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Akihabara as magical space¹

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ABSTRACT

Akihabara (Tokyo, Japan) is a distinctive city in and of itself. (Akihabara and Akiba are very different. Akihabara is a region. Akiba refers to a unique atmosphere and space.)

Akihabara is a region with diverse entrepreneurial types. The accumulation of these entrepreneurs and the way that their careers have developed has functioned as a regional platform and formed the “milieu” in Akihabara as an Asyl (sanctuary). The birth of the entrepreneur generates competitive advantages in Akihabara.

This study sheds light on the Akihabara area (Tokyo, Japan), an area that has functioned continuously as an industrial cluster for more than 65 years since the end of World War II in 1945. In particular, this research is presented as an analytical paper with case studies to examine industrial changes in the Akihabara area from a historical perspective and to elucidate the status of industrial clusters in the region as examples for the latest industries operating in the contemporary era.

With particular emphasis on social elements in mind, the purpose of this paper is to study why specific industries, such as the maid industry and the pop idol industry (e.g. AKB 48) have emerged in the Akihabara area and how the area stands to evolve (with some focus on Japanese society from an otaku - not nerd - perspective) in addition to providing an outlook for new regional analyses.

The observations mentioned above confirm that a specific business model innovation (i.e. a new industry) was created in a specific period in a specific region - “the Akihabara Region.” This process can be referred to as the social institutionalization of innovations.

Keywords: AKB48 (Akihabara 48 girls), Akihabara, asyl, diversity, entrepreneurial type, industrial cluster, milieu, open innovation, otaku, social systems, unique atmosphere

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I. INTRODUCTION

Akihabara (Tokyo, Japan) is a distinctive city in and of itself. (Akihabara and Akiba are very different. Akihabara is a region. Akiba refers to a unique atmosphere and space.)

This paper outlines theories regarding mechanisms of the genesis of the Akihabara entrepreneur based on entrepreneur case examples. This paper also outlines theories regarding mechanisms of the Akihabara industrial cluster, again based on case examples. An industrial cluster can be defined as a collection of deeply inter-related businesses concentrated into a relatively small area, in this case Akihabara.

Akihabara was formerly known as Kanda Radio Town and in its current incarnation as Akihabara Electric Town, in the 65+ years since the end of WWII in 1945 the area has become famous around the world for the concentration of retailers and wholesalers involved in industrial electronic devices such as computers, telecommunications, as well as popular electronic devices such as televisions and radios, etc. Analyzing case examples in the area to examine mechanisms of the Akihabara industrial cluster illustrates a clear demand for revitalization as a counter to falling demand.

First, research into location theory mechanisms with regard to industrial clusters takes its lineage from Weber, M. in this study.

Weber's theories were based on businesses grouping in areas that had simple geographical advantages that translated to lower transportation and labor costs and these factors could be clearly used to classify an industrial cluster.

Furthermore, Marshall, A. postulates that even if advantageous conditions for a particular geographical location are lost, the binds that tie businesses together in an industrial cluster can sustain the cluster over the long term. In short, from the theoretical perspective of industrial cluster research, the mechanism can be examined by looking at the geographical benefits and the consequent advantages of businesses concentrating in one location.

II. METHODOLOGY and PRIOR STUDIES

Research (III. THE FORMATION of ASYL [SANCTUARY] SPACE OBSERVED in AKIHABARA) focused on entrepreneur interviews and observations (ethnography).

Most research documents focus on one aspect of the Akihabara industrial clusters. However, no studies are available which focus on the relation between the entrepreneur and region as discussed in this research (although there is a study which views Tokyo as a city in an Asyl (sanctuary) space in the field of sociology) (Okui (1996)).

Next research (IV. EVOLUTION OF INDUSTRIAL CLUSTER and the BUSINESS ECOSYSTEM (Milieu) focused on the corporate strategies and activities (using a Time Map Analysis) of 7 businesses (referred to as "Leader Corporations") active in the Akihabara industrial cluster as an open innovation.

A historical analysis (the Time Map Analysis) plots time on the y-axis against industries on the x-axis for a specific location (in this case, Akihabara). This creates an easy-to-understand historical expression (Time Map) of the development processes undergone by businesses in the area.

Research of the corporate strategies of each of these 7 Leader Corporations took two forms: tracking how these

businesses have developed (through interviews, analysis of corporate histories, documentary investigation of internal corporate materials, internet surveys, etc.) and tracking area development through Time Map Analysis and observations (ethnography).

III. THE FORMATION of ASYL (SANCTUARY) SPACE OBSERVED

1. What is an Asyl (sanctuary) space?

Needless to say, the Akihabara region maintains a distinctive space in the Tokyo metropolitan area. Akihabara is undoubtedly different from Shinjuku, Shinagawa, and Marunouchi. It is a region formed by the accumulation of chaotic development and entrepreneurial egos originating from burnt-out post-war ruin. Akihabara evolved to an Asyl (sanctuary)-type city due to a mixture of various factors including its geographical predominance brought about by the origin of the city, its role as a diverse transportation node, and its element as an industrial cluster. Although Asyl can be interpreted in several ways as in “sanctuary” and “shelter”, “free space” is probably the most appropriate definition in this context. All of these definitions share a common aspect since they signify a place where “a governing authority cannot reach.”

In many cases, an Asyl (sanctuary) is considered to exist in an area with strong religious elements where Buddhist temples attract support from local communities or in a space where a market-oriented economy is formed. Akihabara conforms to the latter pattern. In Japanese history, it was once possible to observe the presence of various cities and spaces that were established based upon a market economy. However, many of them disappeared along with the rise and fall of those in power. The “Rakuichi-Rakuza” (Free markets, open guilds) policy represents a typical example of such circumstances.

The aforementioned observations can be found in Akihabara since it is home to many entrepreneurs and support systems to help industrialists succeed, as well as a network of entrepreneurs.

Marshall’s non-commercial production factors do exist, but Prof. Benko G.’s (Université de Paris I-Panthéon Sorbonne) theory of “collective regional assets for the purpose of competition” gives a more multi-faceted analysis. Regional communities need identity and governance. With a variety of collective regional assets for competition, combined with increased specialization, it should be possible to develop a region like Akihabara. Benko G.’s approach tallies with Jacob’s theories of urban development.

2. Asyl (sanctuary) space “AKIBA”

After experiencing several calamities and downfalls, Akihabara became an internationally renowned industrial cluster city as a place for electronic goods, otaku-experts and tourism. Even if considered to be obsolete now, trends and aspects that enjoyed popularity in the past are still preserved as a gene of the city. The essence of this is built on its Asyl (sanctuary) - type identity as a free city. Akihabara is one of the few places to permit people to establish an enterprise using their determination and innovative ideas, and consequently, it is not a gathering site for people who became entrepreneurs after enjoying a steady elite career track. Akihabara is rather an Asyl (sanctuary) space where non-elites congregate in search of a place that can provide them with the opportunity to act freely, as if functioning as an air pocket within the bureaucratic and socialistic elements of Japan.

Firstly, the origin of Akihabara will be examined. Akihabara started when it became a transportation hub after air raids, which subsequently attracted people one after another. Amid the chaotic post-war situation, it was apparent that the government had no capacity in Akihabara as the black market began to thrive. From the beginning, Akihabara began to re-launch itself as a place liberated from authority. Markets were created for survival, and people used their intellect to figure out how to secure their livelihood in the markets. Akihabara continued to grow while it was drifting at the mercy of

markets influenced by individual expectations. Akihabara opposed the plan to improve street stalls proposed by the GHQ. This is how Akihabara was born as a market-oriented city. From the beginning, accommodating governing authorities was not a logical choice for them.

As described previously, the residents have spontaneously determined the state of Akihabara. This functioned as a driving force to move Akihabara to its current status. Akihabara escaped from governing authorities, a necessary condition to secure an Asyl (sanctuary) space, formed a city with their own decisions, and established itself as a free city where merchants can spontaneously and magnanimously participate in activities.

3. TYPES OF ENTREPRENEURSHIP IN AKIHABARA

Interviews with entrepreneurs, participant observations, and data analyses revealed that the Akihabara region consists of various types of business formation.

Different types of entrepreneurial activities take place in the Akihabara region as described below.

Fig. 1: (1) - (2) represents the business formation patterns in the Akihabara region and can be explained as entrepreneurial activities in the area. The entrepreneurial activity in this context includes intra-company entrepreneurial pursuits (strategic transitions by strategic planners, company presidents and entrepreneurial activities) in addition to the action someone needed to take to start up a business.

(1) Representing a Spin-off Type Enterprise: Kakuta Radio & Electric Co., Ltd.

The origin of Kakuta Radio & Electric Co., Ltd. lies in a spin-off from the oldest company in the Akihabara region called Hirose Radio & Electric Co., Ltd. Interviews with Kakuta Radio & Electric Co., Ltd. unearthed the presence of the Fukuei Report (a company newsletter), which serves as a unique correspondence-based education system. This discovery confirmed that the newsletter has been used as a medium to share information and know-how as well as to provide personnel training for business offices located in remote areas. Interview results also revealed that Kakuta Radio & Electric Co., Ltd. has a corporate culture that encourages educational opportunities (talent development), such as sending employees to night school (university) to obtain a degree.

(2) Representing “Parting of the Ways” Type Enterprise: Kaga Electronics Co., Ltd.

Mr. Tsukamoto, a founder of Kaga Electronics Co., Ltd. was envisioning a strategic talent development system (entrepreneurial/management development). The most important task for President Tsukamoto is “to develop young, motivated employees and provide an environment where they discover business opportunities and take on the challenge of new business ventures.” Kaga Electronics Co., Ltd. adopts an internal sectionalization policy that permits newly formed businesses to be operated as independent entities. Management of these subsidiaries is also transferred to employees who are willing to tackle the challenge. The corporation contains a large number of domestic and international consolidated companies where entrepreneurs and management executives are being developed. During job interviews, interviewers always ask applicants, “Do you have what it takes to become a leader for a new business venture?” As it is already apparent, Kaga Electronics Co., Ltd. has established a system that has inherited Mr. Tsukamoto’s entrepreneurial spirit. Kaga Electronics Co., Ltd. itself functions as a school to develop business managers. Management of the company also incorporates values and organizations that strongly reflect Mr. Tsukamoto’s devotion. In particular, it consists of a principle that emphasizes respect for human dignity with a unique talent educational system (and the presence of its corporate culture) based on the equation which focuses on “prohibiting occupation changes while welcoming a pursuit to become independent” = “a talent

system which cultivates business managers.”

(3) Representing an Innovation Type Enterprise: Toranoana, Inc., Mai:lish, and Sofmap Co., Ltd.

Toranoana, Inc. (publisher of comic books, etc.), Mai:lish (previously T-Zone, a maid café), and Sofmap Co., Ltd. (personal computer sales, etc.) are enterprises which have expanded their businesses incorporating the culture and values necessary for the times. This type of enterprise is particularly indebted to the presence of entrepreneurs. It is also imperative to note that they effectively utilize universities (Digital Hollywood University, Yoyogi Animation Gakuin, Tokyo Denki University, the University of Tokyo, Meiji University, Nihon University, Hosei University, etc) that serve as regional platforms. These universities provide students’ ideas and supply a demand that contributes to these corporations in areas of recruitment and clients.

This regional platform can be described as what Professor Benko G. refers to as “collective regional assets for the purpose of competition.”

(4) Representing an Enterprise Type with Exclusive Community Consciousness (Social Capital Type): Yodobashi-Akiba and the Computer Hall (the PC Hall) at Laox

According to a prior study, starting a store in Akihabara from other regions was extremely difficult and this is a testimony to why Akihabara is called an exclusive community. The reason for this exclusiveness may lie in a sense of common destiny that has bound the community together since the era of the street stall. Manufacturers have given Akihabara special treatment and such environments have been fostered over the years. This indicates that distinguishing whether or not other parties are trustworthy individuals (or enterprises) plays a significant role in an environment where it is impossible to control their behaviors. This appears to reflect the epitome of the Japanese social structure which emphasizes the “milieu” and is strongly conscious about a sense of “in-groups” and “out-groups.”

These examples indicate the presence of social capital, which is unique to the Akihabara region.

(5) Representing a Spontaneous Origin Type Enterprise: Ishimaru Denki Co., Ltd., Onoden and Tsukumo

This type of enterprise includes many long-established companies created by founders while conforming to the existing business industry environment in the Akihabara region. This means that these companies have adapted their business practices to what the times require in the Akihabara region. They have the history of developing their businesses to date utilizing a regional platform such as the Akihabara Consumer Electronics Promotion Cooperative.

Fig. 1 : Entrepreneurship in Akihabara

<p>❶ Spin-off Type: “Hirose Radio & Electronics Co., Ltd. → Kakuta Radio & Electronics Co., Ltd.” “Tomihisa Electronics, Co., Ltd. → Sakae Electronics Corporation, Iida Electronics Co., Ltd.” and many other enterprises “Shimura Musen → Okamoto Electronics Corporation” “Wawa Electronics Instrument → Sun Parts” and many other enterprises “Furutaka Electronics Co., Ltd. → ELNA Co. Ltd.” and many other enterprises “Yamagiwa Corporation → Ishimaru Denki Co., Ltd., Mansei Co., Ltd.” and other enterprises “Torii Dengyo, Inc. → Sansui Electric Co., Ltd.”</p>
<p>❷ Parting of the Ways Type: “Kaga Electronics Co., Ltd.” (← “Biolet Electronics Co, Ltd.” ← (Spin-off) “Sanko Electronics Co., Ltd.”) and many other enterprises many other enterprises</p>
<p>❸ Innovation Type: “Toranoana, Inc., Mai:lish (previously T-Zone), Sofmap Co., Ltd.”</p>

④ Exclusive Community Consciousness Type (Social Capital Type): “Laos PC Hall” and “Yodobashi-Akiba”
⑤ Spontaneous Origin Type: “Onoden” and “Tsukumo”

Source: Compiled by the author based on Nikkei Sangyo Shimbun (1982) “The Akihabara” Nihon Keizai Shimbun Co. pp.75-77 and interviews of entrepreneurs.

The following section shows examples of other talent development systems in the Akihabara region. Sakae Electronics Corporation, Iida Electronics Co. and many other influential enterprises (entrepreneurs) are products of a spin-off venture from a talent development institution (the Tomihisa School) at Tomihisa Electronics Co., Ltd. The same pattern applies to Furutaka Electronics Co., Ltd.

Similar to this spin-off example, interview results and company histories indicate that founders of trading companies that triggered the accumulation of the electronic parts wholesale industry organized these Akihabara radio stores, used them as learning institutions for product knowledge and industries, took advantage of network functions and then promoted additional strategies as well as entrepreneurial activities.

The aforementioned example suggests that this is serving as a learning region, which also works as a learning system for the Akihabara area. This indicates that regional regulatory mechanisms are functioning.

Fig. 2: Entrepreneurship type

Client Team	Yes	No
Yes	<Virtual Enterprise Type> (Informal, Hierarchical Type)	<Collective Development Type>
No	<Independent Maturity Type>	<Independent Development Type>

Source: Shinkin Chuokinko (2007)

This section analyzes **Fig. 2: Entrepreneurship type** and applies it to **Fig. 1: Entrepreneurship in Akihabara**.

(1) Spin-off Type Enterprise: “Kakuta Radio & Electronics Co., Ltd.”

Kakuta Radio & Electronics Co., Ltd. can be classified as an “Independent Maturity Type” based on Fig. 2.

This is an entrepreneurial type which acquires clients from an umbrella organization and principally becomes independent on its own rather than as a team.

(2) Parting of the Ways Type Enterprise: “Kaga Electronics Co., Ltd.”

Kaga Electronics Co., Ltd. can be categorized as a “Virtual Enterprise Type (Informal, Hierarchical Type)” in Fig. 2. This is a type of enterprise that implements new management methods with strategies (financial and inventory strategies). This type of entrepreneurship indirectly obtains clients from an umbrella organization or affiliated companies and then becomes independent with more than two individuals (or by an organization/team).

(3) Innovation Type Enterprise: Toranoana, Inc., Sofmap Co., Ltd.”

These enterprises can be classified as an “Independent Development Type” in Fig. 2. This is an innovation-type (innovations: technological innovations) entrepreneurship, which starts with no teams, organizations or client bases. However, Mai:lish (a maid café) is an exception since it conforms to a type of enterprise which spins off from an umbrella organization and is strongly influenced by path dependence from specific industries in the region (Figure and Anime industries in Mai:lish’s case). Therefore, Mai:lish can be categorized as a “Collective

Development Type.”

- (4) Enterprise Type with Exclusive Community Consciousness (Social Capital Type): “The Computer Hall (PC Hall) at Laox and Yodobashi-Akiba”
“Virtual Enterprise Type (Informal, Hierarchical Type)” in Fig. 2 is an appropriate classification for these enterprises. This is a type of entrepreneurship that pursues new management methods with strategies (regional strategies). This type of enterprise also indirectly acquires clients from an umbrella organization and adopts strategies to open stores using organizations and teams.
- (5) Spontaneous Origin Type Enterprise: “Ishimaru Denki Co., Ltd., Onoden, and Others”
“Independent Development Type” is a suitable categorization for these corporations. This is an entrepreneurial type that starts up a business with no teams, organizations or client bases.

The analysis result mentioned above suggests that all types described by the prior study (Shinkin Chuokinko (2007)) in Fig. 2: Entrepreneurship Type are prevalent in the Akihabara region. This means the region is rich in terms of human resources. Therefore, utilizing this advantage is essential in promoting regional innovation.

The Akihabara region is an extremely small area, a size equivalent to 600 square meters. Yet, the region contains all types of business establishments, about 60 publicly traded companies (including branches), and learning institutions that consist of approximately 20 universities. Using geographical proximity and regional platforms effectively (including a rich source of human resources), the area promotes entrepreneurial activities and regional innovation.

SUMMARY OF ENTREPRENEURSHIP IN AKIHABARA

- i) It is highly likely that a business establishment in the Akihabara region can be classified into one of five patterns and that enterprises which represent each type possesses unique talent development functions (including their corporate culture).
- ii) Akihabara has the presence of business establishment types that have been influenced by the unique culture fostered in the region. It is based upon “a culture with no fear of failure.” This is derived from the fact that career development process for entrepreneurs in the Akihabara region has Asyl (sanctuary)-like elements. Still, entrepreneurs with high entrepreneurial spirit were born due to Akihabara’s function as an Asyl (sanctuary) space.
- iii) Based upon i) and ii), the Akihabara region has a climate and framework (regional platform) which promotes entrepreneurial activities.

“Regional platform” in this context also includes the presence of talent development institutions owned by enterprises located in industrial regions (schools, training institutes, communication education systems, talent development systems unique to these enterprises). It also encompasses the existence of universities and vocational schools in these regions, unions for each particular industry and NPOs. As for the Akihabara region, “regional platform” also covers the presence of entities such as the Public Corporation of Chiyoda Community Planning Promotion and the Akihabara Consumer Electronics Promotion Cooperative.

Therefore, these entities can be described as what Professor Benko G. calls “collective regional assets for the purpose of competition”.

IV. EVOLUTION OF INDUSTRIAL CLUSTER and the BUSINESS ECOSYSTEM

1. Akihabara industrial cluster: Evolution

The history of specific industries in Akihabara illustrates the mechanisms for why certain industries gather there (Fig. 3:

Akihabara: Development and Innovation - Yamada 2011).

Re: Fig. 3: The graphic plots corporate strategies of 7 Leader Corporations and shows the evolving industrial structure of Akihabara against time.

For each corporation, industry life cycle is illustrated thus: Formative Phase (○); Peak Prosperity (●); Decline Phase (△); and then dissolution. Each industry passes through each phase of this life cycle, from formation through to decline and ultimately dissolution. This cycle occurs across several companies due to businesses gathering in the same location - an external economy (regional external economy).

There are benefits for businesses coming together in the same geographical area. There is an old theory that advantages are created when businesses gather in a specific area. These advantages are passed down to future generations. Marshall, A. supports this theory.

Understanding of the law of increasing returns as a recent intellectual discovery has led to debates on regional external economies (Marshall A.). Marshall stresses the unique significance of the regional external economy and general verification methods of the external economy concept. Marshall states that information exchange merits come from having companies in same industry in the same area. The area has advantages: a deep labor market, large enough to be an effective regional market and efficient enough to sustain intermediate suppliers of goods. The effect of these businesses grouping together creates a regional external economy. In this case the regional external economy has led to the evolution of the industrial cluster.

Marshall's concept of external economy can apply to Akihabara. This external economy is due to three reasons: (1) Information Sharing due to Information Spillover; (2) The existence of non-commercial production factors due to regional limitations and (3) A pool of proficient workers located within the cluster in question.

(1) Information Sharing due to Information Spillover

In Japanese industrial clusters, it is difficult to imagine a scenario where employees of one company actively exchange information with the employees of another company. However, fieldwork in Akihabara revealed a high degree of face-to-face meetings, social events, etc. where much information was freely exchanged. The degree of secret technical information that was shared between companies through this spillover could not be confirmed, but information such as sales trends, strategies, and product line-ups, etc. was shared. This can be considered unique to the compact 600 square meters Akihabara area. The concentration of companies in the same field as well as other fields in this small 600 square meters area is complimentary. Publicly traded companies involved in the same line of business numbers some 60 firms (IT, PC sales, electronic components, semi-conductors, mass merchandise, etc.), added to a number of legacy firms and outlets, results in a number of clusters. Cluster theory promotes the benefits of proximity (reduced information costs).

(2) The Existence of Non-Commercial Production Factors limited to Akihabara: A collective regional asset for competition

If non-commercial production factors exist only in a specific industrial cluster, that cluster has a competitive advantage. Historically, Akihabara has served as a cluster of the manpower, services, organizations and facilities required by these economic activities. In particular, as each sector is represented by an organization (the Akihabara Electrical Town Organization, the Federation of Electronic Component Wholesalers, etc.) that performs a networking function and provides corporate services. Legacy businesses located in Akihabara have

their own institutional approach to foster human resources. Akihabara was the historical site of Tokyo Denki University (Tokyo Electric University). More recently, the Akihabara Dai Biru and surrounding buildings house 20 schools and colleges and industry-academia-government collaborative robot development projects.

Akihabara is home to many entrepreneurs, support systems to help industrialists succeed and a network of entrepreneurs.

For many years Akihabara has been a ‘venture city’ (the whole ‘city’ as an incubation function) combining competition and cooperation.

As shown above, Marshall’s non-commercial production factors do exist, but Prof. Benko G.’s (Université de Paris I-Panthéon Sorbonne) theory of “collective regional assets for the purpose of competition” gives a more multi-faceted analysis. Regional communities need identity and governance. If these items are not in place information spillover does not occur. Businesses rely on this to run their market operations smoothly and to grow through industry specialization (regional specialization and social segregation).

With a variety of collective regional assets for competition, combined with increased specialization, it should be possible to develop a region like Akihabara. Benko G.’s approach tallies with Jacob’s theories of urban development.

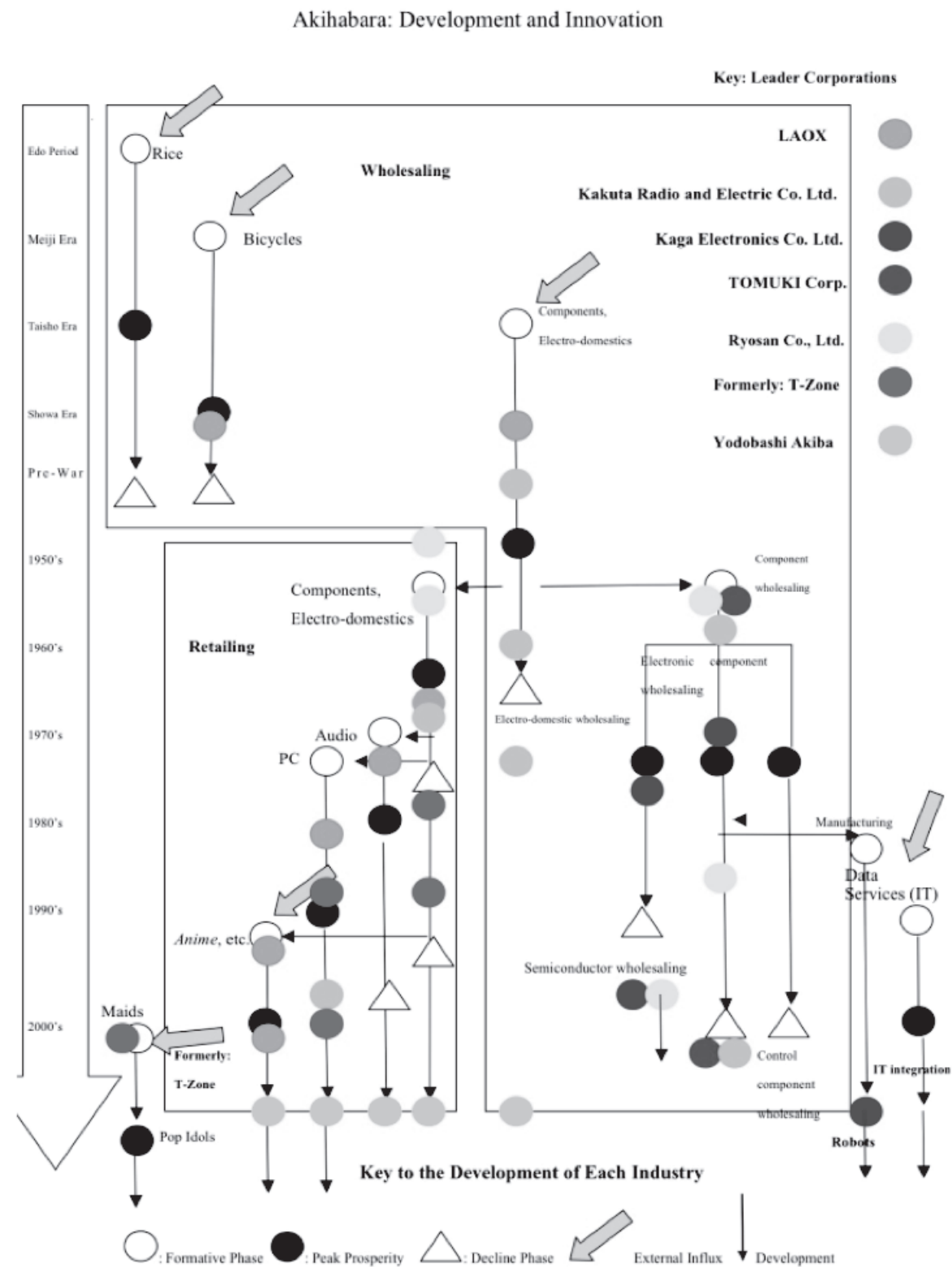
(3) Akihabara and the Pool of Proficient Workers

One great benefit to businesses concentrated in Akihabara is easy access to a pool of workers disposed to the industries in question, keeping HR training costs down and contributing to more information spillover. As observed from the surveys carried out of the 7 leader corporations (Fig. 3), a number of factors has shaped Akihabara’s evolution: the appearance of new businesses, changes to existing businesses, external agents (entrepreneurs) new abilities, businesses developing/growing and the effect of industry-academia-government collaboration on the labor pool.

The evolution of the industrial cluster requires three essential factors to be in place: (1) Information spillover; (2) Non-commercial production factors (collective regional assets for the purpose of competition) and (3) A pool of proficient workers. These three factors underpin an external economy that drives the evolution of the industrial cluster. Akihabara has factors (1), (2) and (3) in place.

Considering an external economy in effect in Akihabara, as observed in Fig. 3.: Akihabara: Development and Innovation, changes to existing businesses and specialization (complimentary for subsidiary businesses) occur alongside the evolution of the industrial cluster (subsidiary businesses, specialization across the whole area).

Fig. 3: Akihabara: Development and Innovation



Source: Yamada (2011)

Furthermore, analysis of specialization in Akihabara from the perspective of region (milieu) and business considers the area.

2. Historical Analysis of Specific Industries in Akihabara

Akihabara's development is shown in patterns A (wholesaling), B (retailing) and C (external influx). Refer to Fig. 3 to follow patterns A, B and C.

A (Wholesaling)

Rice - Bicycles - Components - Electro-domestics - Electronic Components - Semiconductors - Control Components - Manufacturing - Specialization: Manufacturing Robots, etc. / Data Services: IT

B (Retailing)

Components - Electro-domestics - Audio - PC - anime and figurines

C (External Influx)

Data Services: IT / Maids / Pop Idols (AKB48, etc.)

The industrial cluster has developed and specialized (including subsidiary businesses) in the manner shown in pattern A (wholesaling). This level of specialization is difficult to achieve in retailing (pattern B) but through the application of corporate strategies appropriate for the external environment, retailers can change the nature of their industry and as a result the industrial cluster continues to evolve. For example, (refer to Fig. 3) the key shows the orange circle that denotes the company LAOX - whereby it is possible to track the evolution and decline of this company.

The Evolution and Decline of LAOX (indicated in Fig. 3 as ○ (orange color))

Repair of light bulbs on bicycles - radio component wholesaling - electro-domestic wholesaling - wholesaling and retailing of electro-domestic items (subsidiary businesses) - electro-domestic retailing - audio retailing - anime goods (anime-related hobby goods sold through Game-kan and Asobit City) - ○ (formation) - △ (decline) - in 2009 LAOX was assimilated by SUNING, a large Chinese electro domestic mass retailer.

By analyzing the corporate strategies put in place by LAOX against time (Time Map Analysis), it is apparent LAOX was able to implement strategies promptly, with flexibility to the external environment. These policies were part risk avoidance, part a response to external conditions.

However, as is clear from Fig. 3, external influxes (the blue arrow) show trends and items from outside Akihabara such as: rice, bicycles, components/electro-domestics, retailing of anime-related goods and pattern C: (External Influx) Data Services: IT/Maids/Pop Idols (AKB48). Manpower with new skills and abilities (entrepreneurs) as well as new information is brought into Akihabara from outside. Companies are established, develop and trigger a further evolution of the industrial cluster.

In this manner Akihabara has undergone three types of industrial development: 1) Specialization (subsidiary businesses); 2) Adaptation to external conditions; 3) A basic path dependence exists but there is an external influx. As a result the Akihabara industrial cluster has undergone evolutionary changes.

However, as is apparent from Fig. 3, for approx. 65 years after the end of WWII Akihabara was able to survive due to changes to industry itself. But any industry that enters into a period of prosperity (● [black color]) is fated to go into

decline (△) and eventually disappears.

In Akihabara, as one industry falls into decline another industry comes in from outside, triggering a further evolution of the industrial cluster (specialization across the area as a whole) and the area continues to survive.

3. Akihabara: Development & Innovation - Lock In

In concrete terms, this refers to people in the same line of business, affiliated industries situated in the same geographical location (cluster) and the subsequent reduction in mutual trading costs (distribution and information costs) as well as greater profits for companies supplying components, goods and services. Area power can also bring other added values and synergies, such as the ability to source and foster excellent HR and encourage innovation, contributing to the development of the cluster in question.

The next step for the region is to establish a regional brand, and then start to function as a production system. Later, companies active in the cluster create a new cluster and reap the benefits, and in accordance with the law of increasing returns more businesses arrive to join the cluster. The cycle repeats itself, companies develop, industries grow and the region develops. The regional brand takes shape through innovation and synergies are created. This can be considered as an industrial cluster effect.

The law of increasing returns applied to this situation concentrates people, goods, money and information, etc. in a specific region (Akihabara), the result is a mechanism that causes a spatial disparity to grow going forward. In Akihabara, companies that emerge victorious from competition will collect more profits and develop into leader corporations in their particular industries with much of the technical and competitive advantages concentrated in their hands.

Accordingly, the law of increasing returns creates a structure and mechanism that can be considered to add to the uneven nature of cluster.

With reference to Fig. 3, the law of increasing returns applies from formation (○), leveraging economies of scale the market is characterized by a great number of companies congregating until the period of peak prosperity (● [black color]). However, from peak prosperity (● [black color]) to decline (△) or until a particular industry disappears, the law is reversed and diminishing returns becomes the norm. This phenomenon, where companies are unable to secure income and fall into decline, is a form of lock-in and companies have to create new corporate strategies, the drawback being that these companies are unable to generate new strategies - the law of diminishing returns.

Companies in an industry stuck in this loss-making (negative) lock-in effect, even successful leader corporations, are unable to change their trade and pursue a new business model. Companies at this stage of their evolution, even if they are able to somehow turn towards another type of business, face considerable switching costs and are often unable to change their corporate strategies - again, the law of diminishing returns. The industry in question then heads into decline. In particular, long-established companies are often unable to forget what was successful for them in the past and are especially prone to dilemmas when considering innovation.

V. CONSIDERATIONS

As the aforementioned analyses suggest, the Akihabara region has all types of entrepreneurship.

In addition, the Akihabara region functions as an Asyl (sanctuary) space, producing unique entrepreneurs and continuously

providing competitive superiority in the area.

With these aspects in mind, redevelopment plans with strong public works elements may trigger the destruction of the Asyl (sanctuary) space, although the Tokyo metropolitan government and the residents have jointly devised such projects. The number of visitors has increased due to the Tsukuba Express currently in operation and the implementation of more conducive atmospheres created by the establishment of the Daibiru, UDX and Yodobashi-Akiba in front of the Akihabara Station where general consumers felt less comfortable to visit since it was once considered to be a space for otaku experts. However, many people are also concerned that the market-oriented space provided by the “good old Akihabara” may fade away. Changes signified by the shutdown of T-ZONE, the reduction in business operations by Laox, and the acquisition of Sofmap by Suning Appliance are probably an outcome of market activities. Yet, transitions are also continuing in Akihabara. The atmosphere in the back alleys and under the girder bridges still exists. However, it is possible that this may disappear in the future.

The retirement of the entrepreneurs who exerted leadership during the dawn of Akihabara has also contributed to this phenomenon. As displayed by Yamamoto Chozo who dealt with the GHQ or Taniguchi Masaji of Laox, the survival of the Asyl (sanctuary) space in the future depends on the emergence of such charismatic talents who can bring the residents of Akihabara together. Moreover, this will play a significant role in the revitalization of Akihabara in the coming years.

With regard to the mechanism of industrial cluster in Akihabara, conclusions are listed below. However, there are exceptions. For example, these theories were not checked against all companies. There may be companies or sectors that, since the time they were established, may have been able to continuously grow income and profits without any dip in revenues, in which case the conclusions below will not apply. These observations apply to the 7 leader corporations and their specific industries in Akihabara’s industrial cluster. Taking into account these possible exceptions, the observations and conclusions are as follows:

Firstly observations of Akihabara as an industrial cluster, broken down into four 4 main phases. (The breakdown is across 4 phases in order to keep the explanation simple; in an actual case example there would be numerous phases involved.)

Phase 1: Keep Costs Down (Developmental Phase)

On a basic level, this phase refers to the reduction in trading costs that results from a concentration of parties involved in a specific field at one location, which in turn attracts people involved in affiliated industries. Alternatively, either fortuitously or at random, parties involved in affiliated industries may find an accumulation of businesses involved in a specific field nearby. This is the formation period (○) in Fig. 3.

These examples are illustrated in Fig. 3.

Ryosan (indicated as ○ (yellow color) in Fig. 3) was an electro-domestic retailer that was able to adapt to new conditions and evolved into a semi-conductor wholesaler. Ryosan is a case example for this phase to explain the mechanism of the industrial cluster. Mori Tomishio established Ryosan in 1947 as the Mori Trading Co. in Suginami Ward, Tokyo. The company was initially an electro-domestic retailer. In 1952, the head office moved to the Matsutomi Building in Akihabara and in 1953 Ryosan Electric Ltd. was founded (that year the Mitsubishi Group was performing strongly and in order to hopefully ape their success, the company name Ryosan was chosen as a reversal of the characters mitsu (san) and bishi (ryo)). At that time, the main business in Akihabara was the sale of radios and radio components to the Tohoku (NE Japan) area.

In 1956 Ryosan changed to an electronic component trading company (wholesaling electronic components) and in 1975

Ryosan became an official agent of NEC and changed once again into a semi-conductor trading company (wholesaling semi-conductors). In 1983 the company was floated on the second section of the Tokyo Stock Exchange. The business continued to flourish and the stock was consequently promoted to the first section of the TSE. Ryosan is still to this day one of the leading companies in Akihabara.

As per the explanation above, Ryosan was established outside of Akihabara, but when the company decided it needed to expand as an electro-domestic retailer the benefits of the cluster of similar businesses meant that it had to move to Akihabara. It is thought that many similar companies followed Ryosan's example and flowed into Akihabara.

Moreover, it is apparent that, having made the move to Akihabara, Ryosan noted that on a basic level the market for electronic component wholesaling was growing due to a preponderance of similar companies in Akihabara, and so in 1956 the company planned on a sea-change in the industry as a whole and took the bold step of changing its corporate strategy to embrace electronic component wholesaling. At that time, companies such as Tomuki (formerly: Tokyo Musenkizai), indicated as ○ (purple color) in Fig. 3) and Kakuta Radio & Electric (indicated as ○ (green color) in Fig. 3) also joined the electronic component wholesaling industry.

In this way, this initial phase shows how a collection of companies involved in a specific field can keep trading costs down. This is the formation period (○) in Fig. 3.

Phase 2: Growing Revenues (Developmental Phase)

This phase concerns the growth in revenue of suppliers, businesses that supply components and services required by the companies making up the initial cluster. Following formation (○) as shown in Fig. 3 this phase tracks the growth of the market and is illustrated as the period between formation (○ and peak prosperity ● ([black color])). By examining Fig. 3, it is clear that a great number of industries accumulate together during this juncture. This is also the phase where the law of increasing returns starts to apply.

Kaga Electronics (indicated in Fig. 3 as ○ (blue color)) is an electronic component wholesaler and was established during this phase. Entering the industry at this point means that the law of increasing returns is the principal driver and it is possible that Kaga Electronics' rapid growth was due to the timing of its entry into the market.

Phase 3: Increase Added Value (Developmental Phase)

Affiliated industries form groups, expanding and networking. This is the phase of "area power". Area power is denoted by innovation, safety (risk avoidance) and regional branding (a future competitive advantage). Looking at Fig. 1, this phase lies both immediately before and after peak prosperity (● [black color]). At this time, the effect of the law of increasing returns is at its very peak as are the added values for companies active in the cluster. The 4 cases given below give concrete examples as to how the law of increasing returns has influenced Akihabara.

- (1) Reducing costs related to finding and accessing external experts or specialists in the area in question (investment factor conditions)

The electronic component wholesaling industry (electronic component trading companies) set themselves up as the *benri-ya* or 'handymen' of the trade, confirmed by participant observations and interview surveys taken in Akihabara. This business model was suitable for adjusting to specific orders for electronic components, known as 'kitting', and keeping costs down on sourcing and accessing the *benri-ya* external specialists and experts (low trading costs).

- (2) Presence of a large number of vendors selling regional interim assets and services (presence of affiliated and support industries)

The PC sales industry (PC retailing and wholesaling), leads to the presence of affiliated component trading companies, affiliated component vendors, mass merchandisers, support staff at these mass merchandisers and other retailers seconded from PC manufacturers themselves, as well as repair shops offering PC repairs and other related services.

Moreover, in Akihabara one can also confirm the presence of many research organizations, universities, university researchers and technicians, venture manufacturers, venture data service entrepreneurs, NPO activities, etc. and other support organizations. These are all recognized to be latent resources. The relationships that exist between these bodies, although not completely visible, are a manifestation of the 'promise' of Akihabara and forms the basis of the Akihabara regional brand. One could also refer to these relationships as the social capital of Akihabara.

- (3) An Easy-to-Enter Market (A market open for testing: demand conditions)

It is possible to ascertain the presence of the considerable demand that exists in Akihabara. This is true not only for both retail and wholesale, but also for new service providers - Akihabara is an excellent location to catch demand. An example would be testing the market for demand related to the otaku (enthusiast, geek) market and the robot market, etc. Looking at Toranoana Inc., as a company that taps into these sub-culture markets, they were able to create a market from one that did not exist beforehand through researching industry needs and discovering a niche market through test marketing to observe customer trends. Toranoana was able to make a success of its market entry in this way. Moreover, Kaga Electronics is one example of several whereby a company has entered into an industry-academia-government collaboration and used this venture to enter into the robot industry.

- (4) Chances to Innovate based on Human Exchanges (Competition and Cooperation)

Many of the trends in the anime industry begin in Akihabara. An example would be the anime industry developing an offshoot in the form of the figurine industry, which in turn spawned maid culture, which in turn led to maid cafes, grouped as they were in Akihabara (as of July 2009, there were around 200 outlets that were related to the maid phenomenon). One point to note is that the maid café was actually an external influx from Shibuya, with the first café being the Cure Maid Café. Following on from that, path dependence (or copying) led to the CEO's office of the former T-Zone corporation being turned into a maid café known as Café Mai:lish and this triggered the rapid accumulation of maid cafes in Akihabara (refer to Fig. 3).

Moreover, maid cafes have appeared in Toronto, Canada as well as Paris, France and Russia (exported from Akihabara) and their popularity is growing. The proprietors may be Chinese and French, but their popularity is impacting both domestic and overseas tourism. This is one example of Japanese otaku sub-culture reaching overseas from Akihabara.

Furthermore, with regard to anime and figurines, there are cases of innovation regarding the characters from Neon Genesis EVANGELION as used in the pachinko (Japanese gaming device, similar to vertical pinball) industry (of course, this also impacts the semi-conductor industry, the control component industry and the electronic component industry - for example the corporate strategies of both Kaga Electronics and the pachinko industry as a whole).

As shown above, Akihabara is a key in creating trends that touch many different industries as well as stimulating

innovation through human interaction, in addition to acting as a channel for exporting Japanese subculture. The expressive power of Akihabara culture can also contribute to the evolution of the Industrial cluster.

Looking at points (1) through (4) above, working to strengthen “area power” contributes to the law of increasing returns. An area in this situation starts to create its own social capital. At this stage a sense of local community is vital.

One more example of Phase 3 - the company formerly known as T-Zone (indicated in Fig. 3 as ○ [red color]) entered Phase 3 as a PC retailer. LAOX (indicated in Fig. 3 as ○ [orange color]) was active in anime-related goods at this time. As you can tell from their respective cases, both companies were seeking some form of added value and as new players in Phase 3, both were looking to grow their companies at this time.

Phase 4: The Lock-In Effect and Diminishing Returns (Decline Phase)

After Phase 3 comes the transition from peak prosperity (● [black color]) towards decline, as observed in Fig. 3. As with the lifecycle of a company, industries also have their own lifecycle. Once an industry has reached the pinnacle of its prosperity (● [black color]), it starts to trend towards decline. Each specialized industry trends this way and companies locked in to these particular industries follow the same trend. Just before or after Phase 4 these businesses invariably try and change their corporate strategies, develop new businesses or alter their business category. However, by the time they get this phase in the industry’s lifecycle, the switching costs associated with such a change are usually very large and companies find it difficult to change their corporate strategies and they continue locked in to a decline industry -the law of diminishing returns. The industry continues to decline and eventually disappears.

Of the 7 leader corporations represented in Fig. 3, only one currently finds itself in Phase 4: Yodobashi Akiba (indicated in Fig. 3 as ○ [sky blue]). Fundamentally, no company will join an industry in Phase 4, because the chances to innovate are too few and far between.

However, as shown in the case of Yodobashi Akiba, with the right corporate strategy - namely leveraging economies of scale, selling items over the internet across a variety of industries and structuring distribution in a new way, it is possible to enter into this market and secure new customers that were previously out of reach. A corporate strategy to combine the convenience of the internet with one store where shoppers can see and touch every single item in the product line-up, in addition to a location in front of Akihabara Station that has been praised for its ease of access - all of these factors add up to a type of retailing that has not been seen before in Akihabara and an overwhelming advantage for Yodobashi Akiba. In particular, it has been a very effective corporate strategy for Yodobashi Akiba to combine both the real and the virtual in one location.

During this period of decline in this industry, the corporate strategy (regional strategy) of Yodobashi Akiba has been the only recent innovation in Akihabara as market demand continues to fall. Following the success of Yodobashi Akiba, Yamada Denki also opened a store in front of Akihabara Station.

Akihabara has been home to an industrial cluster for over 90 years and in the past +65 years, following the end of WWII, the cluster has continued to evolve. Industries have changed through the 4 phases and industrial cluster mechanisms described above and this cluster will continue to evolve going forward. As industries develop and succeed (anime, figurines, maids, pop idols (AKB48), manufacturing, IT, etc.), new industries replace the old. This ability to change from one industry to another, as shown by the corporate strategy (regional strategy) implemented by Yodobashi Akiba, is the only way to break out of the situation that locks in companies to failure when their specialized industries start to decline. These important decisions depend on the initiative of those at the top of these corporations. Entrepreneurs create these

corporate strategies and implement them.

Finally, when considering the whole of Akihabara (Fig. 3), the current situation, with Akihabara consisting of specific industries and specialization (social segregation), requires change to develop a business ecosystem (milieu) that allows simple (i.e. non-specialized) businesses to flourish. Path dependence and occasional fresh DNA (information, etc.) from inside and outside the region allows for the social segregation of the Akihabara market environment. Akihabara can make use of the merits of its industrial cluster that made it such a stimulator of demand in the Japanese economy in the years after WWII, as well as contributing to innovations (technical and process innovation), as it evolves as an urban creative center.

VI. CONCLUSIONS

Historical analyses reveal that the Akihabara Region has evolved with the Japanese economy. When an industry experienced high demand, Akihabara became a driving force to lead such demand despite its rise and fall. In addition, Akihabara needed to become the forefront of Japanese industries and continues to have attracted otaku in society by building the space recognized as “AKIBA” (Asyl [sanctuary] space) in the Akihabara region. This shows various types of human resources concentration.

Captious customers (otaku) with profound knowledge are also present in this concentration of human resources. This is equivalent to what Marshall, A. calls “a pool of proficient workers (skilled laborers)”. Among them include many entrepreneurs who participate in entrepreneurial networking. This is also an extremely competitive space as well as space for cooperation. A concentration of complementary industries (collective social capitals) and talents in the space called “AKIBA” generated information spillover (circulation of information). This also brought about an external economy and led to a transition of industry to overcome impoverishment, even as the region faces difficulties. This process represents the social specialization of industry in the Akihabara region, allowing innovation to take place in order to overcome economic impoverishment. While path dependency played a role in this development, the Akihabara Region has managed to survive by actualizing the specialization of many industries. The region first began with the accumulation of electronic components and then caused not only product innovation but also process innovation. This development eventually led to transitions to the anime industry, followed by the maid café industry and then the pop idol industry (AKB 48). In some aspects, the Akihabara Region has utilized the Asyl (sanctuary) space and its secret manner (a function of a learning region). The Asyl (sanctuary) space is a product of transforming industry via continuous competition and cooperation. AKIHABARA will remain viable as the world’s AKIHABARA by using this Asyl (sanctuary) space.

(Policy Implications from the Akihabara Region)

- i) It is essential to have a process (talent development system, entrepreneur development system, or management ability improving system for entrepreneurs) that helps transform management information (especially the information on market demand) into business (corporate) strategies within enterprises or in a regional platform created within the area.
- ii) Diversity (all types) within the region is necessary for enterprises and talents. This will lead to the application of: “a concentration of human resources” consisting of entrepreneurs and otaku (including customers). As a result, diversity as a source of creation will play an important role in transforming industries. This phenomenon is defined as “innovation through intra-business specialization”. This reduces business-to-business costs and is a trigger for revolutionizing the city (region) business model. It also promotes business model innovation in the city (region) as an open innovation. This is referred to as the systemic socialization of innovation.
- iii) Enterprises consider the direction of their management strategies (corporate strategies and regional strategies). In addition to corporate diversity, the application of an organization (regional platform) that can help solve issues that

need to be resolved cooperatively in the city (region) is necessary.

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