

# INCAS

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### The evolution of the ICT start-up eco-system in Japan: from corporate logic to venture logic?

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INCAS

Understanding institutional change in Asia: a comparative perspective with Europe

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## ABOUT THE INCAS PROJECT

INCAS is a Marie Skłodowska-Curie Actions R.I.S.E funded project under the European Commission's H2020 Programme.

The project INCAS aims at creating a top-level research and advanced training network on institutional change in Asia, in comparative perspective with Europe.

The coordinator, Ecole des Hautes Etudes en Sciences Sociales (France), promotes this network together with Oxford University (UK), Freie Universität Berlin (Germany), and in collaboration with Waseda University (Japan). The aim of the proposed mobility scheme is to give birth to a European consortium and network of faculties and advanced graduate students specialized in the comparative analysis of institutional change in Asia and Europe. The partners have chosen Japan as a reference point because of its comparability with Europe as shown by previous studies, its historical influence on development and further institutional changes in Asia, and the expertise accumulated within our research team.

Analyzing current economic dynamics in Japan and later expanding this analysis to other Asian countries promises to generate insights that might be help to better understand challenges for Europe and to prepare relevant policy proposals. Our purpose is to compare the results obtained in the case of Japan and few other Asian countries (South Korea, Taiwan, China, and possibly Thailand, after having checked the data availability), not only to previous results on Europe but also to original results we will get on European countries (primarily France – which will be our reference country in Europe – and then the UK, Germany, and Italy) in mobilizing new historical data and applying our theoretical framework.

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## Abstract

This paper uses the notion of institutional logics to advance our understanding of institutional change in the ICT start-up eco-system in Japan. We chose to study ICT start-ups because the rates of entry, growth, and exit are faster in this sector than in others, making it easier to observe institutional change. Our study, based on data from interviews, closed master classes and document analysis, is presented in three steps. First, we describe the two logics that coexist in the ICT start-up eco-system, namely Corporate Logic and Venture Logic, and practices under each logic in three arenas, namely the capital market, the labor market, and social networks. Second, we identify several factors that enabled the emergence of Venture Logic during the period since the mid-1990s. Third, looking into the future, we discuss the reasons why we predict that the two logics are likely to co-exist in this field, resulting in organizational heterogeneity.

# Introduction

The Japanese economy and business have changed over the past several decades, and these changes are captured differently by economists, political scientists, and management scholars. Among the latter, organization theorists employing institutional theory potentially have a lot to contribute. This chapter aims to further our understanding of the evolution of the Japanese business system by applying the notion of institutional logics to the ICT start-up ecosystem in Japan. The ICT start-up eco-system is an ideal setting to study incremental institutional change, as it is one of the fastest growing sectors in the Japanese economy with high rates of entry and exit, facilitating the observation of the emergence of new logics and practices. We aim to shed light on institutional change in the Japanese business system by studying how a new institutional logic emerged over a period of three decades, and by identifying the reasons why two logics, old and new, coexist in a field.

There are a large number of studies that analyze the shifting landscape of Japanese management at the sectoral or national levels (e.g., Ahmadjian & Robbins, 2005, Aoki, Jackson, & Miyajima, 2007, Yamamura & Streeck, 2003). However, many fail to explain why an individual or firm-level change leads, or fails to lead, to field-level changes in practices. The underlying reasons can be studied only if we pay attention to the emergence and maintenance of institutional logics shared among the actors in the field. We therefore analyze firm- and individual-level practices to identify the mechanism under which new practices and logics gradually emerge in a field of the ICT start-up eco-system. We study the adoption of institutional logics and practices of business incubation in three arenas: capital markets, labor markets, and social networks.

Through the analysis of qualitative data concerning the period between the mid-1990s and the 2010s, we identify two logics that coexist in the ICT start-up eco-system in Japan today, namely Venture Logic and Corporate Logic. Our analysis also reveals eight enablers of the emergence of Venture Logic. We argue that Venture Logic spread from one arena to another, and continues to be adopted by a new generation of actors, especially those who are in the center of the eco-system. While Venture Logic is likely to diffuse further, strong pressure continues to exist for start-ups to shift from Venture Logic to Corporate Logic as they grow in size in terms of capitalization and workforce. Because Corporate Logic is at the heart of the established Japanese business system, actors in the start-up eco-system are subjected to a combination of Corporate Logic and Venture Logic. Consequently, heterogeneity in organizational practices persists because (a) the eco-system contains start-ups at varying stages of growth, (b) it is structured with a core and a periphery, and (c) the start-up eco-system exists within the broader national institutional structure, and continues to be permeable in resource flows with respect to the large-firm sector in the economy.

## 1. Literature review

The concept of “institutional logics” emerged in organization studies to further our understanding of institutions and institutional change. This section reviews the concept and evaluates in what ways it helps us to develop an agency-based theory of institutional change by linking the macro (field) and the micro (actor) levels of analysis.

### 1.1 The concept of institutional logic

An institutional logic is the set of assumptions, values and beliefs by which individuals and organizations provide meaning to their activity (Thornton, Ocasio, & Lounsbury, 2012). An institutional field in which a logic applies is identified by the extent to which such assumptions, values and beliefs are shared by members in the field. Empirical contexts to which the concept of institutional logic has been applied are broad, spanning non-profit and profit sectors, ranging from publishing, retailing, banking, professional services (in architecture, accounting, law), venture capital, and HIV/AIDS advocacy (Greenwood & Suddaby, 2006, Maguire, Hardy, & Lawrence, 2004, Pahnke, Katila, & Eisenhardt, 2015, Thornton, Jones, & Kury, 2005). In these contexts, institutional logics are located in the institutional orders of family, religion, state, market, profession, and corporation (Friedland & Alford, 1991).

An institutional logic is normally broken down into categories that become the subject of empirical investigation. These categories concern sources of legitimacy, authority, and identity, and the basis for norms, attention, and strategy (Thornton, Ocasio, & Lounsbury, 2012). For example, in a corporate institutional order, the source of legitimacy is the market position of the firm; authority derives from top management; and identity is linked to bureaucratic roles. Norms are based on membership as employee in the corporation; attention is ordered according to status in the corporate hierarchy; and strategy is based on corporate growth and survival.

A key advantage of deploying the concept of institutional logic is that it enables researchers to link the mindset

of the actor to his action or behavior. Prior to the development of the notion of institutional logics, neo-institutional theory had underplayed individual agency by emphasizing isomorphic pressures, be they normative, coercive, or mimetic, on actors within an organizational field (DiMaggio & Powell, 1983). The institutional logic perspective is an attempt to remedy the lack of an explanation of agency in neo-institutional theory whilst not overly endowing individuals with power. Thus, the institutional logics perspective provides a promising pathway to developing a viable theory of institutional change if we can clarify in what ways agency and structure are loosely coupled, by linking multiple levels of analysis.

## 1.2 Institutional change via institutional strategy

Scholars from different traditions have characterized institutional change in a variety of ways. At one extreme, economists and social scientists in a positivist tradition view the evolution of institutions in terms of long periods of stability punctuated by relatively brief periods of change triggered by exogenous shocks or heroic action (Zietsma & Lawrence, 2010). At the other extreme, political scientists and other social scientists in a more interpretivist tradition are mindful of what appears to be stability that constitutes a compromise among actors with conflicting interests. For these scholars, institutions are socially constructed, subject to different interpretations as to their legitimacy. This leads to conceptualizing institutional change as more incremental, involving the gradual layering of new institutions onto pre-existing institutions, and the repurposing of existing institutions (Streeck & Thelen, 2005).

This latter perspective points to a less deterministic view of how institutions influence actors who might be business firms, managers, or entrepreneurs. Moreover, this approach enables us to examine how actors influence institutions, while being embedded in field-level institutional logics. Such enquiry, however, must address what Seo and Creed called “*the paradox of embedded agency*” (Myeong-Gu & Creed, 2002). The paradox lies in the fact that agents of institutional change within a field are also deeply embedded in the institutions, undermining their capacity and incentive to bring about change. This paradox is therefore riddled with puzzling questions which are not yet fully answered (Battilana & D’Aunno, 2009). We discuss some of these questions below.

How and why would actors shaped by (i.e. embedded within) an institutional structure become able to promote change in those structures? One answer is exogenous shocks. The micro-equivalent of the macro-punctuated equilibrium with external shocks is jolts (Oliver, 1992). Jolts may take the form of social upheaval, technological disruptions, or regulatory change. By contrast, endogenous sources of institutional change are trickier to analyse, and are explored via the notion of “institutional entrepreneurship” (Hardy & Maguire, 2008). These entrepreneurs are “*organized actors who envision new institutions as a means of advancing interests they value highly*” yet that are suppressed by extant logics (DiMaggio, 1988). Institutional entrepreneurs attempt to dislodge existing practices, introduce new ones, and ensure that they are widely adopted and become taken-for-granted by other actors in the field. They create new organizations or effect a change within their organizations by switching categories from one institutional order to another based on prior knowledge. Institutional change is deemed to have taken place when field-level norms and conduct change as a result of a shift in dominant logic from one to another (Prahalad & Bettis, 1986).

Thus, we know what institutional entrepreneurs do, but know less about from where they might hail. A resolution to this issue is partially addressed by analyzing their motivation and incentives to bring about institutional change from within the field. In particular, do institutional entrepreneurs arise from the least embedded periphery in the field, or can they also emerge from the dominant center of the field? Institutional entrepreneurs might come from the core of an institutional field because they have more power to influence, but they also have less incentive to change and would rather maintain the status quo. Or else, institutional entrepreneurs may come from the periphery of a field because they are less embedded, but they have less power to bring about change. Whether institutional entrepreneurs are more likely to come from the periphery or the core of a field is often resolved by a case-by-case examination of strategies that actors pursue, and the field-level conditions that prevail. In particular, once individual institutional entrepreneurs effect a change in their organizations, they are more likely to be able to diffuse the change to the rest of the field if the field is still emergent and not well established (MacGuire, Hardy, & Lawrence, 2004), or if it is in crisis (Hardy & Maguire, 2008).

Ultimately, institutional entrepreneurs are found to have strategies to bring about institutional change, by giving regard to three things (Hardy & Maguire, 2008). First, they mobilize and recombine resources (including materials, symbols, and people) in novel ways. Second, they are able to articulate, sponsor, and defend new practices in such a way that they become legitimate or desirable. Third, they are able to forge new inter-actor relations so as to bring about collective action. These strategies ensure that institutional entrepreneurship does not stop at individual actions, sometimes heroic and exceptional. It also incorporates subsequent forms of “*institutional work*” undertaken to ensure subsequent diffusion and reproduction (Lawrence, Leca, & Zilber, 2013). In other words, organization theorists, by combining “old” and “new” institutionalism, have examined what Lawrence called “*institutional strategy*” (Lawrence,

1999), i.e. patterns of organizational action concerned with managing the institutional structure in which actors operate. Actors formulate and implement institutional strategies to create, transform, or dismantle institutions, by influencing the rules and standards that prevail within a field.

To summarize, the institutional logics perspective provides a tool to study institutional change. It enables the analysis, not only of how institutional change has led to changes in organizational practices, but also of strategic responses of actors to shape the interpretation of institutions. It enables researchers to focus their attention on the impact of institutional logics on action and practices, without being over-deterministic about institutions as constraints nor about agency driven by power. When agents face alternative institutional logics, they can exploit ambiguity in institutions, subject to different interpretation and legitimization effort, so that their responses vary. In other words, agency leading to diverse responses is possible even in the presence of isomorphic pressures within a field (DiMaggio & Powell, 1983). In particular, different reactions to the same external pressure can be analyzed in terms of specific actors' endorsement or abandonment of an institutional logic, using symbols and rituals to legitimize such acts.

We now apply this line of thinking to analyze and interpret data from the ICT start-up eco-system in Japan. By doing so, we are also able to explore the under-studied points of intersection between institutional theory and entrepreneurship research (Phillips & Tracey, 2007, Tolbert, David, & Sine, 2011).

## 2. Research Method

### 2.1 Research context

We investigate how old and new logics and practices came to characterize the Japanese ICT start-up eco-system during the period spanning over three decades. The study identifies three phases of development: the first phase prior to 1999; the second phase starting from the opening of new stock exchanges to the Livedoor incident in 2006; and the third phase initiated by the subprime mortgage crisis in 2008. Figure 1 presents the key statistics during each phase.

<FIGURE 1 HERE>

The first phase started from the early 1980s when the criteria for over-the-counter-stock registration and listing on the second section of the Tokyo Stock Exchange changed. The development of ICT industries engendered the first generation of ICT start-ups. Successful venture companies include, but not limited to, Softbank, Just System, Square, and Dial Q network. Further, the emergence of the Internet in the mid-1990s produced the next generation of start-ups such as Rakuten, Cyber Agent, IJJ, InterQ, On the Edge, Digital Garage, Kinotrope, Hikari tsushin, Cybozu, Netyear, Cybird, Netage, and others.

The second phase was initiated in the late 1990s by the reform of venture financing laws (e.g. enabling limited liability partnerships for venture capital), and the creation of new stock exchanges, in particular MOTHERS at Tokyo Stock Exchange and Nasdaq Japan. Despite the bursting of the dot-com bubble in early 2000, these changes contributed to a gradual acceleration in the growth of the ICT start-up eco-system, as evidenced by growth in the number of IPOs and venture capital investment (see Figure 1) until the Livedoor shock<sup>1</sup> in 2006. During this phase, companies such as DeNA, GREE, and Kakaku.com found a space in the mobile business and expanded rapidly.

Although the Livedoor incident and the 2008 financial crisis led to stagnant venture activities for a while, the third phase ushered in a new generation of start-ups, such as Mercari, Gunosy, Crowdworks, and others. By the early 2010s, the ICT start-up eco-system benefited from a healthy pipeline of entrepreneurs, venture capitalists, and angel financiers, leading to the emergence of a new logic of action shared among the actors in the eco-system.

### 2.2 Research method and data

To capture the practice-level changes in the field, we adapted a grounded, interpretive approach. We investigated highly contextualized processes of business incubation by start-up entrepreneurs and other actors who nurtured business incubation. We did not impose any particular framework beforehand, and collected data concerning the ways in which individuals conducted business incubation, in order to capture the field-level characteristics of the enactment of particular logic(s).

<sup>1</sup> In 2006, the founder of Livedoor, Takafumi Horie, as well as associated stakeholders, were charged with violations of the securities and exchange law. This incident damaged the reputation of TSE Mothers and contributed to a long-term slump in stock prices.

We relied on different types of data from diverse sources.

(a) Interviews are the main source of information. We conducted 29 semi-structured interviews in Tokyo during 2014-16, each lasting at least an hour, and all were audio recorded and transcribed. Interviewees included entrepreneurs and professionals such as lawyers, accountants, and venture capitalists.

(b) Another data source is closed master classes, which were hosted by a conference organizer, each lasting around 75 minutes. These sessions, 15 in total (3 of which were chaired by one of the authors) were held in a closed, off-the-record setting. Typically, two to three experienced entrepreneurs and other actors (38 informants in total) discussed specific topics related to business incubation such as financing, hiring, alliance, and their attitude toward business, in front of around 15-30 younger entrepreneurs. The sessions, video-recorded and transcribed, supplemented our understanding of the shared practices and logics among actors.

(c) In addition, participation in 54 informal gatherings and start-up conferences and 23 visits to incubation facilities and start-up companies helped us to understand the phenomenon, resulting in field observation memos.

(d) Last but not least, we accessed media coverage, books and industry journal articles.

All the documents, including interview and master class transcripts, were organized in MAXQDA12 database for analysis. In total, 67 informants, recruited by purposive or snowball means, provided their insight on business incubation spanning different phases in the evolution of the ICT start-up eco-system (see the bottom of Figure 1).

We followed the procedures and principles of grounded theory approach (Corbin & Strauss, 1990). The analysis adopted the process of abductive theorizing (Mantere & Ketokivi, 2013) in which we obtained inductive insights from empirical data, and then gradually developed a higher level of abstraction. We coded and categorized the empirical data in order to develop a theory, by following a process that Gioia, Corley, and Hamilton call “*the methodology that enhance grounded theory development*” (Gioia, Corley, & Hamilton, 2013). We used the practice lens of the institutional logic literature (Feldman & Orlikowski, 2011), and developed new theoretical insights in an iterative process of theory generation (Eisenhardt, 1989, Yin, 2006).

As a result, we identified two different logics in the ICT start-up eco-system in Japan, which we labeled Corporate Logic and Venture Logic. Note that these logics were identified inductively through the observation of the Japanese ICT start-up eco-system alone, not by contrasting the Japanese eco-system with other (e.g. Silicon Valley) eco-systems. Different logics revealed themselves when actors enact the logic in practice to reveal their thinking about strategy, power, and growth. Further, we sought, in our analysis, to identify the enablers of change that triggered the emergence of Venture Logic, and the factors that account for the persistent co-existence of the two logics in the field.

## 3. Findings

### 3.1 The two logics: corporate and venture

#### The two logics in a field

Table 1 summarizes the contrast between the two logics. In the Japanese ICT start-up eco-system, there are a variety of actors who follow different logics, with Venture Logic and Corporate Logic as two competing logics that co-exist in the field. In the past, Corporate Logic inherited from the traditional ways in which Japanese businesses managed their growth, dominated the start-up eco-system. More recently, a new generation of actors came to uphold a new logic, Venture Logic. We describe each logic, by contrasting the two logics as applied to three areas, namely how actors think about strategy, power, and growth.

<TABLE 1 HERE>

Corporate Logic has been dominant in the large firm sector in Japan, and is also found in the Japanese ICT start-up eco-system. Financial-institutions backed venture capitalists, professionals from large companies, and entrepreneurs who are distant from the center of the eco-system, tend to lean toward Corporate Logic. By contrast, Venture Logic is a more recent emergent logic typically upheld by a new generation of entrepreneurs, independent venture capitalists, and angels with previous “exit” experience. In the 2010s, the ICT start-up eco-system in Japan is structured with

two separable communities, one upholding Venture Logic and another embedded in Corporate Logic, with neither community having an incentive to persuade the other to follow their pattern of conduct in the eco-system. Instead, the two logics coexist with little interaction between the two communities, as evidenced by relative absence of information sharing. Those who enact practices under Venture Logic regard the actors under Corporate Logic to be in a separate community, and vice versa. Neither group expects the other to change the logic and the practice to join them. However, some actors occasionally shift from one logic to another logic, due to changing circumstances.

### **The basis of strategy**

Under Corporate Logic, actors prioritize sustainability, and do not necessary drive for rapid growth as the basis of their strategy. Successful entrepreneurs under Corporate Logic generally demonstrate stable growth, even the most successful ones, due primary to their reliance on the entrepreneurs' personal savings for seed funding and on cash flow and loans for growth. They tend to avoid excessive investment, pay attention to profitability, and control the pace of financing and hiring to minimize the risk of bankruptcy. They take extra care to retain existing business contacts, and are often hesitant to move beyond the area where they have confidence. One ex-entrepreneur stated:

*“The CEO has the responsibility for the livelihood of employees, business partners, and customers. Growth is important, but that must be the result of good business”.*

The actors under Venture Logic, in contrast, have a strong appetite for growth. Entrepreneurs obtain funding from venture capitalists to realize promising business ideas, constantly seek additional capital and labor, and sacrifice positive cash flow and stability for the sake of growth. Successful entrepreneurs often obtain funding without demonstrating their ability to generate cash surplus, by leveraging the funders who appreciate growth more than stability. They actively recruit talented executives and junior staff, with incentive packages that are linked to corporate growth. They proactively seek growth opportunities by extending the scope of business relationships. They dislike having underutilized resources, and minimize cash reserves by accelerating the pace of investment. One entrepreneur explains:

*“We call it, cash burn rate. That’s the word to indicate how many months the company can survive by spending the cash reserve. We are constantly battling with a negative cash flow, and risk continuity for the sake of growth”.*

### **The basis of power**

The basis of power, underpinned by the actor's legitimacy, recognition, and authority in the eco-system, also differs between the two logics.

Actors operating with Corporate Logic appreciate seniority and stability, consistent with the value system of traditional Japanese management. The experience of managing stable operations without failure is valued. The quality of the service and product firms offer is important, regardless of size or growth of the firm. Entrepreneurs with a track record of contribution to society, maintenance of tradition, and avoidance of business risk are considered responsible and admirable. The corporate profile and history matters, and that alone can produce high status and power in the eco-system. The CEO of a firm that was founded in 1999 and has remained small notes: *“Growth is the result. Not the objective”.*

By contrast, the key goal of the actors under Venture Logic is “exit”, i.e. to monetize their business by Initial Public Offering (IPO) or buy-out. The actors with a track record of participating, either as entrepreneur or supporting actor, in a series of exits obtain visible legitimacy, recognition, and authority. Entrepreneurs' lack of track record or failure in the past does not matter if one could finally succeed. However, actors with Venture Logic are unforgetting of ventures that do not grow. A venture capitalist explains:

*“The entrepreneurs with a venture mindset dislike the companies that just survive for years without any indication of growth. Such companies are called “living dead”. They are alive but mentally dead”.*

### **The system of growth**

Differences in the system of growth further reinforce the divergent mental models of the actors who follow different logics. As explained below, contrasts exist in the economics of valuation, the focus of attention, and sources of strength.

Actors under Corporate Logic are recognized and rewarded by stability and continuity. They are rewarded if they generate sustained cash flow over a long period of time, even if they have no plans for “exit” via IPO or corporate acquisition. As failure means the loss of power, they focus more on cash flow stability and stakeholder relationships to minimize risk. Therefore, their strength comes from factors that stabilize their business operation, such as profitability, sufficient asset and robust organizational procedures. Good reputation and track record of strong financial management also matter.

Such a system of growth contrasts with that for Venture Logic that values the enterprise value linked to market capitalization or the price of corporate acquisition. Naturally, the focus of attention goes to the speed of growth and potential that contributes to high valuation. Consequently, the source of strength evolves around the factors that accelerate growth. Notably, those with access to promising business trends, influential funders, and skilled professionals can differentiate themselves from others. The actors who leverage the system are: “*the guys with ideas, the network, and the gravity to attract the talent*”.

### 3.2 Enablers of the emergence of Venture Logic

Until the mid-1990s, Corporate Logic was dominant in the Japanese ICT start-up eco-system; however, its evolution in the past three decades incubated an alternative logic, Venture Logic. Table 2 summarises the enactment of practices under Corporate Logic that was prominent among start-ups in the past, the enablers of change that have triggered the emergence of Venture Logic, and the enactment of practices under Venture Logic that has become prominent among some start-ups in the 2010s. All enablers had a gradual and accelerating impact. In this section, we analyse the field-level factors (i.e., enablers) that triggered the emergence of Venture Logic in three arenas: capital markets, labor markets, and social networks.

<TABLE 2 HERE>

#### Capital markets

##### *Wider range of funders help different stages of growth*

Until the late 1990s, venture capital finance received limited protection under the law, and banks were hesitant to provide loans to new businesses without tangible collateral. There were only a few venture capitalists, and their role was to give loans on behalf of the sponsoring financial institutions. Therefore, start-ups were largely self-financed, and they relied on cash flow for their growth, especially in the early growth stage.

The regulatory change in 1997 enabled the establishment of limited liability investment partnerships. The opening of NASDAQ Japan and MOTHERS at Tokyo Stock Exchange also prompted various players to participate in venture investment. This new movement initially did not produce many successful IPOs, due to the ending of the dot-com bubble and the underperforming stock market. However, the eco-system slowly engendered a new generation of funders. For instance, the venture capitalists who worked for bank-backed venture capital funds left their job to start their own independent venture capital. Successful entrepreneurs started to act as angel investors by utilizing the fortune they made from their IPO success. Concurrently, the first generation of IT start-ups gradually expanded their business, and formed their corporate venture capitals to diversify their business portfolio.

As a result, the start-up eco-system gradually developed access to a variety of funding sources each with different characteristics. The funders tend to cooperate, rather than compete, for investment in order to help start-ups to grow, especially due to small fund size and different risk appetite. According to a venture capitalist:

*“We know each other very well and exchange information. As each specializes in different stage and has different strengths and weaknesses, it’s better to collaborate than compete. When a start-up exits, they typically have financing from four to five different venture capitalists with different strengths”.*

The first stage of financing is typically by incubators and accelerators who headhunt promising entrepreneurs. Such funders educate entrepreneurs about the attractiveness of starting a business and the necessary skills and knowledge. The entrepreneurs then may obtain seed funding from these funders or angel investors. Successful start-ups grow and then obtain “series-A” finance typically from independent venture capitalists that connect the start-ups to the wider start-up eco-system. Then a selected few obtain typically the last stage of funding for most entrepreneurs before IPO, “series-B” funding from corporate venture capitals and/or financial-institution backed venture capitals that can connect the start-up to larger, traditional Japanese corporations. In later stages of financing, bank loan, bond, and

other form of financing is also available from brokers. For relatively small, slow-growth companies, government backed subsidies also provide necessary funding.

This layered financing system provides a wide range of support and sufficient size of funding to the start-ups when they require.

### *Iconic funders emerged as catalysts for venture investment*

Until the late 1990s, there were a small number of well-known ICT entrepreneurs. However, they did not act as active funders of others' business. Some iconic entrepreneurs appeared in the media, and they organized start-up events, some of which attracted hundreds of young aspiring entrepreneurs, to raise awareness of a “*start-up movement*”. However, such effort did not lead to funding of the next generation of entrepreneurs. The focus was on the growth of their own business, and without the capital market available to venture business, they could not monetize the high valuation of their own ventures to fund others' business ideas.

The situation gradually changed because of the accumulation of successful entrepreneurs, venture capitalists, and other growth supporting actors. Such people were considered legendary gurus of entrepreneurship, due to the proven track record of “exit”. Due to their experience and relationships, they have good access to skilled designers, engineers, managers, accountants, lawyers, and venture capitalists. They also can give legitimacy to the ones who they believe have growth potential. An entrepreneur notes:

*“Because of their gravitas, and their power to attract promising businesses and valuable resources, they can create the flow of resources necessary for the rapid growth of start-ups”.*

The iconic investors and entrepreneurs with glittering success currently function as catalysts for investment and growth for the next generation of start-ups. This is because they can effectively facilitate financing and hiring by leveraging their name and provide access to the inter-personal/corporate networks. While only a handful of such people work full-time on business incubation, the iconic individuals function as accreditors, allowing the actors in the eco-system to identify the promising few start-ups. Start-ups leverage them as the catalyst of growth, acquiring necessary resources by utilizing the personnel's prominent position in the network.

## **Labor markets**

### *Rise of “serial employees”*

In the late-1990s, Shibuya, Tokyo, was the center of so-called “*Bit-Valley movement*”. At that time, young entrepreneurs and workers were attracted by the possibility of the Internet, and have gathered there and started a variety of Internet-related businesses. However, most entrepreneurs came from different industries or direct from educational institutions.

As generations of start-ups grew and exited, the eco-system gradually cultivated a growth in not only serial entrepreneurs, but also serial employees. The latter are like serial entrepreneurs; they have expertise on accelerating start-up growth, and move to the next project once the company matures. Serial employees have experienced rapid growth, exit/IPO, and pit-holes a number of times. They can therefore contribute to the growth of the next generation of start-ups. The average tenure of the people in this eco-system gradually rose, and many are now serial employees. A headhunter specialized in the IT sector notes:

*“They move because they know they have certain strengths and weaknesses. Some like to be in a very early stage of venture and to do fire fighting. Some others prefer to craft a system, rather than to spend time on maintenance. The move benefits both the start-ups and the people”.*

Serial employees are the depository of knowledge and capabilities in technology or management. For example, the “zero-one managers” who can build a business from scratch are considered the most scarce resource. Further, “one-ten” managers and “ten-hundred” managers know how start-up companies should prepare for rapid growth. Serial employees often have experienced all the processes in successfully growing start-ups, and are able of transplanting their learning to newly formed start-ups.

### *Earlier generation of start-ups provide talent for new start-ups*

Until the mid-1990s, the Internet start-up eco-system was still in the developmental stage. While the start-up

companies expanded in the personal computer related businesses, they were rather isolated. Migration of engineers and managers from larger, traditional Japanese corporation to start-ups was rare. Start-ups in the early days faced the challenge of insufficient supply of skilled human resources.

However, as the eco-system developed, successful start-ups (e.g., Rakuten, GREE, and DeNA) occasionally hired a large number of managers from established Japanese corporations and professional service firms in law, accounting, and consulting. A human resource manager at a start-up recalls:

*“We had to quickly hire people to catch up with the pace of growth and market expectation. I have to admit we hired for a high-level position with high compensation without carefully checking the fit between us. Now most people have left and work in other start-up”.*

These people could not or did not wish to migrate back to traditional companies, and moved to other start-up companies to reuse their skills. Large start-ups also began to hire a substantial number of new graduates from prestigious universities. The graduates learned the way large start-ups function, and then many changed the course of their career to test their capabilities in smaller start-ups. Further, the start-ups that survived and became large are also a ground for legal, accounting, financing professionals to change their career from being external professionals to internal professionals. They develop specific skills required for a start-up companies to grow, and became the bridge between the external and the internal functions of start-ups, improving the quality of not only their internal operation, but also that of the eco-system overall.

In this way, earlier generations of start-ups that grew supplied a large number of skilled workers to the eco-system. They function as the entry points for people who are interested in developing a career in the start-up eco-system. The large, established start-ups educate such people in their working culture and systems, and prepare them for work in the eco-system.

#### *Access to best practice via external professionals with a portfolio of start-up clients*

Up to the mid-1990s, start-up entrepreneurs relied on their own business knowledge. Especially in the early stage, it was difficult for tiny start-ups to pay the fees required to hire professionals. Therefore, entrepreneurs had to wait until they grow in size, obtaining legitimacy and sufficient fund to attract such talent.

Over time, the growth in the number of start-ups operating in the eco-system attracted a handful of external professionals who specialize in giving advice to start-ups. Skilled professionals, such as lawyers, accountants, consultants, designers and engineers, are attracted by having a portfolio of start-up workplaces because the contracting arrangement minimizes the risk of depending on a single risky venture business. By having a portfolio of start-ups that they advise or work for, external professionals are able to maximize the possibility of advice leading to growth in future income from successful start-ups. An entrepreneur explains the benefit for start-ups:

*“It’s hard for us to pay the expensive fees if we hire them full-time. We just want to learn the essence and we can improve later. If the person is really good, I always have an option to convince them to work almost full-time with us. Of course, if the person is not good, we can simply terminate the contract. This is much easier than to hire as a full-time employee”.*

Consequently, managers with specific expertise may join a start-up on a project-based contract, teaching the knowhow to the internal staff, and improving the corporate systems to the level that match to the industry best practice. First-class designers and engineers often decide not to join any company as full-time staff, but contract with a portfolio of start-ups to work two or three days a week for each. In this way, start-ups can engage the best-in-class talent without significant cost burden, and the professionals can also leverage their skills by being involved in multiple start-ups, some of which grow but some of which die.

## **Social networks**

### *The increasing presence of growth supporting actors*

In the mid-1990s, start-ups had to help themselves or rely on available general services that did not embody sufficient expertise required for rapid growth. External professionals had limited incentive to serve start-ups because the fee income would be, on average, one tenth of that of larger companies.

As the eco-system gradually expanded in size, the inter-personal network has also expanded over the years. The network now accommodates professionals, such as accountants, lawyers, auditors, and engineers, who are attracted by the possibility of future income by accessing the eco-system. A few such professionals gained significantly when the start-ups they advised became large, and others started to follow the strategy to charge a low fee in the beginning thus deferring reward until after growth was achieved. While they typically do not obtain equity, they invest their time and expertise, and therefore are incentivized to materialize the growth of the start-up. They help the emerging start-ups to obtain access to the knowhow required to employ advanced techniques for financing, hiring and other critical business processes. A venture capitalist notes the role of such professional:

*“Now the required standard of operation for legal, accounting, and other operating function is increasingly strict, especially for those start-ups that aim to IPO. The professionals help them to meet the standard. As some are very skilled, they are very busy working with promising start-ups”.*

Well-known professionals are increasingly considered as an integral hub of the start-up eco-system. They facilitate the information exchange of important practices, introduce key stakeholders, and give the start-ups they advise a high-level of legitimacy as others tend to think that the start-up is valuable enough for the busy professional to spend his/her time.

### *The formal communities as platforms for entry, expansion, and exchange of ideas*

In the mid-1990s, the first wave of formal community building has started. However, it has dissolved by the aftershock caused by the bursting of the dot-com bubble. For several ensuing years, start-up entrepreneurs did not have a place to gather. The eco-system had been a small closed circle, and one had to be an insider to understand what to do to access the circle.

In the third phase since the 2008 financial crisis, formal communities such as conferences, gatherings, incubation camps, pitch contests, and other start-ups related events became increasingly important. The main organizers have been venture capitalists, government institutions, or news media. The actors have an incentive to organize or participate in such formal communities. For example, venture capitalists want to differentiate by organizing such communities to find promising start-ups and convince them to accept their investment. New actors participate to gain access to the informal networks. Existing participants participate to maintain their relation with other participants and find new contact. A conference organizer says:

*“Conferences are the gateways of informal communities. People come to off-site conference, and in the night they go to drinking or dinner to maintain or expand their network. They usually don’t directly compete as they offer a different service. But as all are in the same IT sector, they value having a tie with others”.*

Social networks in the formal communities of the start-ups eco-system in the 2010s are rather flat and connected, despite the light and shade. In such formal communities, intermediary actors, especially venture capitalists, lawyers, and accountants are active in facilitating the networking of emerging firms. The formal communities work to source new participants to the informal communities of the eco-system, to give legitimacy to promising new participants, and to effectively create and strengthen the existing relationships.

### *The informal communities as the channels of dense communication*

In the mid-1990s, the ICT start-up eco-system was “a tiny group of less than a hundred entrepreneurs”, according to an entrepreneur who started his first business in the mid-1980s. The informal connections at the time were therefore less complex than those that exist in the 2010s. In the 1990s, selected few entrepreneurs were connecting their business and each other in traditional ways, such as over drinking parties and weekend excursions.

As the eco-system developed in size, informal communities also grew in size. The growth of social networking services and messaging services accelerated the development of such informal information networks. The entrepreneurs just pick up their smart phone and launch Facebook, LINE, or similar services to ask business-critical questions to their comrades. Then within minutes, someone in the network can give the answer. If the answer is not appropriate or insufficient, others follow up to fix the bug. An entrepreneur showed how this system works:

*“I have many chat windows for different groups on LINE and Facebook. For example, this chat group is for discussing the latest venture finance, asking someone who knows about the back of the envelope calculation of the valuation. This is to discuss about the articles of incorporation on which we can find the structure of preferred stocks. We share the secret, and so they are very informative”.*

The informal networks facilitate casual exchanges of important, valuable information which is not public, such as the logic behind the valuation of a specific IPO, who invested in which start-ups, or which CFOs, COOs or venture capitalists are good or to be avoided for their incompetence. Such information networks reduce the complexity of financing or hiring transactions. These informal networks function as a tool to maintain the order of the eco-system as the networks transmit information about the reputation of each organization or individual. If an organization or individual does something that is against the logic shared among the eco-system, such actor will lose connections to other participants of the eco-system. The web of informal networks seems to drive and govern the growth of the eco-system.

### 3.3 Coexistence of two logics

While prediction about the future is not easy, there are grounds for arguing that Venture Logic and Corporate Logic would coexist in the field for some time to come. This is because Venture Logic is likely to be adopted by new start-ups, and likely to continue to diffuse by the presence of the enablers identified above. At the same time, Corporate Logic represents the logic of the broader Japanese national institutions that accommodates the start-up eco-system, and is therefore likely to continue to exist. In this section, we elaborate our argument below.

#### The gradual shift towards Venture Logic

Our observation indicates that the shift in logic was due to a gradual change in the field facilitated by the “enablers” elaborated in the previous section. The actors adapted to Venture Logic because that benefit them. They could choose not to engage with the actors with a different logic, and actors were inclined toward either of the logics at any particular point in time. Therefore, the gradual shift did not lead to “*novel institutional complexity*” (Smets, Morris, & Greenwood, 2012) nor “*contradictions*” (Greenwood & Suddaby, 2006). In the Japanese ICT start-up eco-system, we found two ways by which Venture Logic diffused in the field.

First, entrepreneurial start-up firms adopt a new logic step-by-step. A shift in an aspect of business incubation would trigger a shift in other aspects. This is slightly different from the “*collision of local practice*” explained by Smets, Morris, and Greenwood (2012). The transition is much more moderate; the installation of a new logic in an arena does not collide with the existing logic but replaces it, and then the new logic benefits from the installation of the new logic in other arenas.

For example, hiring of a serial employee, for example an ex-CFO who experienced a large IPO, may result in large-scale financing and a high burn rate from an early stage. The large amount of financing and fast growth with a high burn rate would attract professionals with multiple workplaces and growth supporting actors, bringing further changes in practice. Start-ups do not migrate from one logic to another at once. Rather, they adopt the new logic gradually for an arena and then adapt in other arenas.

Second, the new generation of start-ups adopt the new logic as part of their institutional strategy (Lawrence, 1999). The start-up that was born at the centre of the eco-system, and is endowed with prominent funders, would be guided toward Venture Logic by active interaction with the actors who share the same logic. In fact, iconic funders, serial entrepreneurs, serial employees, professionals with multiple workplaces, and growth supporting actors collaborate and function as influential routes of transmitting and diffusing the logic and the associated practices. They have “*legitimacy with respect to diverse stakeholders*” (Maguire, Hardy, & Lawrence, 2004) and have the powers to change the way start-ups conduct their business. Most of them are inter-connected to each other, and their “*subject positions allow them to bridge diverse stakeholders and to access dispersed sets of resources*” (Maguire, Hardy, & Lawrence, 2004).

Such actors who can command legitimacy under Venture Logic influence the ways firms and individuals incubate the business, often as a stakeholder or an internal member. As Geng, Yoshikawa, and Colpan (2016) found, the managers play a role in the diffusion of new practices; however, in our case, by migrating to the next generation of start-ups with the experience gained in the previous generation of start-ups. They discuss better ways for a new generation of start-ups to accelerate growth, and transfer new practices to the ones with which they engage.

As a result, the Japanese ICT start-up eco-system will continue to lean toward Venture Logic. Clearly, new start-ups are likely to adopt Venture Logic over Corporate Logic. Moreover, some existing start-ups may gradually adopt Venture Logic in some arenas.

## The pressure to adopt Corporate Logic as start-ups grow

Start-ups learn and endorse Corporate Logic in the process of growth by interacting with the actors under the logic. At the field level, we observed that actors might shift the logic according to their developmental stage. As Corporate Logic does not necessarily facilitate business incubation, start-ups under Corporate Logic often face difficulty in financing, hiring, and social network participation. As a result, rapidly growing start-ups are typically under Venture Logic. However, as Venture Logic is not necessarily compatible with the language of the traditional Japanese business system, when start-ups get closer to the wider economic system, the pressure arises for them to adjust their practices to meet the standards of Corporate Logic. This would be because they gradually change the actors with whom they interact as they grow in size.

For example, the funders in the early stage, such as angels and accelerators, operate mostly under Venture Logic, while the funders in later stages, such as corporate venture capitalists and financial-institutions backed venture capitalists, tend to operate with Corporate Logic. IPO seems to be a turning point to move toward Corporate Logic because the market, brokers, lawyers, auditors, and accountants request start-ups to change the way they organize their business. This crucial event works as “*theorization*” (Greenwood, Suddaby, & Hinings, 2002) of how publicly traded firms should operate, and in this case the stock exchange and stock brokers jointly theorize. In preparing for IPO, start-ups are required to be on schedule and on budget. The cash flow becomes sizable and positive, and start-ups gradually shift their financing practice. As start-ups grow in size and build legitimacy in the business society, mid-career hire managers start to come from companies under Corporate Logic. Such managers influence the company to gradually lean toward Corporate Logic. The professionals who work for traditional, large companies also gradually pressure start-ups to move towards Corporate Logic. The successful entrepreneurs with Venture Logic learn to adopt Corporate Logic in the process of growth. They “*revise the dominant logic as the nature of business changes significantly*” (Prahalad & Bettis, 1986).

When start-ups grow, they gradually expand the network to wider society. As companies in other sectors tend to be older, more established, larger companies on average, they do not necessarily appreciate practices under Venture Logic. Therefore, to engage with the actors outside of the eco-system, start-ups will still have to learn to operate under Corporate Logic. Even if Venture Logic were to dominate the center of the start-up eco-system, the strong pressure on the expanding start-ups is unlikely to disappear, as long as Corporate Logic survives in the wider society.

## The eco-system center-periphery embedded in national institutional structure

Entrepreneurs who have access to the core of the start-up eco-system tend to adopt Venture Logic. By contrast, those who do not operate with Corporate Logic. This structure in the field is equivalent to having a “*center*” and a “*periphery*” (Greenwood & Suddaby, 2006).

We found that leveraging the dense inter-personal network at the core of the eco-system, start-ups at the center obtain finance from angels and seed investors and hire on the basis of personal introductions from iconic funders, accelerating the pace of growth. By contrast, start-ups in the periphery of the eco-system rely more on financing from cash flow, bank loan, or government funding. They feel distant from the network of serial employees, professionals with multiple workplaces, and other growth supporting actors, and are dependent on direct business relationships or personal connections. However, the ways in which the actors under Corporate Logic incubate the business seem to be prominent outside of the ICT start-up eco-system in Japan. While they are on the periphery of the eco-system, they are in fact closer to the center of the broader economic institutions in Japan.

Any subnational institutions are exposed to the broader institutional structure of a national economy, and are likely to inherit aspects of the national institutions. The ICT start-up eco-system in Japan illustrates the case of such inheritance of Corporate Logic from the national business system, and the gradual emergence of Venture Logic, thanks to the increased presence and legitimacy of the actors under the logic. The distinctive ways in which these actors incubate the business have resulted in the separation between the center with Venture Logic and the periphery with Corporate Logic, with the latter firmly connected to the core of the national business system.

If Corporate Logic were to continue to survive in the broader institutional structure of the national economy, the periphery of the start-up eco-system would continue to be subject to Corporate Logic. If this were to happen, isomorphic pressure from the two logics concurrently would influence the eco-system actors in the center and the periphery, leading to persistent “*organizational heterogeneity*” (Greenwood, Hinings, & Whetten, 2014) in the field. The co-existence of two logics in the field also create opportunities for those who can navigate between the competing logics. Such actors accelerate initial growth with Venture Logic, and then continue to expand with Corporate Logic by

drawing resources from the large-firm sector of the economy. Therefore, even if Venture Logic may come to dominate the eco-system, we expect that Corporate Logic to continue to influence some of the actors in the eco-system.

## 4. Conclusion

Drawing on a study of the development of the Japanese ICT start-up eco-system, we proposed a way to understand the process by which the ICT start-up eco-system in Japan has evolved over time. We investigated how the new logic, Venture Logic, has emerged in a field where Corporate Logic was dominant, and discussed the ways in which two different logics co-exist in a field.

To our knowledge, our study is the first to apply the notion of institutional logics to interpret the causes and consequences of institutional change in the Japanese business system. While previous studies have already discussed the changing nature of Japanese institutional environment (e.g., Geng, Yoshikawa, & Colpan, 2016), they failed to explain endogenous sources of incremental institutional change, and the persistence of organizational diversity in the process of such change. Further, most studies investigate large traditional companies such as those listed on the first section of Tokyo Stock Exchange. In contrast, we studied the start-up eco-system, and in doing so enhanced our understanding of Japanese management in evolution. We detailed the process by which Venture Logic gradually developed in the past three decades, and analyzed why some actors changed their practices, while others did not.

We contribute to the institutional logics literature by analyzing how organizational heterogeneity within the eco-system retains. We argued that organizational heterogeneity remains because: 1) the eco-system contains start-ups at varying stages of growth with a different logic applying at different stages; 2) a variety of actors reside in the center and the periphery; and 3) one of the logics in the subnational eco-system is tightly linked to the dominant national-level institutional logic. The organizational heterogeneity, explained by the concurrent isomorphic pressures from the two competing logics, is likely to persist as long as Corporate Logic continues to earn legitimacy in the Japanese national business system.

The present research also has practical implications for actors involved in business incubation. The enablers explained in this study would help new entrants to understand the landscape of the eco-system. Successful actors may develop an “institutional strategy” to cope with exposure to two competing logics, while others may underperform due to the absence of institutional strategies in the face of institutional complexity. Best practice (underpinned by such institutional strategy) leading to successful new ventures depends not only on the eco-system to which one belongs but also on one’s positioning in the eco-system. Successful start-ups may employ Venture Logic or Corporate Logic to access different communities of actors at different stages of growth.

## 5. References

- Ahmadjian, C. L. & Robbins, G. E. 2005. A clash of capitalisms: Foreign shareholders and corporate restructuring in 1990s Japan. *American sociological review*, 70(3): 451-71.
- Aoki, M., Jackson, G., & Miyajima, H. 2007. *Corporate governance in Japan*. Oxford: Oxford University Press.
- Battilana, J. & D'ahunno, T. 2009. Institutional Work and the Paradox of Embedded Agency. In Lawrence, Thomas B., Roy Suddaby, & Bernard Leca, (Eds.), *Institutional work : actors and agency in institutional studies of organizations*. Cambridge, UK; New York: Cambridge University Press.
- Corbin, J. M. & Strauss, A. 1990. Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology*, 13(1): 3-21.
- DiMaggio, P. J. 1988. Interest and agency in institutional theory. In Zucker, L., (Ed.), *Institutional patterns and culture*. Cambridge: Ballinger Publishing Company.
- DiMaggio, P. J. & Powell, W. W. 1983. The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2): 147-60.
- Eisenhardt, K. M. 1989. Building Theories from Case Study Research. *Academy of Management Review*, 14(4): 532-50.
- Feldman, M. S. & Orlikowski, W. J. 2011. Theorizing Practice and Practicing Theory. *Organization Science*.
- Friedland, R. & Alford, R. R. 1991. Bringing society back in: symbols, practices, and institutional contradictions. In Powell, Walter W. & Paul DiMaggio, (Eds.), *The New institutionalism in organizational analysis*. Chicago: University of Chicago Press.
- Geng, X., Yoshikawa, T., & Colpan, A. M. 2016. Leveraging foreign institutional logic in the adoption of stock option pay among Japanese firms. *Strategic Management Journal*, 37(7): 1472-92.
- Gioia, D. A., Corley, K. G., & Hamilton, A. L. 2013. Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology. *Organizational Research Methods*, 16(1): 15-31.
- Greenwood, R., Hinings, C. R., & Whetten, D. 2014. Rethinking Institutions and Organizations. *Journal of Management Studies*, 51(7): 1206-20.
- Greenwood, R. & Suddaby, R. 2006. Institutional entrepreneurship in mature fields: the Big Five accounting firms. *Academy of Management Journal*, 49(1): 27-48.
- Greenwood, R., Suddaby, R., & Hinings, C. R. 2002. Theorizing Change: The Role of Professional Associations in the Transformation of Institutionalized Fields. *Academy of Management Journal*, 45(1): 58-80.
- Hardy, C. & Maguire, S. 2008. Institutional entrepreneurship. In Greenwood, Royston, Christine Oliver, & Roy Suddaby, (Eds.), *The Sage handbook of organizational institutionalism*. London: SAGE.
- Lawrence, T. B. 1999. Institutional Strategy. *Journal of Management*, 25(2): 161-87.
- Lawrence, T. B., Leca, B., & Zilber, T. B. 2013. Institutional Work: Current Research, New Directions and Overlooked Issues. *Organization Studies*, 34(8): 1023-33.
- MacGuire, S., Hardy, C., & Lawrence, T. B. 2004. Institutional entrepreneurship in emergent fields: HIV/AIDS advocacy in Canada. *Academy of Management Journal*, 47(5): 657-79.
- Maguire, S., Hardy, C., & Lawrence, T. B. 2004. Institutional Entrepreneurship in Emerging Fields: HIV/AIDS

Treatment Advocacy in Canada. *The Academy of Management Journal*, 47(5): 657-79.

Mantere, S. & Ketokivi, M. 2013. Reasoning in Organization Science. *Academy of Management Review*, 38(1): 70-89.

Myeong-Gu, S. & Creed, W. E. D. 2002. Institutional Contradictions, Praxis, and Institutional Change: A Dialectical Perspective. *The Academy of Management Review*, 27(2): 222-47.

Oliver, C. 1992. The Antecedents of Deinstitutionalization. *Organization Studies*, 13(4): 563-88.

Pahnke, E. C., Katila, R., & Eisenhardt, K. M. 2015. Who Takes You to the Dance? How Partners' Institutional Logics Influence Innovation in Young Firms. *Administrative Science Quarterly*.

Phillips, N. & Tracey, P. 2007. Opportunity recognition, entrepreneurial capabilities and bricolage: connecting institutional theory and entrepreneurship in strategic organization. *Strategic Organization*, 5(3): 313-20.

Prahalad, C. K. & Bettis, R. A. 1986. The dominant logic: A new linkage between diversity and performance. *Strategic Management Journal*, 7(6): 485-501.

Smets, M., Morris, T., & Greenwood, R. 2012. From Practice to Field: A Multilevel Model of Practice-Driven Institutional Change. *Academy of Management Journal*, 55(4): 877-904.

Streeck, W. & Thelen, K., (Eds.). 2005. *Beyond Continuity: Institutional Change in Advanced Political Economies*. Oxford: Oxford University Press.

Thornton, P. H., Jones, C., & Kury, K. 2005. Institutional Logics and Institutional Change in Organizations: Transformation in Accounting, Architecture, and Publishing, *Research in the Sociology of Organizations*.

Thornton, P. H., Ocasio, W., & Lounsbury, M. 2012. *The institutional logics perspective : a new approach to culture, structure and process*. Oxford: Oxford University Press.

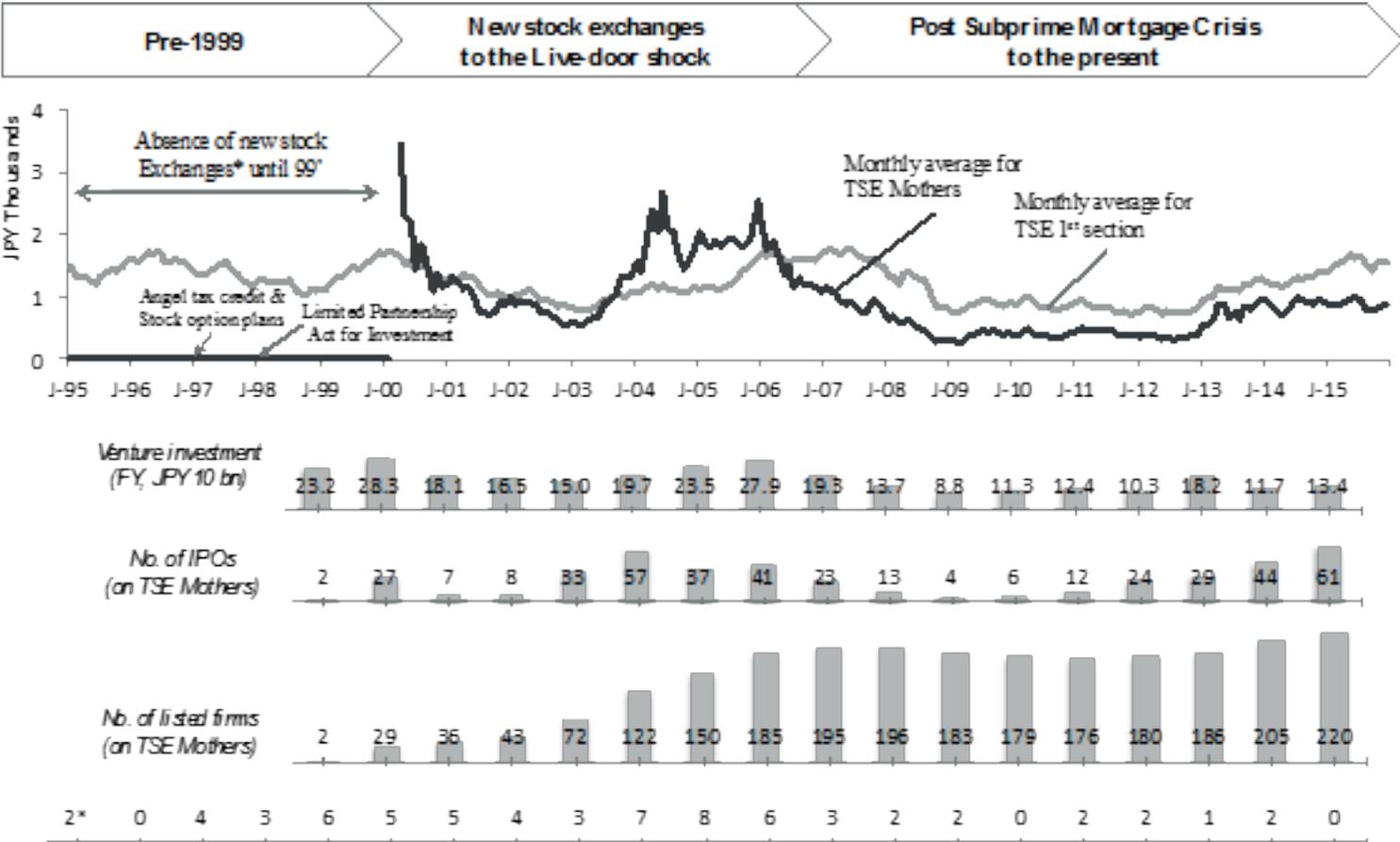
Tolbert, P. S., David, R. J., & Sine, W. D. 2011. Studying Choice and Change: The Intersection of Institutional Theory and Entrepreneurship Research. *Organization Science*, 22(5): 1332-44.

Yamamura, K. & Streeck, W. 2003. *The end of diversity? : prospects for German and Japanese capitalism*. Ithaca: Cornell University Press.

Yin, R. K. 2006. *Case study research: design and methods*. Thousand Oaks, Calif. [u.a.]: Sage.

Zietsma, C. & Lawrence, T. B. 2010. Institutional Work in the Transformation of an Organizational Field: The Interplay of Boundary Work and Practice Work. *Administrative Science Quarterly*, 55(2): 189-221.

FIGURE 1. Key statistics for ICT start-up eco-system in Japan



No of informants (The number indicates the number of informants who joined/started a ICT startup during the year; n=67; \* include before 1995)

\* Except the TSE 2<sup>nd</sup> section and over-the-counter-stock trading  
Source: VEC, TSE, Interviews

TABLE 1. *Corporate Logic and Venture Logic in the Start-up Eco-system*

	Corporate Logic	Venture Logic
<b><i>The Basis of Strategy</i></b>		
<i>Objective</i>	<b>Growth as a result</b> Extra care on existing business relationship Control the pace of financing and hiring	<b>Growth as an objective</b> Proactively seek business opportunities Constantly seek additional capital and labor
<i>Priority</i>	<b>Sacrifice growth for stability</b> Avoid excess investment Positive cash-flow & sufficient cash reserve	<b>Sacrifice stability for growth</b> Rapid pace of capital investment Negative cash-flow & high cash burn rate
<b><i>The Basis of Power</i></b>		
<i>The source of legitimacy</i>	<b>Survival as success</b> Long-term business survival (not growth) No experience of failure	<b>Survival as failure</b> Rapid growth (not long-term survival) Experience of success or failure
<i>The matter of recognition</i>	<b>Stable business operation</b> Stability of the business "Exit" as departure from the community	<b>Growth and "exit"</b> Growth of the business "Exit" as credit to the community
<i>The actors with authority</i>	<b>Actors with stability and tradition</b> Prominence by consistent performance Hierarchy in community	<b>Actors with growth and/or "exit" experience</b> Prominence by the magnitude of commercial success Hubs in community
<b><i>The system of Growth</i></b>		
<i>The economics of valuation</i>	<b>Business stability and continuity</b> Low uncertainty Accumulated assets	<b>Enterprise value by market capitalization</b> Growth potential IPO/acquisition price
<i>The focus of attention</i>	<b>Cash-flow stability and stakeholder relationship</b> Budget control Existing business maintenance	<b>Growth speed and high valuation</b> Exponential growth New business opportunities
<i>The source of strength</i>	<b>The factors that stabilize business operation</b> Profitability Asset and procedures Reputation and history	<b>The factors contribute to growth and high valuation</b> Access to business ideas with potential for success Influential funders Skilled professionals

TABLE 2. *The practice from the past, enablers of change, and the practice emerged recently*

	<b>Enactment of Corporate Logic</b>	<b>Enablers of the emergence of Venture Logic</b>	<b>Enactment of Venture Logic</b>
<b>Capital market</b>	Limited external financing <i>Finance from family, limited number of investors, main bank, and cash-flow</i>	<b>Wider range of funders help each stage of growth</b> Funders with different risk appetite and strength collaboratively help different stage of growth	Finance from a portfolio of investors <i>Finance from a variety of funders; cash-flow positive only after the growth</i>
	Budget control to stay out of the red <i>Constantly remain in surplus to gain trust of suppliers, customers, and bank</i>	<b>Iconic funders as catalysts for venture investment</b> Funders with authority endorse new promising start-ups, and can accelerate the growth	Obtain an attention of key person <i>Gain the attention of iconic funders e.g., by winning a biz contest</i>
<b>Labor market</b>	Slow, cautious hiring of managers <i>Rely on personal contact, hire managers cautiously to avoid the risk</i>	<b>Rise of "serial employees"</b> Workers with experience of growth migrate to new start-ups to transplant the skills and knowhow	Active hire by referencing and introducing <i>Actively hire managers by checking the credential by references</i>
	Limited recruiting from an allier talent pool <i>Limited hire from large firms w/ some secondment from stakeholders</i>	<b>Earlier generation of start-ups provide talent</b> Large start-ups hire mid-career and new graduates, and such talent migrate to smaller start-ups	Larger talent pool for start-ups <i>Recruit via wider range of recruiting tools from larger pool of talent</i>
	Learn from external sources <i>Learn from the experience by experimenting in the field</i>	<b>Knowledge via professionals with multi-workplaces</b> Professionals with best practice work part-time, offering the knowhow to broader audience	Learn directly from the experts <i>Learn from experienced persons by hiring professional for a limited term</i>
<b>Social networks</b>	Knowhow via secondary sources <i>Learn from business contact, media, or government/private institutions</i>	<b>The increased presence of growth supporting actors</b> An access to the best practice knowledge and knowhow from the early stage of firm growth	Knowledge directly from the experts <i>Learn from the experts directly with reference to actual business situation</i>
	Relation within a small, closed circle <i>Interact within a closed community and hesitant to accept new members</i>	<b>The formal communities as platform</b> A ground for new members to participate, and the existing members to maintain old and find new	Relation within larger, open community <i>Interact within larger community, and accept new members who qualify</i>
	Information from personal connection <i>Obtain information from trusted personal/business contact</i>	<b>The informal communities as the knowledge pod</b> A tool to facilitate effective exchange of confidential, valuable information among the	Information from multiple online groups <i>Utilize multiple informal communities by leveraging online tools</i>