

# Corporate Venturing in Japan

## - New Win-Win Movement of Big-corporation and Start-up Collaboration -

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### Summary

Entrepreneurship is one of the most needed factors in Japan to escape from the post-war business model that aimed to catch up. Start-ups, however, are not growing against expectation, and big corporations are in a inovator's dilemma, and losing dynamism.

Recently in the movement of MOT, Corporate Venturing is starting to be focused in Japan. Corporate Venturing is helpful for both big corporations' entrepreneurship and fostering start-ups, and leads both parties to win-win.

In this paper, six Japanese cases of Corporate Venturing are analyzed and show the way of Japanese new model of big corporations and start-ups collaboration.

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## **1. Disruptive Innovation: Created by Start-ups or Major Companies?**

Which is contributing more to society through epoch-making innovations, major companies or start-ups? Taking into consideration the flow of the times, which of the two is responsible for innovations that transform society through new items, service or technology?

Peter F. Drucker stated in his book “Innovation and Entrepreneurship.” published in 1985 that major corporations both require and have successful potential for entrepreneurship, showing such as 3M, GE Plastics and Sony.

In reaction to this, Professor Christensen of Harvard University put forward the theory in his book “Innovator’s Dilemma” in 1997, that major corporations find it difficult to make disruptive innovations due to their pursuit of customer satisfaction as a result of following orthodox business strategies.

Though he notes that there are some exceptions in Japanese businesses, he uses examples such as hard disks drives and hydraulic shovels to make his point that almost all disruptive innovative product developments in western countries have been made by start-ups.

The opinions of Drucker and Christensen stand in contradiction to one another. Which one is to be believed? My position on this is influenced by my position as someone who spun off from a major corporation (Sony) and is now teaching entrepreneurship theory.

In addition, I have also had the experience of being the initial director of the FeliCa contactless IC card system business office as an internal start-up of Sony in my last three years working for the company, competing with a powerful Swiss start-up called Mikron. As a result, I have a particular need to find a solution to this question.

As someone who has preached creative destruction and new combinations and put forward the view throughout my life that innovations are the basis of economic growth, I wonder what sort of an opinion Joseph Schumpeter, whom I respect greatly, would have on this question. The surprising answer to that question is as follows.

At the young age of 29, the European-born-and-raised Schumpeter published “Theorie der wirtschaftlichen Entwicklung” (The Theory of Economic Development) in German, stating in the book that only the founders of start-ups, full of entrepreneurial spirit and unconstrained by old ideas, could form innovations.

However, after emigration to America and viewing with his own eyes the abundant resources, research offices, human resources and capital available to the major

corporations of America, Schumpeter's opinion reversed itself completely. His "Capitalism, Socialism and Democracy," published in English at the age of 59, claims that it is the major corporations that can make ground-breaking innovations through their wealth of material and human resources.

Matching the contrasting opinions of professors Drucker and Christensen in regards to who brings about innovations, Schumpeter ended up greatly modifying his own early ideas on the subject. A problem such as this that caused even such a brilliant economic scholar as Schumpeter to vacillate is truly a difficult one to solve.

The theories of Christensen and Drucker stand in contradiction to one another, and even Schumpeter could not choose between the two. A great many companies and corporations have long awaited a solution as to which theory is correct in today's business world. The idea proposed by Professor Weber of MIT that the most important issue over next ten years of MOT will be corporate venturing comes, in my opinion, as truly the answer to these contradicting theories.

## **2. The Nature of Corporate Venturing**

In March 2003, the Ministry of Economy, Trade and Industry marked the first year of Management of Technology in Japan with MOT workshops held at the Keidanren Kaikan (Japan Business Federation Hall).

In the speech by the authoritative figure on MOT theory, Professor David Weber of MIT, one chart (Table 1) in particular showed the cutting edge of MOT in the United States and in Europe.

As Professor Weber expostulated about this chart, "The strategic impact of MOT is changing around once every ten years.

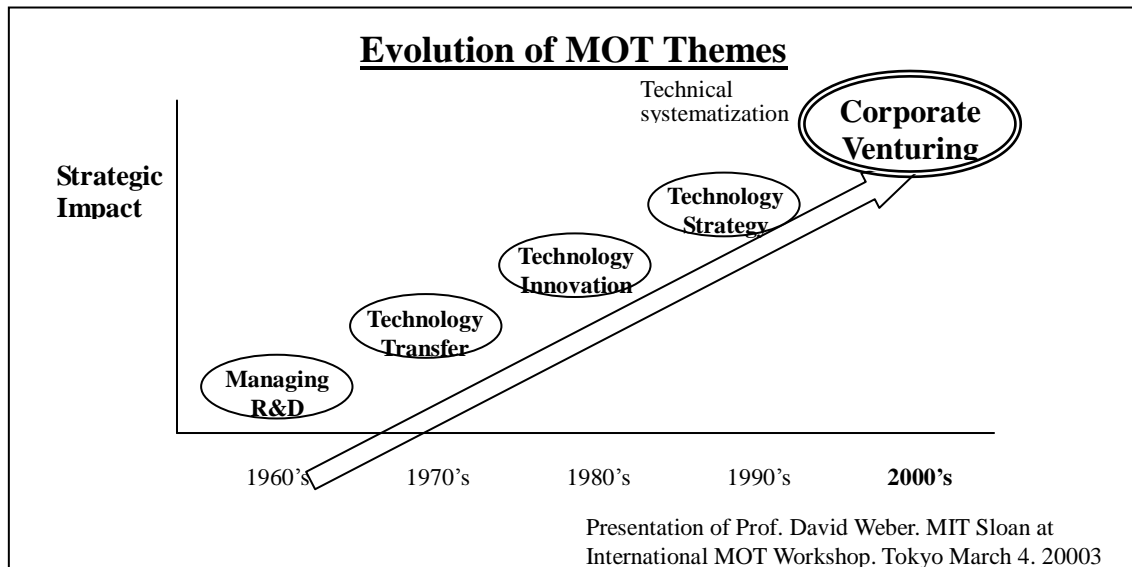
In the 1960s it focused on research and development management by central research institutes, in the 1970s there was a technology transfer from the research institutes to business departments, in the 1980s to focus was technical innovation, in the 1990s it was technological strategy, and as we enter the 21st century, the next ten years will focus on corporate venturing."

As Professor Weber argued, with the opening up of business, the systematization of technology has become necessary, and for major companies there is a need for assimilation of technology innovations from other industries in addition to those of their own.

Concurrent with this, the innovations of improvement in the previous catch-up business

model have been overtaken in strategic importance by disruptive innovations needed for front-runner business models. Hence, the use of corporate venturing involving tie-ups in some form or other with pioneering start-ups will become a focal are of business strategy.

Table 1



Corporate venturing is the use by major and middle-sized companies of the entrepreneurship of start-ups to create new business. It can be expressed as a strategy for companies to make active use of entrepreneurship (start-ups).

The following ten types of methods are available for corporate venturing:

- 1) An independent internal organization developing new business (internal start-up)
- 2) Investment in an independent start-ups as corporate venture capital
- 3) Tie-ups with start-ups
- 4) Support to spin-off ventures
- 5) Joint development with a start-up
- 6) Start-up incubation (development)
- 7) M&A of a start-up
- 8) Management Buy-out (MBO) / Management Buy-in (MBI)
- 9) Carve-out (forming a separate / independent company from the main company)
- 10) Developing an internal start-up into an external start-up

Over the last ten years, numerous major companies in Japan have been trying, largely unsuccessfully, to create the entrepreneurship they need through the means of internal start-ups. With little chance of control-oriented major companies making efficient use of highly independent, high-risk start-ups, recently increasing numbers of companies are opting to switch to external start-ups, inspired by the multiple successes of spin-off start-ups.

Though the founders of external start-ups cannot return to their original companies in the case of failure, for about three years after leaving the parent company close support is given to them. Companies such as Fujitsu, NEC and Ricoh have transformed their previous internal start-up systems into external start-ups. Recruit Co. is an unusual example of a company utilizing start-ups through developing both internal and external start-up systems.

What are especially required in Japan are tie-ups between spin-off start-ups and major companies. Forward-looking large-scale companies have already invested in tie-ups with leading-edge start-ups, thus gaining their technology and methods, as well as their entrepreneurship.

NTT Docomo, for example, jointly developed power-saving semiconductors for its next-generation mobile phones with the technology of the hitherto unknown Tokyo semiconductor design start-up called Yozan, making possible the formation of the basis of a world-wide alliance including European companies.

Toyota Motor Corporation invested in Lattice Technology, a spin-off start-up from Ricoh, supporting the development of software used in exchanges of ultra-lightweight 3D moving display design drawings between business places, greatly enhancing the performance in the technical design field.

Other successful cases of collaboration between large-scale corporations and relatively unknown start-ups have recently begun to increase in number in Japan, more than one would suspect to be the case.

However, at the same time there are many big companies with old-fashioned ways of thinking that ignore or actively work against start-ups formed by engineers spun out from them, regarding it as disgraceful for such carefully developed human resources to take off on their own. As these big companies continue to ignore such start-ups spun out from themselves, it becomes more likely that these start-ups will form ties with their competitors.

It is now a question for major companies as to how well they can incorporate spun out

companies into their orbit and nurture them for product development and sales channels, thus making use of the entrepreneurship and energy of the start-ups for their own sakes and to cover their own weaknesses.

Whether a major company can grant benefits to start-ups and, in so doing, gain innovations through the power of these start-ups that they could not have created only by themselves, and whether start-ups and major companies can make a complementary relationship work to create a win-win situation for each other is the key to corporate venturing.

As Professor Christensen demonstrates in the “Innovator’s Dilemma,” major corporations are indeed ill-suited to disruptive innovations due to their pursuit of customer satisfaction.

On the other hand, R&D-oriented start-ups have the potential to achieve major innovations in niche fields through their fever-pitch drive to succeed. In contrast to the controlled societies of large corporations, venture companies are not constrained by summer or winter vacations. Instead they are powered by a vast pool of energy aiming at R&D or business model breakthroughs that will make them a listed company, ambition enough to keep them running for four hours of sleep a night for a year or more. There is a high chance of the disruptive innovations mentioned by Christensen being created by such a place.

At the same time, the major corporation is vital to the R&D-oriented start-ups as its first customer for its new products. For a start-up with neither a brand nor established reliability or proven performance, whether or not a first customer willing to make initial purchases in fairly large quantities is the difference between success and failure. When the research has progressed to a certain level, forming an effective tie-up with a major corporation likely to become a user means greater dependability for the major corporation and allows it exclusive possession of a new technological product for a certain period of time.

This complementary relationship allows the start-up and the major corporation to form a win-win situation for both parties. The innovator’s dilemma facing the major corporation can be overcome by bringing in the help of an R&D-oriented start-up. The R&D-oriented start-up, meanwhile, can survive unscathed through the death-valley and the Darwinian Sea with the help of the major corporation.

My particular term for this is the “Stone Wall Theory.” The stone wall of, say, a castle is not made stable merely by piling one large rock on top of the other, but is instead fixed squarely in place by the insertion of tiny pebbles between the large rocks. This gives

stability to the larger rocks and allows them to fulfill their purpose. Similarly, simply collecting large corporations together to make use of their particular strengths still fails to cover their weak areas. In contrast, a combination of companies with differing roles maintains a good overall balance and allows the virtues of each party to shine.

### **3. Cases of Corporate Venturing in Japan**

#### **1) Nurturing Spin-off – The Example of NEC**

NEC is working to form corporate and start-up win-win relations through allowing the carving out (independence from the corporation) of technology and human resources removed from its core business areas and offering support to these external start-ups.

NEC's Tohru Tsujide (D.Eng.), head of the company's evaluation technology development division, spent one billion yen to develop himself a device for use in semiconductor manufacturing processes. With moves afoot within NEC to halt the project as unprofitable, Dr. Tsujide took the license from NEC and set up a company called Fab Solutions in 2002.

NEC's top executives took a bold decision to view spin-off start-ups making use of patents lying dormant inside major corporations as being beneficial to both NEC and to Japanese industry. NEC provided not only exclusive licensing rights for patents but also allowed use of research facilities and financial / tax support free of charge for two years, and was rewarded in April 2002 with the acquisition of equity warrants as stock options recognized under revision to the commercial code.

The start-ups involved can maintain their freedom through trading with NEC as a completely independent company with no restrictions, with NEC holding no shares in the company. The fact of NEC's support raises the company's trustworthiness drew in funding from venture capital both internal and external. The company founder, Dr. Tsujide, became CEO and CTO, and brought in Kuniaki Togasaki, a man with wide-ranging business experience including work at Tokyo Electron and Sumisho Computer Systems, as the company president.

One of the principal reasons why this was possible for a major corporation like NEC was the understanding of then-president Koji Nishigaki. He made the point that "there is an over-concentration of human resources in the larger corporations of Japan, which makes it difficult to allow individual talent to shine. Allowing talented human resources to form start-ups outside the company and supporting them brings benefits to us both." Changes in thinking are evident even at the level of top management in Japanese

companies.

Another reason causing old-fashioned Japanese corporations to move in this direction is the burning ambition of advanced engineers to spin out technology developed by themselves but not being used in the company. This allows them to realize their long-cherished ambition of making use of the technology, and at the same time causes the slow-moving management executive to take action.

## 2) Joint Product Development with Spin-off – The Example of Toyota

Toyota Motors has been making successful win-win collaborations with spin-off start-ups specializing in IT software technology from seven years previously.

In 1999 Toyota invested in Lattice Technology, a spin-off from Ricoh formed by Dr. Hiroshi Toriya (D.Sc.) and several others in 1997 to develop 3D image compression and transmission software. The financial involvement of Toyota in this little-known start-up gave great self-confidence and ambition to the technology and growth of the start-up. Its trustworthiness increased and it gained a boost in investment from venture capital. This was without doubt a win-win relationship for both the corporation and the start-up, making it a representative example of corporate venturing.

Led by president Toriya, Lattice Technology is now a well-known start-up looking toward going public in the near future, but one has to admire the astuteness of Toyota to judge the need for such network-era technology in automobile manufacturing and to quickly invest risk money into what was at the time a completely unknown company. This innovative technology allowing 3D images to be sent over the Internet in only a few kilobytes has become a vital weapon in trial design at distant locations and design drawing database management at Toyota.

Toyota's start-up tie-ups were given sensational coverage in the 2002 summer special edition of financial magazine "Zaikai" with the headline "Toyota Begins Quietly to Search out Start-ups." Cutting edge corporations such as Toyota with an eye for business are already consciously involving themselves in corporate venturing.

## 3) Supporting Carve-out – The Example of Sony

Sony Corporation, beaten out by Sharp in releasing LCD displays, decided in at the end of 2006 to focus on organic electroluminescence (organic EL) for its internal development of next-generation flat panel technology. This decision came after an in-company competition between organic EL and field emission displays (FED) and thus dropped FED technology from mainstream development at Sony. However, FED retained technical advantages which Sony did not want to lose, so instead of completely



halting the development, SONY set up a start-up called Field Emission Technologies. The company was formed by carving out the relevant patent technologies, research equipment and human resources and was funded 63.5% by the advanced technology research fund called TechGate Investment, and 36.5% by Sony.

Hence, Sony was able to continue FSD development and make possible its future commercialization through moving human resources and technology assets to the new company. Various possibilities remain in the future for Sony to increase its investment ratio or make an M&A, or sell the technology off to another company. It has been speculated that this is due to well-balanced and complex arrangements between Sony, the advanced technology research fund, and the engineers who went to the start-up.

The development of FED technology outside of Sony began to take off astonishingly well a year after this. Under Sony's internal development system products could not be displayed at exhibitions in Japan or overseas unless the technology had reached a level where confidentiality issues became relevant, but with the fund pushing for fast commercialization and desiring profits, technological development was freed from the culture of hidden and confidential development.

Thus negotiations were held with Sony's competitors and the technology was exhibited at exhibitions here, there and everywhere, resulting in an outpouring of technical ideas from customers and input from unexpected sources for hitherto unrealized ideas given in a workable format. Stimulated by this flood of new ideas, the developers were able to make rapid progress towards commercialization with a market-based focus.

What better example of open innovation and the solution to the innovator's dilemma could be found? Thanks to the input of useful ideas from various sources, innovation was transformed from linear to non-linear style. The change from organized and progressively controlled development inside a corporation to the entrepreneurial and fluid style of the start-up greatly transformed the evolution of this technology in terms of time and ideas.

#### 4) Active Support for Carve-out – The Example of MHI

In 2001 engineers at Mitsubishi Heavy Industries (MHI) developed and patented the metal chloride deoxidization vapor-phase growth method, a ground-breaking alternative technology allowing film to form on wafers in a vacuum state by reducing metal to a vapor. This method marks a major change over the previous time-consuming and costly deposition process method involving cleaning and heat-treatment processes for the metal-plating process.

For MHI, the manufacture of semiconductor deposition devices was not a core business field, hence rather than leave this innovative technology to languish inside the company, it was carved out to give it a chance to become commercially viable.

Technology Alliance Investment, an advanced technology research fund and a subsidiary of MHI, was central in setting in 2005 a company called PhysChemix. MHI transferred to this company patents and research technology related to deposition technology in return for acquiring just under 30% of the company's shares. At the same time MHI chose four talented technical personnel from amongst its research engineers and sent them into PhysChemix, which was an external start-up.

MHI also allowed the use of its research facilities, containing highly expensive analytical devices that would normally be beyond the reach of a start-up, and also made possible technological discussions with PhysChemix. The Technology Alliance Investment fund headhunted the expert president of Oki Electric Industry and established him as the head of PhysChemix. Expert engineers from overseas were also invited into the company through the new president's personal connections.

Thanks to this level of support from MHI, on a level equivalent to one of its subsidiaries and acknowledged as the best in Japan for this sort of pure research, the external start-up of PhysChemix has achieved growth and has used its entrepreneurship to develop to a level where it can aim at cornering a large share of the global market. As PhysChemix looks toward entering the share market in the near future, we can see that this company is a good example of a successful carve-out start-up.

##### 5) Internal start-up Carve-out – The Example of Shimizu Corporation

The founders of the internal start-up of Shimizu Corporation which utilized IT to efficiently manage data for a wide range of buildings were dissatisfied with the streamlining of property management services for only buildings constructed by Shimizu. Despite having stable incomes and happy customers, they wished to use their powerful software to manage buildings made by competing companies as well as those of Shimizu.

When they explained this to the corporation, the corporation assented to their leaving the company with the patented IT software to bring the benefits of streamlined services to the whole construction / property management industry – after all, the work of this internal start-up was a secondary area distanced from Shimizu Corporation's core businesses. In 2000 the Property Data Bank set itself up as an external venture, using the ASP business model suited to property management.

Property management covers a wide area of services, including management of building plans, maintenance, utilities and tenants, contact with the authorities, disaster prevention and tax services. Consequently expenses ran high and streamlining was required for efficiency. In addition, that particular time was one of major transformation for the securitization of real estate in the property management industry, with changes to real estate possession, management and evaluation methods, with demands for the timely and efficient management of real estate data.

Against this background, the decision to move from being an internal to an external start-up was given the approval of major companies in the industry such as Ken Corporation and Chuo Mitsui Asset Management, gaining capital from such sources along with the Shimizu Corporation. Several venture capital companies also approved and supplied capital. The major IT company Hewlett Packard Japan also invested in the company. Thus, this external start-up was gathered knowhow on IT, finance, property management and construction through their ties to major companies in these fields.

In 2004, prefectural governments nationwide all over Japan adopted the basic services of the jointly developed maintenance information system, used by 2007 in over 110,000 buildings by corporate property management departments, local administration departments, the administration departments of public corporations, repairs and utilities departments, asset managers, property managers, building management companies, public offices and local bodies.

A start-up that would have ended as used only inside a single corporation was able, by the resolute decision of the founders of the company and its parent corporation, to expand so far as to be used as part of social infrastructure nationwide, and to add its weight to the improvement of the productivity of the lagging services industry in Japan. This is an excellent example of a successful contribution to society through corporate venturing.

#### 6) Collaboration between Spin-off and Corporate Employees – The Example of Mitsui and Co.

A Japanese businessman who, while working for the Petroleum Division of Mitsui and Co, had experienced the importance to Japan of energy resources while risking his life procuring oil from the Middle East during the Iran-Iraq war, went to London after this experience to study. Interested in researching new energy sources, he earnestly investigated the state of technology for solar and wind power, and the state of global business in this field.

As a result of this he proposed setting up wind power business operations within Mitsui,

but amidst the confusion of the IT revolution and the scramble to form Internet-based business operations, none of the management executive were prepared to listen to his ideas. Importing wind turbines from overseas to sell to local governments might be all right, but the massive equipment investment required to develop in-company wind power business operations was out of the question. With the idea of helping Japan of achieving a stable contraction of resources if he started his own company, he founded the Japan Wind Development Company in 1999.

The plan was to establish his name in the first year, make a profit by importing wind turbines in the second year, own his own wind power generator, however small, in the third year, to have a large-scale power generator client in the fourth year, and from the fifth year forward to aim at being the industry leader and expanding overseas.

Initially financial institutions paid no attention to the company at all. However, impressed by his determination, venture capital investments started came in and top executives at construction companies and German wind turbine manufacturers decided to support him, allowing the company to get off the ground at last. The four founding employees were unpaid for the whole of the first year.

Support for the creation and growth of the wind power business, which requires knowledge of multiple fields such as construction, electrical engineering, funding, financial accounting, engineering and energy, came not from tie-ups with major corporations but from specialists who left such corporations to join the start-up, doing so of their own will while knowing the risks involved.

Through their help, knowledge-based support from major corporations in every field necessary for the development of the wind power business was gained, with personnel from companies such as financial corporations like the Bank of Tokyo-Mitsubishi UFJ and Sumitomo Mitsui Banking Corporation; manufacturers like the Japan Steel Works and MHI; electric companies like the Tokyo Electric Power Company and the Hokuriku Electric Power Company; energy companies such as BP and Cosmo Oil; construction companies such as Kumagai Gumi and Tobishima Corporation; engineering companies such as Toshiba Plant Systems and Services and Tokyo Electric Power Services; and commercial companies such as Mitsui and Co. and Nichimen.

In its own way, on a practical level, this can also be called a type of corporate venturing through win-win collaboration between a start-up and major corporations.

What we can see from the examples above is that start-ups, which are valuable resources for the nation, are founded by the wealth of technology and talent made available through the restructuring of corporations. This technology and talent can be

found in departments which have lost their importance or are not part of the core business of the corporation, or in patents for innovative technology that is not part of the corporation's specialty.

What is needed to nurture and utilize these technologies and resources and to allow successful examples of their full separation (carving out) from companies to spread is a change in awareness of the management of major corporations, away from the closed culture still prevailing there.

If technology is stifled within the company, the morale of engineers will suffer also. For engineers already distant from the core corporate business, freeing them from old-fashioned corporate culture is particularly needed within Japan.

#### **4. Industry-Start-ups and Academic Collaboration**

Having visited technical start-ups active in Europe, the United States and Asia over the last ten years, I have observed that highly successful technical start-ups are more numerous in regions with flexible networks featuring tie-ups between universities, research institutes, states and cities. A year later, in 1999, I learned that these networks are called clusters.

When tracing back the history of these clusters in interviews in each region, it became extremely interesting to observe whether the cluster was formed and developed because of the presence of large numbers of start-ups, or whether start-ups were able to grow and develop because of the presence of the cluster. In fact, both answers appeared to be correct.

When the cluster was being formed the former answer was correct, but when the cluster was becoming established the latter answer was true. I was intrigued further when I learnt that many of the start-ups involved were spinoffs from core local businesses that had been founded several decades ago, or from national research laboratories. My interest gradually evolved from my initial research into start-up into the role of start-ups in these clusters.

As I visited and studied material on the regional clusters that have prospered across Japan over the last ten years, my impression was that the emphasis was being placed on academic-industrial tie-ups over the development of start-ups. In other words, the stress was on collaboration between local corporations or major corporations and universities or research institutes.

Clusters in each area focused on such academic-industrial tie ups, with the 'industrial'

part being taken up by small regional companies or the local branch of a larger sized corporation. The ‘academic’ part, meanwhile, was played mostly by local university lecturers or researchers from research institutes. In urban areas academic-industrial tie-ups took the form of umbrella agreements between famous universities and well-known corporations.

This type of academic-industrial collaboration is necessary and has significance, but there are more vital types of collaboration that could be had between academia and the business world for the establishment and growth of regional clusters.

‘Industry’ does include start-ups that aim to be the future of industry, and outside of Japan the majority of academic-industrial tie-ups in developed clusters are between start-ups and academia, such tie-ups often serving as the engine of growth for beginning and established clusters. Rather than ‘academic-industrial’, the mainstream is ‘start-up-academic-industrial’ collaboration.

Innovative fundamental research from universities and research institutes takes several years to become innovative applied technology usable in commercial products. Surely only start-ups are able to involve themselves in this process, thanks to their rampant curiosity and willingness to survive on profits of only several million or tens of million yen a year.

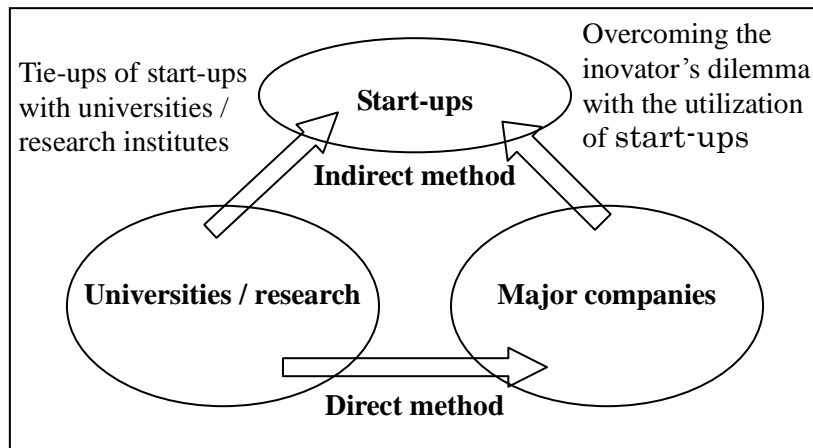
Large and medium-sized corporations, faced with the “Innovator’s Dilemma,” have little to do with small markets in low demand by their customers and unexplored fields with unstable performance. Smaller companies also can’t afford to involve themselves in such areas, unless willing to make a second start in such a field.

A certain portion of start-ups that involve themselves with technology from universities or research institutes end up failing in their business operations or in their cash management and going bankrupt. Innovations in business models and technology come about through exactly the cycle of destruction and creation, engendered by this harsh life and death conflict and drive to survive. The way in which the connectors inside clusters work to incubate and nurture such start-ups is vitally paying important.

In Japan the role of start-ups in collaborations between academia and business circles is often forgotten, which is why I use the phrase ‘industrial- start-up-academic’ tie-up (Table 2). Win-win relationships between medium and large-sized corporations and start-ups that have develop applied technology and trial products with academic technology to near-commercial level, through sales tie-ups, technology tie-ups, supplying funds or M&As are in fact realistic propositions.

Table 2 Industry-Start-up-Academic Tie-ups

**From “Industry – Academic Tie-ups” to “Industry – Start-up – Academic Tie-ups”**



The principal differences between the old concept of ‘industrial agglomeration’ and the recent concept of ‘clusters’ are (1) whether there is concentration on specific industries and whether companies are easily able to collaborate or complement each other within the cluster; (2) whether the knowledge of the universities and research institutes are being used to the full; (3) whether within the cluster there is a deep awareness of harsh competition between start-ups in addition to cooperation; (4) whether there are opportunities for regular contact between government, industry and academia; and (5) whether it is possible to see the faces of leaders willing to take a frontal role for the regional vision.

Amongst these, the point of (3) regarding the competition between start-ups could not be imagined as part of an industrial concentration, where cooperation was held in great esteem. We often hear of the need for youth, fools and outsiders to make industrial concentrations turn into clusters, and in fact start-ups possess just such a mix of recklessness to fulfill such a role.

**5. Start-up-Human Resources-Producing Corporations**

The climate for start-ups in Japan has changed greatly over the last ten years. Numerous policies relating to giving support to start-ups have been formulated, various start-up-related courses have appeared at universities, books and papers have been published on start-ups, academic-industry tie-ups have progressed, and incubation centers and angel investors have been active.

There have been great increases in the number of spinoffs from universities and major corporations, and the number of IPOs. Negative factors such as the Horiemon Incident

have occurred, but when we consider the closed situation ten years ago, it seems like a different age altogether.

However, when we look at the IMD's studies on global competitiveness and the GEM Report, Japan's entrepreneurship is still ranked near the bottom of the several dozen countries from around the world. The social position of entrepreneurs is still low, without the respect given to such people in the western countries.

Following the positive trends in the economy in recent times, most Japanese tend to orient themselves towards the safe-and-sound major corporations. If a significant portion of talented human resources do not consider start-ups as an option, Japan has a long way to go towards realizing its goal of becoming a science and technology-oriented country.

Just as Professor Christensen of Harvard has pointed out in the "Inventor's Dilemma," the overwhelming number of disruptive innovations are created by start-ups, not major corporations. Such disruptive innovations include not only ground-breaking research technology but also innovations in business models too.

It is my belief that success or failure in competition between companies over the next ten years will be decided by what extent major corporations are willing to work together with start-ups, inside and outside Japan, on an equal footing, despite their differences. Astute, cutting edge corporations such as Toyota are already doing so. This is exactly what Professor Weber means when he talks of corporate venturing.

The days when those who have spun out of large corporations can be ostracized for having done so are long gone. We are instead coming to a time when students and the younger generation will judge a company's value by the number of talented human resources spun out from it. The image of a corporation as helping to form talented human resources will be a compelling one for youth with talent of their own.

The following forward-looking announcements by the presidents of NEC and the Mitsubishi Corporation are gaining attention as heralding such a new age.

President Yorihiro Kojima of Mitsubishi Corporation: The Nikkei Shimbun Morning Edition, January 22, 2004 in "*Keizaijin*" (Economists)

"Former staff of Recruit Co. and IBM Japan are active in management at in numerous companies. We at Mitsubishi hope to become an even greater producer of human resources who challenge for start-ups."

At a golf competition recently I ran into President Kojima, and while relaxing



afterwards in the hot springs I mentioned how I used this article in my university graduate courses, leading to quite an interesting discussion.

President Koji Nishigaki of NEC: Asahi Shimbun Morning Edition, July 9, 2002;  
“Focus: an Intellectual Property-Oriented Japan”

“Japan has too many human resources tied up in major corporations. It’s too hard for individual talent to shine through when you have tens of thousands of staff in one company. I want talented human resources to be active outside the company in their own start-ups, which we will support through investment, to benefit both sides. We’re not in the age of counting how many patents we have any more.”

Executives and managers of major corporations need to be conscious of the new era business model of win-win relations between start-ups and corporations. Major corporations cannot grow without tie-ups with R&D-oriented start-ups. The time for catching up with overseas is past, and in the age of the front-runner major corporations will not find ground-breaking innovations without corporate venturing.

People with first class skills and first class positions inside major corporations need to firmly take control of the direction their companies are heading, for the sake of the growth of the Japanese economy as well as that of their corporation. Those with second class skills would not be likely to make a success outside of their corporations.

However, those who might have first class skills but who are not involved with the core technology of their company, and hence end up being neither first nor second class, are just the sort of people who ought to spin out of their company to help invigorate Japan’s industrial world. Allowing such a person with first class skills to and the determination to take risks to take their technology and carve out of the corporation will give better results for both the engineer and the corporation.

The statement of the President Shindo of Accela Technology that “Technology viewed as obsolescent inside a corporation can be improved and made more attractive by being exposed to the marketplace” is the voice of real experience.

Executives and managers of major corporations need to be conscious of the new era business model of win-win relations between start-ups and corporations. The promotion of this corporate venturing is the key to the “Innovator’s Dilemma”.

What Japan specifically needs amongst all this is collaboration between spinoff ventures and major corporations. Most Japanese corporations still view engineers who leave (spin out of) the corporation as self-centered and without loyalty to the company, and

hence ostracize such engineers. Sony, Fujitsu, NEC, Recruit Co., Mitsubishi Corporation, Ricoh and other corporations are the exceptions that actively maintain relations with talented personnel that have spun out from their companies, continuing to contact them after they have left the corporation.

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