Chemistry, School of Engineering, University of Tokyo

Raising Entrepreneurship in Japan Through the Third Arrow of “Abenomics”

By Japan SPOTLIGHT

The Industrial Competitiveness Promotion Council is one of the key advisory groups to Prime Minister Shinzo Abe. Its key objective of planning policies to encourage long-term Japanese industrial competitiveness is crucial in achieving the ultimate goal of “Abenomics” – economic growth. Dr. Kazuhito Hashimoto, professor of the Engineering Department of the University of Tokyo, is a member of the Council, and in particular is a strong advocate among its members of raising new ventures and entrepreneurship, the main goal of the 2015 annual plan for growth strategy. *Japan SPOTLIGHT* had an opportunity to have an interview with him.

Industrial Competitiveness Promotion Council — Innovator of New Growth Strategy

JS: Could you please tell us about the role of the Industrial Competitiveness Promotion Council and your impression of its activities so far as a member?

Hashimoto: The Industrial Competitiveness Promotion Council was started about two and a half years ago in January 2013, just one month after the second Abe administration began. Its mission is to work out a growth strategy, a “Strategy for the Restoration of Japan”. The prime minister always told us that his administration would implement any policy it promised to, so the most significant difference between his growth strategy and others in the past is that it would be put into practice without fail rather than merely talked about. Another big difference is that this implementation process would be quick and any policy to achieve the goals of the growth strategy should be started immediately.

Therefore, our discussion time was somewhat shortened but the discussions among members were very intensive. I have been greatly impressed by the passion and enthusiasm of the ministers responsible for the quick and smooth implementation of the growth strategy, having participated in the discussions myself.

JS: How have your academic expertise and activities



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contributed to achieving the goals of the Council?

Hashimoto: I am a chemist and thus my expertise is in science and technology. But I am not working as a chemistry expert for the Council. The members are expected to contribute to discussions using our knowledge and professional experience beyond our specialties. For example, in my case, since I have been working as a professor at the Engineering Department of the University of Tokyo, I am expected to make a specific contribution to discussions on science and technology policy and university education.

Since joining this Council, I have also been a member of the Science and Technology Innovation Council, responsible for planning the science and technology policies for the government, and the prime minister told me to achieve collaboration between these two councils.

This is my most important mission. In our first meeting, Mr. Abe showed us the 10 key items of his growth strategy. The first is deregulation and the second is technology innovation. So innovation is a very important issue for his administration.

JS: Our impression of advisory groups to the government in general is that experts in each area gathering for discussions are expected to contribute to policy planning on the basis of their own specialties. But for this Council, as you suggest, members are expected to contribute to policy planning based upon their broader overall

experience. Is this a particular strength?

Hashimoto: Yes. In the case of the Advisory Council of Fiscal Policy Affairs, since they discuss macropolicy issues, all the issues are to be covered by economists and business executives. But in our case we discuss the microeconomic issues, and our goal of growth strategy is related to a wide range of topics covered not only by METI but also by the Ministry of Agriculture, Ministry of Health, Labour and Welfare and many others. In this context, our Council is aimed at working on policy plans overriding each ministry's jurisdiction and finding a horizontal solution for each issue beyond an individual ministry's jurisdiction. You can't find the best solution from discussions only among experts with each ministry's jurisdiction, since today the whole variety of microeconomic issues are closely interconnected and I believe we should produce policies regardless of each ministry's own area of responsibility. I am participating in our discussions with this in mind, largely on behalf of science and technology professionals.

Focal Points of Revised Growth Strategy in 2015

JS: Innovation appears to be a principal issue for the recently revised growth strategy of Abenomics, called the “Strategy for the Restoration of Japan”. Could you tell us its main focal points?

Hashimoto: Yes. I think the key features of this revised growth strategy should be “investment for the future” and “local Abenomics”. Investment is necessary for growth, particularly by industries, the main players in the economy. So the first feature means the government needs to create a business environment where industries can invest and grow. The second one means that we should expand the positive effects of Abenomics to the regions as well. In addition, the revised growth strategy highlights implementation of joint projects between the government and the private sector towards 2020, the year of the Tokyo Olympics and Paralympics, to speed up the economic reforms necessary to realize growth.

To encourage “investment for the future”, innovation and creation of venture businesses are mentioned. Revitalizing venture business would be a key to creating a business environment for innovation, assuming that ventures in general could stimulate innovation, which is usual in the United States. We are now trying to introduce this US model of innovation into Japan.

This is also related to the issue of the university reform. In 2013, the government strengthened the functions of the Council of Science, Technology and Innovation and in 2014 the expanded role and function of national R&D corporations was considered one of the key reforms to encourage innovation. In 2015, we have discussed the possibility of university reform as a policy to stimulate innovation.



Reform of Universities & Innovation

JS: We would like to ask you about this question of promoting innovation and venture business. We have heard that the prime minister had a meeting with some representatives of Japanese venture business in Silicon Valley when he visited the US last May. He asked them how Japan could facilitate a venture-friendly business environment like the one in Silicon Valley. Do you think venture businesses face a difficult situation in Japan at this moment?

Hashimoto: Before responding to that, I guess the important thing is that the prime minister was very impressed that the business culture of Silicon Valley creates entrepreneurship and innovation. It is also important that he was impressed by Stanford University's contribution to innovation in this region. In Silicon Valley, ventures help create new business and Stanford is playing an important role in this process. This is what the prime minister saw there and I guess he asked the question you mentioned, noting the difference between Japan and what he saw in Silicon Valley.

After coming back to Japan, he told me that any new venture project would have to overcome many challenges in order to be successful, since the probability of a venture's success is very small. In Japan one single failure in a venture could lead to the ultimate end of your business career, whereas in the US if you fail once in a venture, you would be considered eventually as a full-fledged business person. This is a big difference between Japanese and

Interview 1

American corporate culture relating to venture business. This is what Mr. Abe found on his visit to Silicon Valley, and I share his view. Failure in starting a venture in Japan would lead not only to social disgrace but also to financial difficulties in which you could not repay the borrowed money.

In financing venture businesses, in the US they have venture capitalists who would be ready to invest money in the projects, even with a small possibility of success like 10% or even 1%. In Japan, there are only a few such venture capitalists and a supporting system for them is not yet well developed, though it has made some progress. We will also need to change our culture and mindset and start believing that we could achieve business success even after a number of failures. If a friend of mine failed in starting a venture, I would also tend to think that he or she must be stupid. But in the US this would be considered a sign of reaching maturity as a business person. We should create a similar culture, even though it is difficult to change such a deeply-rooted mindset in our society.

There would be even far less probability of a venture reaching the stage of an initial public offering (IPO) than achieving an initial success. In this regard, I think what works in the US is that large corporations absorb ventures by M&A and become bigger. According to an interesting book titled *Business Produce* published by Japanese company Dream Incubator Inc. in May this year, during the past two decades the number of the US companies capitalized at more than \$10 billion has been increasing, while the number of Japanese ones has not been increasing much.

This difference comes from the fact that large US enterprises are expanding by creating new business somewhere, linked between one industry and another, while Japanese ones are trying to expand within their own industry. This book also shows that the American ventures are playing the role of interlinking industries and in many cases the large US corporations buy those ventures and expand themselves.



JS: Are there any success stories of Japanese ventures?

Hashimoto: Yes. In these past 10 years we have had around 200 ventures founded at the University of Tokyo, of which the total capital has reached \$10 billion. Most of them have reached the stage of IPO by themselves or been absorbed by US firms through M&A. Large Japanese enterprises have not been interested in buying ventures, saying that they have never achieved reliable performance.

There is one successful bio-venture founded at the University of Tokyo called PeptiDream Inc. that was started nine years ago by using a new biotechnology invented by Prof. Hiroaki Suga at the Science Department. Three years ago it achieved an IPO. This company provides a platform for producing new medicine. A pharmaceutical company can use this platform to develop new medicines by paying a fee in advance to the company, and the company will then get another fee from the sales of the new medicines if they are sold to the public. This business model is so attractive that many of the large pharmaceutical companies have entered into contracts with this company, though their new medicines have not been sold yet. At the beginning of this business, it was the large pharmaceutical companies overseas that made contracts with them. After having seen such companies' reactions, Japanese firms followed them, since they can see now a good outcome for their business. This shows that most of the large Japanese firms are rather skeptical about technology or products developed by a venture business and hesitate to take the risk of adopting them.

PeptiDream Inc. is earning a surplus every year. This company is so successful that if I had invested 1 million yen in this company at its foundation, I would now have earned several hundred million yen from that investment. By taking a risk, you could earn lots of money from investment in a venture. That is one invaluable merit of venture business.

I believe that showing such a success story to the public is key to changing our corporate culture. Successful Japanese business people tend to be shy and not talk about their success story. I believe this has to change and a venture's success story should be made more open to the public and thus serve to stimulate their interest in creating new business. For example, I would suggest that Prof. Suga, a founder of this successful venture, build a large residence for himself to demonstrate how wonderful a successful venture business can be for your personal life. We Japanese evidently suffer from a lack of such candidness in publicly demonstrating business success, unlike the Americans.

Communicating success stories to the public and creating a support system for entrepreneurs to continue taking risks even after a number of failures in their business career could raise many ventures in Japan as well. What is important is to increase the number of ventures, since the probability of each individual venture's success is very small. Raising a venture would contribute to the

evolution of a society, so in that sense it is an important social mission as well.

JS: What do you think about the role of university education in raising ventures that promote innovation?

Hashimoto: The primary role of the university should be human resource development, and also transmitting a nation's traditional culture, as well as basic research. Promoting innovation is only a small part of a university's mission. Therefore, reform of university education simply to encourage innovation would not be well received by university professors.

However, I believe that promoting innovation is also one of a university's important social missions. How is it that universities in Japan do not work well at this moment in stimulating entrepreneurship? I think this is due to the fact that all the 86 Japanese national universities have the same education program and no diversity among them. Each university should have their own distinguished mission and role. There should be some universities that consider promotion of innovation as their primary mission. University reform should lead to each university starting to think about its own individual mission.

In addition, the most serious impediment to any university program in Japan at this moment is a financial one. As the national public finances have fallen into great deficit, the subsidies from the government to the universities have been cut by 10% in total during this decade. It will be difficult to increase these subsidies as expenditures for social welfare have naturally risen due to the aging society and pensions have to be cut for fiscal rationalization. It would be better for universities under such a situation to think about contributing to social needs, in ways that would produce a return for them. Among such social needs, innovation would provide a university with the most significant pecuniary rewards and investment from a successful venture business. Every business firm is always expected to earn a return in the short run. They would not be able to afford to invest in long-term R&D, though they understand it is vital for enhancing their competitiveness. For such long-term R&D, an alliance between a university and the venture would provide great benefits.

So supporting ventures and reforming university education with a view to promoting innovation would be vital to strengthening our industries' growth potential. A large enterprise would buy a seed of new technology created by a venture through M&A and also another seed of new technology developed by basic research at a university that has never been produced by any business firm. In this way a university could earn money from the seeds of innovation and invest it in the original important missions such as human resource development or transmitting traditional culture.

International Collaboration

JS: What do you think about possible collaboration with universities abroad?

Hashimoto: As we are living in a globalized world, interaction with universities abroad is inevitable. The problem with Japanese universities' international collaboration is, in my view, that most of their ties are based upon a professor's personal relations and not on university-wide networks. Intellectuals' networking between European universities and US universities is well developed, but Japan cannot enter into this network; nor can China, South Korea, or Singapore, though they also seriously try to do so. This is truly a difficult issue. The impediments to international collaboration clearly known to us so far are the lack of linguistic ability among Japanese universities' staff in charge of administrative procedures necessary for foreign academics to participate in academic activities in Japan and the lack of schools for educating their children in the case of those with families staying for a long period in Japan. We need to ameliorate this situation as quickly as possible.

Another important thing about Japanese universities' international collaboration is that we should consider collaboration with other Asian universities or research institutes as a higher priority than with US or European ones. We see many Southeast Asian students coming to Japan to study who are highly qualified and extremely competent. I have met excellent students from Thailand, in particular. I hope these students who come to our universities go back to their countries and make a good contribution to their nations' development.

JS: Finally, could you briefly tell us about your future plans?

Hashimoto: I think the most important part of our work in the Council should be to implement our strategy for the restoration of Japan steadily. Promoting and developing ventures will not be so easy, despite the policy measures we decide on. We will need more specific business-oriented efforts to achieve this in a more accommodative business environment.

On reform of the national university education system, I hope that the necessary bills to achieve it will be definitely passed by parliament by March 2016. This is very important because April 2016 will be a crucial moment, since the new mid-term plan for a national university education and administration program and also the new basic plan for science and technology development will be started then. The necessary university reform plan must be reflected in these two crucial plans determining the future direction of innovation in Japan.

JS

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