

# New Business Incubation for Regional Innovation

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## Abstract

By moving into a business incubation (BI) facility, entrepreneur candidates can enjoy the advantage of externality that derives from social capital. It is necessary for business incubation activities in a region to have a deep relationship to the regional community. To an entrepreneur, social capital is valuable "borrowed capital"; however, during the latter half of the growth stage, it is possible for bonding-type social capital to exhibit disutility. When the functions of business incubation facilities are differentiated and industrial agglomerations possess specialized (technology) business incubation according to regional characteristics, and when regional communities incorporate "business incubation cafes" that nurture community business and boost entrepreneurship, it is possible to construct a system that will sustainably create innovation in the region.

**Key words:** Regional innovation, business incubation, JANBO/JBIA industrial agglomeration, social capital

## Introduction

### 1. Topic of this research

Currently, with regional communities truly feeling the population onus, with macroeconomic activities expected to face considerably harsh circumstances, with disparities arising between regions, and with industrial agglomeration maturing on a broad scale, the nationwide uniform prescription formulated by the national government is achieving less and less effect.

The Japan Association of New Business Incubation Organizations (hereinafter "JANBO"), which was established in 1999, achieved much success in nurturing human resources and improving regional platforms and the new start-up structure that supports them. Among its achievements was an October 2006 basic survey on business incubation, which found that facilities corresponding to business start-up support facilities existed in 323 locations nationwide, and that of those facilities 190 fit the definition of a business incubation facility. Since that time, in part due to the recent sluggishness in the real estate market, rents in urban areas have dropped, while private facilities that can be called "business incubation facilities" have increased in number.

Figure 1 Survival rate of BI tenant companies

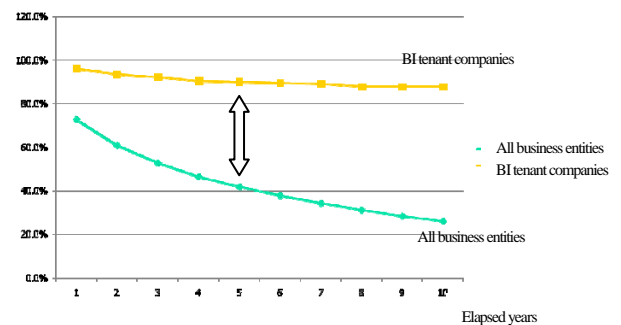


Figure 1 shows a comparison of corporate survival rates over time, calculated through cooperation between the Japan Industrial Location Center and Japan Business Incubation Association (hereinafter "JBIA"). While 40% of all business entities are still in operation five years after starting up, the survival rate of business incubator tenant companies is 90%. Compared to the data for all business entities, the data for business incubation facility tenant companies may not be considered sufficient evidence due to the limited number of business incubation facilities themselves and limited number of samples available due to historical constraints. Even so, many researchers and persons associated with industrial development will likely be instinctively convinced by the results. Also, more than anything, I am convinced that many entrepreneurs who have moved into a business incubation facility and received support will concur.

If this effect is universally established, if regional

communities set up properly functioning business incubation facilities, and if regional entrepreneurs make use of the BI facilities like a gymnastics springboard when engaging in business start-up activities and in small and medium-sized enterprise (SME) secondary start-up and innovation activities, then the regions can expect to see increases in added value and the preservation and expansion of employment.

## 2. Method used in this research

For the advanced research, the "Business Incubator Basic Survey" conducted by the Ministry of Economy, Trade and Industry will be used as basic data on the current state of business incubation facilities, advanced theories on industrial agglomerations proposed by Okamoto (2009) and others will be examined and analyzed, and essays that attempt to measure social capital will be referred to, starting with the Cabinet Office's "Social Capital: In Search of a Benevolent Cycle of Rich Human Relationships and Civil Society" (2003). Also, making use of the Social Capital Index estimation (region-based) technique used in the aforementioned Cabinet Office survey, the Social Capital Index for each region will be calculated, based on the results of a social awareness survey conducted by Hosei University, and the relationship with regional characteristics will be examined from the aspect of regional innovation.

In addition, a questionnaire survey will be conducted, targeting Japan Business Incubation Association-certified incubation managers (IMs), who are on the front lines of business start-up and secondary start-up support. The aim is to clarify, for instance, the current state of daily business incubation activities, status of regional support networks, and utility (effect) of social capital in an entrepreneur's growth stage. Based on these survey results, a proposal regarding policy implications will be attempted from, for instance, the relationship of social capital, and the mechanism and system of industrial development that makes use of a region's industrial agglomeration.

Incidentally, the entrepreneurs and SMEs that are the target of this paper's research will be business operators who will develop their business with the region as a base. The paper will exclude business operator types who aim to develop their business based on seeds of high technology at a university or research institution.

## Advanced research

### 1. Advanced research analysis

This paper considers the following questions: Why is the business survival rate, or success rate, higher for entrepreneurs that move into a business incubation facility? What is the mechanism? Can regional communities nurture entrepreneurs and their businesses to take on the challenge of regional innovation?

### 2. Summary of advanced research

When we consider the roles and expectations for business incubation facilities in regional communities and industrial agglomerations, it is clear that regions in which continuous "regional innovation" occurs are rich in diversity and self-sufficiency, that industrial agglomerations and regional communities offer externality, and that these are regions in which learning goes beyond companies and organizations.

If viewed as an extremely small regional community, a business incubation facility is a place that enables face-to-face (or better) mutual trust to be established between tenants, offers excellent accessibility and networking, and has a platform that is linked to regional industry support services, high-level financial institutions, universities, and research institutions. For these reasons, it creates an environment in which it is highly possible for a localized learning region to emerge and for innovation to occur. Also, it can coincide with Marshall's three conditions related to external economies, and can serve as the vortex of expanding regional innovation.

From experience with business incubation facility management, the author has a solid sense that a regional community should be a place that allows discussion of subjects such as the future concept for the region, formation of support groups, installation of infrastructure, and policies on human resources development. If a business incubation facility can perform its mission grounded in the regional community and beyond industrial policy, it will be possible, in Japan as well, to create a new type of regional community with the business incubation facility as a place of communication. And since it can also be a device for developing a "comprehensive relationship of trust (general trust)," which is essential for the conversion of an industrial agglomeration, it can be an engine that enables the industrial agglomeration itself, as well as individual

entrepreneurs, to survive. Companies that make up an industrial agglomeration do the following: ① Maintain a variety of resources and functions internally, and develop networks with the outside. ② Develop human resources and extend invitations to parties outside. Considering the importance of proceeding with these actions jointly and efficiently, members have little choice but to cooperate with other members. Moreover, discussion and cooperation for the future cannot be avoided. Conventional institutions and organizations do not have a powerful consensus-forming capability for sharing such awareness in the regional community, and the time that remains for survival is passing by without any prospect for consensus building. That seems to be the current situation today. On the other hand, it is necessary to position within the regional community the business incubation mechanism, which consists of the IM training system and network set aside by the "Act for Facilitating the Creation of New Business" and Regional Platform Subsidy. In the area of entrepreneurial support, too, broad catalytic power based on the region's characteristics will be tested. Both know-how and human resources cannot be accumulated overnight.

### 3. Proposal of hypothesis

By strategically maintaining business incubation facilities as the mitochondrial organizations and functions of industrial agglomerations grounded in the regional community and by managing the utility (benefit) of social capital, it becomes possible to increase trust in entrepreneurs, create a climate favorable to incubation in the region, and heighten regional innovation.

#### Analysis of survey results

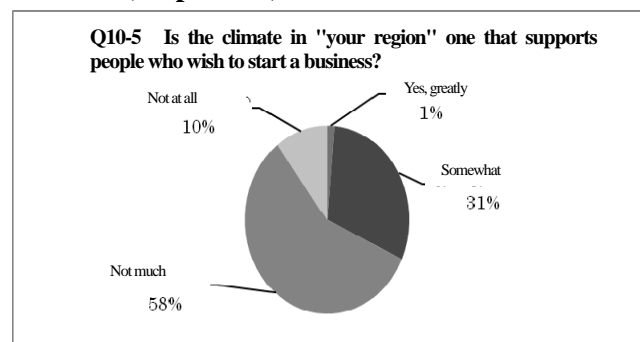
Through advanced research, it was learned that business incubation (BI), which sends entrepreneurs into the regional community, and incubation manager (IM) activities, which support BI, need to be deeply associated with the regional community.

This paper confirms the current state of the regional community with regard to regional innovation, based on items in a social awareness survey conducted by Hosei University in August 2010. Also, from the JBIA-certified IM questionnaire survey, the relationship with the regional community was examined in the area of entrepreneur support.

### 1. Regional community awareness survey

From August 6 (Friday) to August 9 (Monday), 2010, Intage Inc. sent questionnaire surveys to 13,080 individuals among its monitoring members aged 20 to 69. The survey then focused on the 4,752 individuals (sample) who provided responses. The results showed that 5% of the respondents were thinking of starting a business in the future. This data adds support to the belief that the number of people considering starting a business in Japan is low. Also, respondents were asked whether "outsiders, young people, and stupid people" (those often said to be the leaders in regional development) were accepted in their region. As a result, it was found that although there was a climate in which new "people" were accepted, their region was somewhat guarded when it came to accepting new "things." Many responded that, in general, the tendency was to accept so-called "young people, outsiders, and stupid people"; however, when respondents were asked specifically whether they would support "entrepreneurs," their responses became negative. In other words, the overall climate cannot be said to be one that supports entrepreneurs and welcomes innovation.

Figure 2 **Q10-5 Is the climate in "your region" one that supports people who wish to start a business? (Response: 1)**



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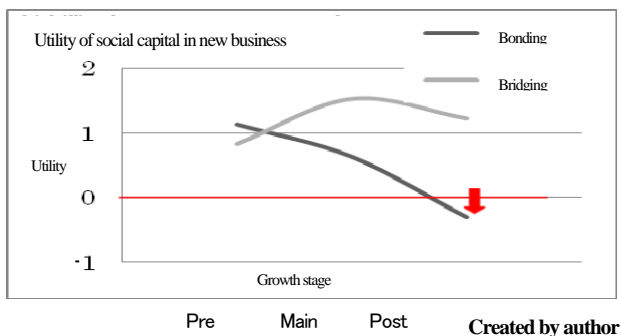
Even in large cities, only 36.2% of the responses were positive, while in smaller cities and towns the figure dipped below 30%. Although only a general conclusion, regional differences exist even by regional Bureau of Economy, Trade and Industry. A crisis awareness, pioneering spirit, aftereffects from the Lehman and Toyota shocks, and sense of structural stagnation in regional industry, for instance, reflect the mood of industrial agglomeration. The results gave an indication of the connection between the regional

economy's status and regional characteristic, for instance, and social capital.

## 2 . JBIA-certified IM questionnaire survey

From November 15 (Monday) to December 1 (Wednesday), 2010, questionnaire surveys were sent to all 176 current JBIA-certified incubation managers (IMs) regarding topics such as social capital and the content of the work of the IMs in charge at the business incubation sites. The survey then focused on the 46 individuals (sample) who provided responses. The results produced a solid sense of the great utility (benefit) that social capital provides to the success of business start-ups. Social capital can be in the form of "bonding" or "bridging." The former type aims to stabilize reciprocity and strengthen solidarity in certain groups. In contrast, bridging-type social capital is thought to be able to create a broader identity and general reciprocity.

Figure 3 Utility of social capital in new business



According to this survey, as shown in Figure 3, the utility of bonding-type social capital drops as the growth stage progresses; and during the business expansion stage, or post-growth stage, it becomes instead a disutility (adverse effect).

The utility of bridging-type social capital is less than that of the bonding type during the foundation-solidifying pre-growth stage, but as the growth stage progresses, the utility rises, helping corporate management in the early stage when trust is absent.

However, during the stage in which the business base and manager capabilities have further expanded, utility diminishes. Since the social capital onus phenomenon occurs in the post-growth stage with bonding-type social capital, supporters must ensure that matching actions are performed according to the stage.

## 3. Specific conclusions regarding survey results

The number of persons considering starting a business in the future is a small 5%, a figure similar to that found in other statistical reports. However, it was learned that, even among this small number, company officers other than top management can be considered business start-up "reserves," and students and full-time stay-at-home wives and husbands are a group that should be targeted for education in starting up a business.

In addition, implications by prefecture could not be drawn forth directly from the Social Capital Index calculated by prefecture.

Also, it was possible to obtain a general estimation of the utility of social capital through the JBIA-certified IM (incubation manager) questionnaire survey, although it was based on the guesses of the IMs at the incubation sites. Thus, the result of the survey will lead to a survey of the entrepreneurs themselves who actually receive benefit.

Summary: New business incubation positioning and workings

Though perhaps a proposition that would seem to be common sense at a glance, it became clear through this research that "a region's incubation climate is fostered by raising the general trust of the region itself." In Japan, as soon as entrepreneurs declare their intent to start up a business, they are met with opposition, chastisement, alarm, and other adverse reactions from every direction. The very act of sending a negative cold wind at would-be entrepreneurs who lack passion about starting a business can also have the effect of suppressing rashly considered start-ups. If, however, severe opposition causes people to give up the idea of starting businesses, nothing of value will be created in the regional community. Also, there is no doubt that social capital is "borrowed capital" that is appreciated by entrepreneurs because it supports business success both openly and behind the scenes. No matter how admirably entrepreneurs are able to assemble people, goods, money, and other private capital through their wisdom and efforts, if they are lacking in social capital, which exists outside the management organization, they will likely put up a brave fight without result in the short term and then suffer hardship and cease to exist in the intermediate to long term. The phrase "reverence for persons

knowledgeable of the world," which could be seen in the principles of long-standing companies, may have been something used to convey the importance of social capital to the next generation.

As "industry-creating infrastructure" designed to help entrepreneurs achieve business success, a business incubation facility supplements entrepreneurs for their troubling lack of "credibility and trust" when first starting up their businesses. This resource adds to the people, goods, money, know-how, and other management resources that the entrepreneurs themselves have acquired. When entrepreneurs move into a business incubation facility, they are able to enjoy the advantages of social capital. Then the synergetic effect produced from the advantages of that tenancy is thought to heighten their success rate. The author learned that entrepreneur candidates and SME managers striving for innovation can, by moving into a business incubation facility, enjoy the advantages of externality derived from social capital in addition to the "brush-up" benefits (utility) and effects of their own management resources.

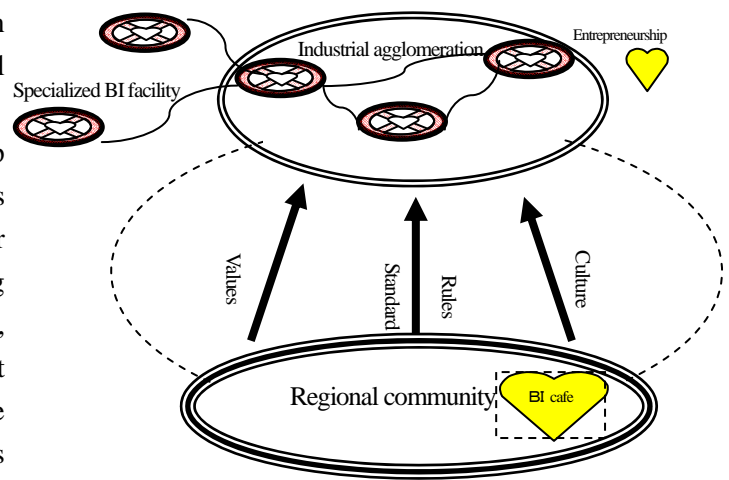
#### Policy implications

##### 1. Formation of tokamak-type industrial agglomeration

In order to create national and regional wealth, and maintain and develop prosperity, the "evolution of industrial agglomeration" asserted by Okamoto (2009) is necessary. For that reason, it is necessary to have intensive collaboration with the "regional community" over the medium to long term. For example, just as a tokamak-type fusion reactor creates self-sustaining plasma, and the fusion reaction is buoyed by a powerful magnetic field, a regional community provides implicit knowledge and, through entrepreneurship (will and action), buoys up industrial agglomeration and creates a continuous industrial fusion reaction, in other words, innovation.

Entrepreneurship encourages members of the regional community to cooperate in a spirit of self-sufficiency and independence. A community development policy must be developed that revives an awareness in citizens to truly be owners of their region.

Figure 4 Tokamak-type industrial agglomeration



Okamoto (2009): modified by author

As shown in Figure 4, a new industrial agglomeration will be regenerated as a tokamak-type innovation reactor, buoyed by a strong magnetic field consisting of values, standards, rules, and culture.

##### 2. Establishment of social capital measurement system

In this paper the "social capital onus" phenomenon was confirmed; however, to the degree that social capital has a major effect, it is risky to utilize it without knowing the content. The only way to measure it is to repeatedly analyze and verify through a social survey technique. In order to talk about individual regional communities, however, it is necessary to obtain a certain number of samples. It is necessary for the Cabinet Office and relevant government ministries to present standardized questions and to support survey methodologies and implementation that are inclusive to the regional community level.

##### 3. Development of business incubation cafes in regional communities

It is also necessary for the regional community to have a place that fosters entrepreneurship. A "business incubation cafe" is charged with such a function. If possible, a "business incubation cafe" should have a specific hub and should be a "salon" where people and knowledge actively interact. In other words, it is a "public hall" that is a government-financed, privately managed facility where people can casually gather, and is a regional platform that posts social capital rich IMs and generates social entrepreneurship.

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## Conclusion

Entrepreneurs take the benefits of social capital if they would use the Business Incubator(business incubation).

The system of a sustainable regional innovation is structured by the distinctive business incubation built depending on the specialty of the industrial Agglomeration and “business incubation-Café” that makes the entrepreneurship increase and fosters community business in the regional community.