

Advisory Panel for Global Financial City Tokyo

Toward the Creation of a FinTech Ecosystem (Tokyo version FinTech Center)

Japan Venture Capital Association Soichi Kariyazono, Chairman

1. Overview



- 1. Importance of Clustering in the Innovation space
 - There is no doubt that creating an ecosystem and promoting clustering are crucial elements for industries to accelerate innovation. Silicon Valley and Shibuya's Bit Valley in Tokyo are two prime examples.
 - In more recent studies, clustering density has been increasing from regional level to zoning and building levels. For FinTech, while clustering has taken place in cities like New York and Dublin, clustering by concentrator such as London's Level 39 and Boston's CIC is also drawing attention.

2. FinTech in Tokyo

- Investments in FinTech are skyrocketing in Japan. Not only financial institutions and VCs but also
 corporates are increasingly interested in it. In addition to special zones, establishing national sandboxes is
 also being discussed by the government and related authorities. In global comparison, however, a gap
 remains.
- Tokyo has seen a budding ecosystem such as FINOLAB, FINOVATORS and FinTech Association Japan, and major financial institutions are conducting their independent research and development activities. However, clustering of FinTech firms is yet under progress.
- Concept of Tokyo version FinTech Center
 - Tokyo should also advance clustering of the ecosystem. To develop cluster, cooperation with players that promote collaborations such as accelerators and concentrators which work as hubs is important.
 - Japan's FinTech has the potential to grow significantly by collaborating not only with the finance industry but also with other industries. It is necessary to build an ecosystem that incorporates new technologies such as AI and IoT, and coordinates across healthcare, manufacturing and other industries.

2. Importance of "Clustering"



"Clustering" is Key to Promote "Innovation"

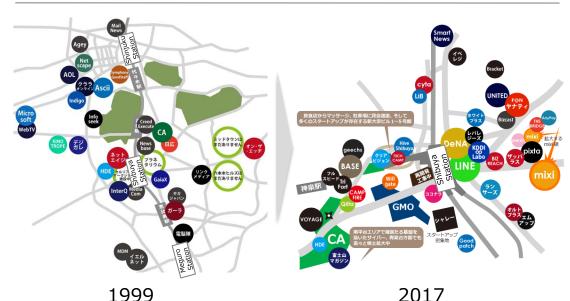
- Collaboration takes place more frequently through physical proximity (clustering effect)
- Silicon Valley is a good example of the clustering effect for innovation. In Tokyo, the Internet industry's ecosystem has developed in Shibuya over the last 20 years
- More recently, clustering cases are prevalent in various cities around the world (e.g., London, New York, Boston and Dublin).

Correlation between Distance and Collaboration

オフィスの位置 コラボレーションの割合

Office Location		% Collaborating
同じ通路	Same corridor	10.3%
同じフロア	Same floor	1.9%
違うフロア	Different floor	0.3%
違う建物	Different buildir	ng 0.4%

Increasing Clustering of IT Firms in the Shibuya Station Area



Source: Kraut and Egido, Bell Communications Research, and Galegher, University of Arizona, 1988.

Source: Blog http://takanoridayo.blog.shinobi.jp/Entry/500/

2-1. Example for Clustering: London Level 39



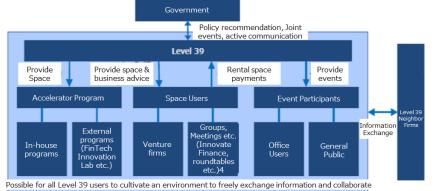
Location: Canary Wharf, London, UK (London South, Eastern area)

Operator: Canary Wharf Limited (Real estate developer)

- Europe's largest technology-related accelerator. Over 100 companies are members and have offices.
- In addition to in-house programs, there is Accenture's FinTech Innovation Lab. There are opportunities for networking among participating firms' business partners, clients and investors, and it serves as hub for firms interested in FinTech to house in the vicinity of the Level 39 and exchange information including information related to FinTech.
- Innovate Finance (industry organization) actively provides
 information to the government and builds close ties with the FCA. It
 also works to realize policies related to tax systems on financing and
 additional government funding and others.
- Regulatory Sandbox executed as part of FCA's regulatory reform activities. Reduces time and cost for FinTech firms commencing services.







Source: METI(Ministry of Economy, Trade and Industry) "2015 Industrial Economic Research Commissioned Project – Research Study on the Impact of Finance and IT Integration (FinTech) to the Finance Industry"

Located in Canary Wharf, where finance and IT industries cluster. Easy access to investors and professionals, good facilities and venture friendly environment. Actively provides venture firms, mentoring support and networking with clients and investors.

2-2. Example for Clustering: Boston CIC

(Cambridge Innovation Center)

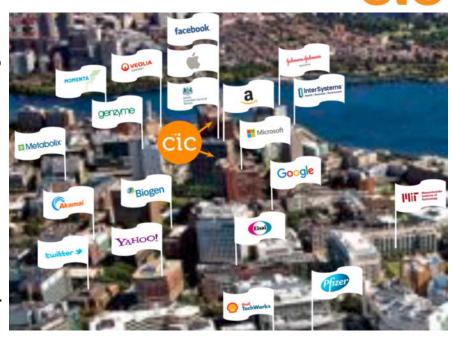


Location: Cambridge, Massachusetts, USA

Massachusetts Institute of Technology (MIT) vicinity

Operator: CIC (since 1999)

- "Concentrator" model: A cluster of over 850 companies related to innovation, including 500 venture firms, satellite offices of leading firms (e.g. Facebook, Apple, Amazon, etc.), venture capital firms, accelerators (CIC does not make investments).
- Venture Café, a sister non profit body, holds exchange events and workshops at District Hall etc. almost daily.
- The HQ is the East Coast's largest cluster. Similar models are being expanded to St. Louis, Miami, and Rotterdam (the Netherlands), becoming the largest innovation cluster in each city.
- Planning Tokyo entry (c. 2019). Also, considering expansion to other European countries.



Huge cluster located in the city center with good access. Emphasizes innovation through clusters and exchanges among venture firms, universities, leading firms, venture capital firms and governmental bodies. CIC focuses on developing the community by holding events frequently and providing staff with the variety of support instead of making investments itself. Planning Tokyo entry.

2-3. Example for Clustering: New York City, New York



New York City (Financial Services Revitalization Plan, 2009)

In order to promote FinTech, it supports financial services sector and innovation by measures such as (1) supporting entrepreneurs' networking, (2) establishing incubator, (3) providing financial support up to a maximum of US\$10 million, (4) establishing Jump Start NYC to promote start ups by those laid off from financial institutions and (5) establishing Fast Track that facilitates employment of people laid off from financial institutions by venture firms. In 2014, the number of people working in FinTech reached 43,000 people, (1) and the number of FinTech firms reached 5,000. (2)

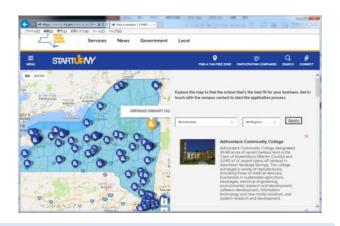
New York State START-UP NY (since 2014)

Commenced to create new employment within the state. When companies are established within designated areas by New York State, such as incubation facilities of state-approved educational institutions (81), taxes related to operations such as state tax, regional tax, corporate tax and sales tax are exempted for 10 years.

- (1) Bloomberg "LONDON: DIGITAL CITY ON THE RISE" P9
- (2) NYCEDC "INDUSTRY TRENDS&INSIGHTS FINTECH IN NEW YORK CITY DECEMBER 2015" P1

FinTech Focus Ecosystem Players

-Hub/Concentrator	10+
-Events/Conference	20+
-Media	10+
-VC	20+
-CVC	10+
-Angel (50+investments)	10+



Rich support extended to venture firms in terms of human resources, funding and facilities. Since New York is abundant with wide networking opportunities crucial for accelerating business growth, the number of business established has been increasing. This leads to investments by venture capital firms and corporations.

2-4. Example for Clustering: Dublin "Silicon Docks"



Location: Docklands Region, Dublin, Ireland

- Started as program to attract global firms by IDA Ireland, the Ireland's Industrial Development Authority. (Attracting financial firms since 1989 and IT firms since 2000)
- Includes many financial supporters such as NDRC, Europe's largest incubator, and Enterprise Ireland (Irish state economic development agency), Europe's third largest seed early investor as well as global accelerators (e.g. Accenture, Mastercard, Google etc.).
- Enterprise Ireland invests in about 70 HPSU (High Potential Start-Up)
 companies annually. Currently has more than 1,300 investee companies.
 Also supporting investees' expansion abroad through Enterprise Ireland's overseas offices.
- As for collaboration between industries and academia, Knowledge
 Transfer Ireland that supports commercialization of IP held by five
 national universities, and Innovation Voucher system that allows venture
 and small to medium sized firms to make research requests to
 universities and research institutes exist.

"If I visit 4 pubs in the neighborhood,
I can always meet someone in the
industry" Local Dublin VC

"Results of sales support of our client venture firms are directly linked to our evaluation"

Enterprise Ireland, Japan Representative, Chief Commercial Attache



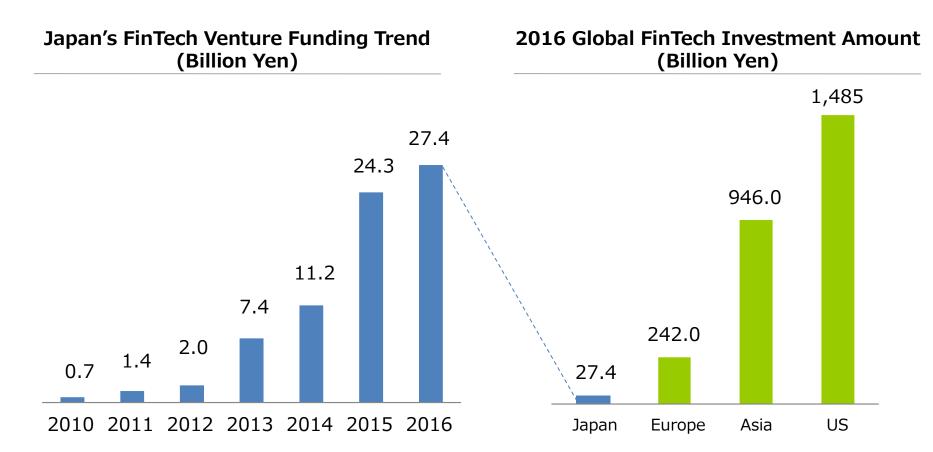
Source: Enterprise Ireland

Supports "HPSU (High Potential Start-Up) companies" intensively. Supporting organizations to make appraisal system based on their objectives, and increasing its effectiveness. Existence of places like pub where people can easily get together contributes to vitalizing ecosystem.

3-1. Japan's FinTech: Amount Invested



Domestic FinTech venture funding grew to 27.4 Billion Yen in 2016. When compared globally, however, it is still less than 1/50 of that of the U.S.



Source : Japan Venture Research Report No. R0048 "2016 Year End Venture Firm Funding" Source: KPMG "The Pulse of FinTech 4Q 2016" FX Rate USD= Yen 110

3-2. Japan's FinTech: Current Ecosystem



In Japan, industry associations have been established and places for clustering are being created.

Moreover, conditions such as government's cross-organizational efforts and regulatory reforms to create ecosystem are being developed.

Japan's FinTech Related Associations



Fintech Association Japan Members: 78 venture firms, 154 corporates (as of early May 2017)



FINOVATORS

Pro bono organizations participated by FinTech professionals



FINOLAB

Incubation facility located in Otemachi dedicated to FinTech incubation. Collaboratively operated by Mitsubishi Estate Co., Ltd., Dentsu Inc. and Information Services International-Dentsu, Ltd.,



Innovation Lab by MUFG

Open innovation facility established in Otemachi by MUFG.



N-Village

A new company established by Nomura Securities to conduct new business development and make business investments.

Source : respective websites

Active Government Support

Venture support led by the Cabinet Secretariat and cross gov't organizational efforts

"Venture Challenge 2020"



「Nationwide Sandbox」 to Be Established1. Sandbox for regulation

Regulators Cannot reform unless necessary data for reforms are proven. Firms seeking to create through innovation Cannot test due to existing regulations and cannot acquire necessary data for reforms

Establish a framework to allow "trials" assuming consent from participants after explaining contents and risk while limiting participants and applicable period

Upon carrying out these efforts, establish unified organization that can effectively coordinate among related governmental bodies, and strongly promote cross-governmentally the growth strategy through innovation.

Sources:

Top Section, Cabinet Office, Government of Japan Bottom Section, Headquarters for Japan's Economic Revitalization, Future Investment Strategy 2017 Overview Materials

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3-3. FinTech in Japan: Degree of Clustering



Financial Institutions

Large

In contrast with financial institutions aggregated into Otemachi, governmental agencies in Kasumigaseki, and IT firms in Shibuya, FinTech ventures have been scattered around widely in the eastern and western parts of Tokyo. Toward the creation of an ecosystem in Tokyo, the strategic selection of location and promotion of clustering are crucial.

Map of FinTech related firms and associations



4-1. Suggestions for FinTech Center concept - Hardware • Space -



Besides the strategic selection of the location and developing a physical "space" for people to cluster, providing incentives to support clustering is also critical.

The strategic selection of a location

=> Select a location where venture firms, universities and research institutes with the state-of-the-art technology, governmental agencies, large firms could easily cluster Example: Silicon Docks, Dublin

Large Scale Offices Capable of Housing Fast Growing Firms

⇒ Build large scale office with flexibility in design so that it can cope with sudden changes in numbers of employee of the residing startups. Example: CIC (Cambridge, Rotterdam)

Incentives to Promote Clustering

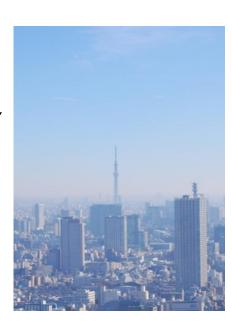
⇒ Promote clustering by providing tax incentives to tenants of selected facilities Example: Preferred taxes at selected facilities in START-UP NY

Community Space for Large Scale Event

⇒ Provide large scale event space where any firms and people can use freely Example: CIC's District Hall

"Communication space" to Promote Frequent Exchanges

=> Vibrant city with full of charm can attract people to gather and excurse. Example: Dublin



4-2. Suggestions for FinTech Center concept - Software · People -

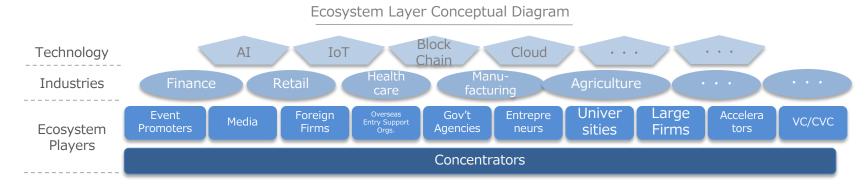


Creating an open community to accelerate integrations linking both industries and technologies, and a scheme to promote interactions are critical.

- Clustering Across Industries and Technology
- =>Toward the creation of business innovation, create cluster that allows integration across industries and technologies

Example: Level 39, London and others, concentrators define various areas to focus

- Community and Manager Functions
- =>Customer support that promotes exchanges among various players, and frequent workshops and community events
 Example : CIC, Venture Café (NPO established to create communities), Boston
- Content Production and Media Communication
- => Communication and dissemination of ecosystem information, both domestic and abroad Example: Specialized media groups in New York



5. Creating a FinTech Center: Tokyo Version



In Tokyo, FinTech ecosystem is emerging centering on the private sector. As this momentum advances, expectations for Tokyo version FinTech Center are increasing.

Referring to leading cases in other cities, the selection of the strategic location and the design of hardware that facilitates major stakeholders to gather are crucial to establish a center. Using concentrators and accelerators to promote communication and exchanges among people is another shared feature.

Moreover, given Tokyo and Japan's characteristics, the key is to develop an ecosystem that is not limited to finance and IT industries. It is important to make an ecosystem where innovative services are created through collaboration with new technologies such as AI and IoT and diverse industries including healthcare, manufacturing and others.

To develop more venture firms in Japan that become successful globally, effective communication that enhances the presence of Tokyo/Japan globally is important. The Tokyo Olympics/ Paralympic Games in 2020 is an excellent opportunity to attract interest from around the world.

JVCA would also like to promote "Innovation City Tokyo" by attracting "Global Venture Capital Congress (GVCC)", a biennial conference hosted by each country's international venture capital association, to Tokyo for 2020.

Japan Venture Capital Association

〒107-6003

Ark Mori Bldg. 3F, 1-12-32 Akasaka, Minato-ku,

Tokyo, 107-6003 Japan

■TEL: 03-5114-6667 ■FAX: 03-5114-6668

■ E-mail: jimukyoku@jvca.jp

■ URL: http://www.jvca.jp

