

Chapter 18

The Concept of Town Equity and the Goal of Urban Development



Saburo Saito

Abstract The concept of “town equity” is defined, and the meaning of “the goal of urban development” is clarified.

Keywords Town equity · Goal of urban development · Information evolution · Town walking · Hypertext city · Visit value · Brand equity · Asset of attractiveness · Consumer’s mind

1 Information and Evaluation of Town

In this chapter, we define the concept of “town equity” and clarify the meaning of “the goal of urban development.”

1.1 Information Evolution of Town Walking: Information and the Hypothesis on the Attractiveness of Town

The Hard Trick for Information Evolution: Canal City Hakata as an Example

We have a hypothesis about the attractiveness of towns. The commercial complex, Canal City Hakata, located in the city center district of Fukuoka City, is a very popular commercial establishment where people enjoy themselves by staying and spending their time. One of the unique characteristics of Canal City Hakata is that its

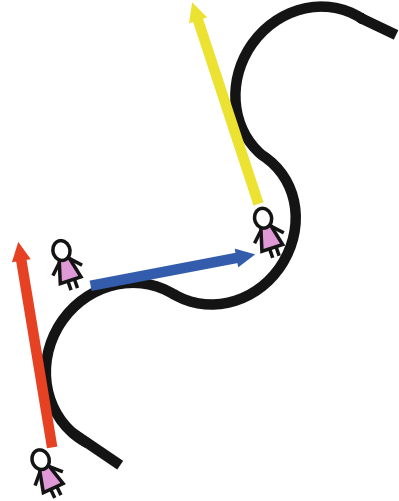
S. Saito (✉)

Faculty of Economics, Fukuoka University, Fukuoka, Japan

Fukuoka University Institute of Quantitative Behavioral Informatics for City and Space Economy (FQBIC), Fukuoka, Japan

e-mail: saito@fukuoka-u.ac.jp

Fig. 18.1 Information evolution of town walking



facility has a complex building design that uses many curves. The question then arises as to why there are so many curves.

I have interpreted the design as shown in Fig. 18.1. When people walk in the valley of a curve, their field of vision is limited. However, as they gradually walk toward the curve's mountain, visibility is regained, and the next valley appears for the first time. My interpretation is that this may be linked to "a feeling of excitement" when walking inside the facility, which then might become an element of attractiveness of the facility.

We call this mechanism that the new information jumps in one after another while walking around a town as the "information evolution of town walking."

Actually, our hypothesis is based on the idea that the attractiveness of town walking may consist in the information evolution of town walking. In other words, our hypothesis postulates that the attractiveness of a town lies in the possibility of discovering unexpected information and new information while walking around a town.

Therefore, our hypothesis infers that the facilities with many straight passages, lines, and good visibility would be less attractive than those with many curves because with straight passages, the things you can see ahead now from afar will just come closer to you as you walk through those passages without any unfolding of new or unexpected information.

According to this hypothesis, the fact that many curves were used throughout Canal City Hakata can be thought of as a trick that uses hard physical space as a means for effectively inducing the information evolution of town walking^{1,2}. In

¹As for the information evolution of town walking, refer to Saito [7].

²A new hotspot in Shanghai, Xintiandi, utilizes many cross intersections between division lots like traditional hutong, which is said to borrow the idea of the curves in Canal City Hakata.

short, many curves in Canal City Hakata can be regarded as a hard trick for information evolution.

The Soft Trick for Information Evolution: The Concept of Hypertext City

Thinking this way, the idea spreads. To enrich the information evolution of town walking, not only the hard tricks but also the various soft tricks can be utilized. Outdoor performances such as events, street performances, and musical and singing performances taking place inside a town can be regarded as examples of the soft tricks to stimulate the information evolution of town walking.

We remembered that in the early days of the Internet, the hypertext in which various WWW URL links were embedded in a plaintext had given us a great impact and appeal. Drawing the analogy between the hypertext and the information evolution of town walking, we once developed the idea of “Hypertext City.” The Hypertext City is defined as a city in which real links or real agents are embedded in the city, and people who visit the city can make semantic interactions with the city through various information and intelligent mobile devices. We have advocated the implementation of the “Hypertext City Plan.”³

While from the start real links in a town were supposed to be intelligent agents, the remarkable rapid progresses in technological innovations including smartphones, mobile ICTs, the IoT, and wearable technology are enhancing the feasibility of creating such a Hypertext City environment. However, as will be seen later in [Chap. 20](#), recording and analyzing systematically what kinds of interactions are made between individual consumers and the information provided by the city is an attempt that has just begun.

Thus, it is still a future work to verify whether or not the individual consumers have increased their evaluation of the city through their experience of the information evolution of town walking inside the city while recording the detailed history with respect to what kinds of semantic interactions they have made with the information provided by various agents embedded in the city. In this sense, the hypothesis of “information evolution of town walking” is said to be a current working hypothesis of ours.⁴

³As for the idea of Hypertext City, refer to Saito [6, 7] and Saito, Nakashima, Kakoi, and Igarashi [10].

⁴As an indirect evidence for the hypothesis of information evolution of town walking, we have the result of the measurement of time value of shopping (Cf. Saito, Yamashiro, Kakoi, Nakashima [11] and [Chap. 10](#) of this book). According to the result, when we compare consumers’ time values by their purchase attitudes, among the three purchase attitudes, “coming to preview goods and prices,” “thinking about buying if there are good products,” and “a definite intention to buy the items,” the highest time value is “thinking about buying if there are good products,” the next is “coming to preview goods and prices,” and the lowest is “a definite intention to buy the items.” This means that consumers give a great value to the discovery of new good products on shopping, which indirectly supports our information evolution hypothesis.

2 The Concept of Town Equity

2.1 *Dynamics of Changes of Hotspots Within a City Center District*

Here, we take up an example of the city center of Fukuoka City. A town changes dynamically. Its changes are not limited to the construction and redevelopment of physical facilities located in the town. The value of the town has drastically changed according to the change of how people would evaluate the town.

In the city center of Fukuoka city, before 2000, the street of *Oyafuko-dori* located in the north of Tenjin district which is a core part of the city center of Fukuoka was quite a popular and vibrant hotspot. Young people had been gathering together there from all over Kyushu region every weekend night. *Oyafuko-dori* is a street not so wide with two sidewalks at both sides across two lanes for autos, which was once a path from the station to the preparation school for the high-school graduates who were preparing to take the entrance exam of the university. This is the origin of the street name, whose meaning is “not-filial-piety-street.” At both sides of the street, there were and are many small restaurants, snack bars, live houses, mini theater, and night clubs. However, the popularity of the street had plummeted down because of factors such as the deterioration of security and the opening of adult entertainment businesses, and the hotspot had shifted from *Oyafuko-dori* to *Daimyo* district, another part of Tenjin district.

This instance demonstrates that city center hotspots have been changing dynamically depending on their popularity among people. If a town loses its popularity and people do not gather, the value of the town as real estate would also fall sharply. In other words, the changes in visitors’ evaluations of *Oyafuko-dori* have greatly changed the value of the town. That is, people’s evaluations of the town greatly affect its value.

Therefore, a town that is conscious of this fact has realized that people’s evaluations should be regarded as a “town brand,” and the town brand should be required to be maintained, nurtured, and managed.⁵

2.2 *Brand Equity*

From the concept of “brand,” it is easy to extend to the concept of “brand equity.” To clarify the goal of urban development, in the next section, we will introduce the concept of “town equity.” Here, “town equity” is a term coined by the author borrowing from the analogical term, brand equity.

⁵*Marunouchi* district, a business district adjoining to Tokyo Station, is an instance. Also see Saito [5].

We explain the concept of brand equity using a hypothetical numerical example. Suppose that 10,000 people are willing to pay 10,000 yen more for cosmetics with a famous brand name than for cosmetics with no brand name. Suppose that these people buy the famous cosmetics 100 times a year. The annual sales of the company producing those cosmetics with the famous brand name will be increased by 10 billion yen.

In other words, just by being the cosmetics with a famous brand name, the increase of the revenue or the additional cash flow would be 10 billion yen per year. If the additional cash flow continues forever, it is the same as getting the annual interest, 10 billion yen every year forever. Dividing the amount of the annual cash flow by a discount rate, say 5%, gives the asset value of this cash flow, which equals 200 billion yen.

In short, if one has a deposit of 200 billion yen at a bank with interest of 5% each year forever, one will receive the interest income of 10 billion yen every year forever. This stream of the interest income is equivalent to the above cash flow of 10 billion yen per year generated by the famous brand name. Thus it is known that the name of the famous brand that generates the additional cash flow should be regarded as something that is the same as the monetary asset of the deposit of 200 billion yen. Therefore, the famous brand name, something like monetary asset, is called “intangible assets” in contrast to the visible assets like money, buildings, and lands.

Consequently, the value of the intangible asset corresponding to this additional cash flow accrued to the name of brand is referred to as “brand equity.”⁶

As for the brand equity, the important point that should be noticed is that while the brand equity is the asset of the company which owns that brand, it is not the asset such as buildings or lands the company owns but the asset that is fostered in the minds of consumers who transact with this company.⁷

2.3 *Definition of Town Equity*⁸

Thinking in this way, we notice that the same is true for towns. Based on the concept of brand equity, “town equity” is defined as “the value of the asset of attractiveness of the town which is fostered in the minds of visitors who visit the town.”⁹

⁶As for the brand equity, refer to Aaker [1].

⁷The recent uses of the concept of brand equity appear in terminology such as “place branding” or “tourism destination brand equity,” which is similar to the concept of “town equity” (Cf. Gomez, Lopez, Molina [2]).

⁸The author used for the first time the word, “town equity,” in the 20th anniversary symposium on “Urban Revitalization and Town Equity” held by Japan Association of Real Estate Sciences in 2004. (Cf. [3, 4])

⁹The term, “town equity” was first defined by Saito [4]. Also refer to Saito [7].

Several things to note about the concept of town equity are in order. The most important point to notice about the concept of town equity is that the value of the asset of attractiveness of the town is first defined at each individual micro-behavioral level in terms of the value of the intangible asset which is fostered in each mind of individual visitors. In other words, the town equity is first defined as a disaggregate concept. Thus the value of the asset of attractiveness of the town is first defined as the values which are fostered in the minds of visitors to the town, and then the town equity is defined as the aggregated value of them.

In addition, the concept of town equity may well be applied to a small district such as *Daimyo*, one district in the city center of Fukuoka City, or the whole area such as the entire Fukuoka City since the value of the intangible asset which is fostered in the minds of individuals does not restrict the area applicable. This is similar to the concept of brand equity which can be applied to one product or the line of products such as super brands.¹⁰ Therefore, the concept is equally applicable to sightseeing spots and historical sites. It should be further noticed that since the concept of town equity is defined by the value of the asset, the town equity for a particular area can actually be measured in terms of money.

When constructing the concept of town equity as the values perceived by individual visitors, we notice that the goal of urban development, which had not been clearly conceived of so far, is in fact to maximize the values of the asset of attractiveness of the town in the minds of those visiting individuals.

If the goal of urban development is set to maximizing town equity, from the viewpoint of what kinds of functions, services, and facilities provided in the town enhance the values perceived by the visitors the most, we see that research on the evaluation of various urban development policies can be extended from the evaluation of the composition of stores in a commercial complex to that of the functional composition of the city.

3 The Goal of Urban Development

A town is not formed by a single entity. A town is a system which is formed by various entities. Considering this fact, the goal of urban development is redefined as “maximizing town equity regarding the town as one entity.”

From the disaggregate definition of town equity, we see that the town equity at the micro behavioral level of individual visitors turns out the values of the asset of attractiveness of the town which are perceived, evaluated, and fostered in their minds through their experiences in the town while they visit the town.

¹⁰We have tried to measure the town equity of *Daimyo* district, a part of the city center of Fukuoka City (Cf. Saito, Iwami, Nakashima, Yamashiro, Sato [9]). In this measurement, the additional cash flow is defined as the willingness to pay additional expenditure to *Daimyo* in comparison with the average expenditure at the whole Tenjin district.

Thus from the perspective of individual visitors, the town equity can be seen the “values of the town” evaluated and perceived by the individual visitors. Assuming that individual visitors evaluate their “values of the town” according to how much the town is worth visiting for them, the “values of the town” become equivalent to their “visit values to the town.”

Therefore, maximizing the value of the town is known to be equivalent to maximizing the visit values for individual visitors. Furthermore, the goal of urban development can be reduced to the question, “What kinds of visit values would be maximized for what types of visitors by providing what kinds of functions and facilities for constituting the town?”

The significance of the concept of town equity is that it clarifies the goal of urban development which remains ambiguous so far, formulates the value of the town as a measurable concept, and demonstrates that it actually can be measured based on *Kaiyu* behavior micro-data. In addition, town equity is measured in monetary terms as an asset value. Therefore, it makes it possible to compare in monetary terms the costs of implementing an urban development policy with the increase in the value of the town as town equity by this policy. Thus, the more cost-effective policies can be explicitly selected.¹¹

In addition, noteworthy about the concept of town equity is that the attractiveness of the town is not homogeneous among visitors but differs heterogeneously individual by individual. Therefore, to identify how the value of the town would be increased by what policy, it is necessary to explore in detail what kinds of the value of the town would be increased for what types of visitors by taking what kinds of urban development policies.

The viewpoint of evaluating urban development policies focusing on how those policies would increase the values of the town perceived and experienced by visitors who visit the town with diverse preferences and motivation can be called as “consumer-oriented urban development.”

While we defined the goal of urban development as maximizing town equity by considering the town as one entity, our research where parking lot policies in the city center have been examined from the viewpoint of maximizing town equity regarding the town as one entity will be presented in the next chapter.

References

1. Aaker DA (1991) Managing brand equity. Free Press, New York

¹¹While gaining the additional cash flow is utilized to evaluate the town equity, the opposite case of waiving the additional cash flow is applied in Saito, Ishibashi, Kumata [8] to the valuation of the river flowing through the city center retail environment. In their study, the existence of the river decreases the turnover of retail sectors at both sides. This decrease of the turnover is regarded as the willingness to waive to preserve the natural asset of the river.

2. Gomez M, Lopez C, Molina A (2015) A model of tourism destination brand equity: the case of wine tourism destinations in Spain. *Tour Manag* 51:210–222
3. Ishibashi K, Morozumi M, Saito S (2005) Consumer behavior and town equity II: workshop held at the 20th annual meeting of the Japan Association for Real Estate Sciences (2004). *Jpn J Real Estate Sci* 19:152–161. (in Japanese)
4. Kakoi M, Deguchi A, Saito S (2005) Consumer behavior and town equity I: workshop held at the 20th annual meeting of the Japan Association of Real Estate Sciences. *Jpn J Real Estate Sci* 19:143–151. (in Japanese)
5. Saito S (2007) Valuation of town brand and consumer behavior: keynote speech at the open symposium on attractive urban development to inherit to descendants: fostering a distinctive town brand. *Jpn J Real Estate Sci* 21:12–20. (in Japanese)
6. Saito S (2001) Change town into hypertext: a commemorative lecture given at the opening ceremony of FQBIC (Fukuoka University Institute of quantitative behavioral informatics of city and space economy) on April 27th, 2001. *Res: Cent Res Inst News Rep* 17–21. (in Japanese)
7. Saito S (2005) Urban revitalization based on consumer shop-around: changing town into Hypertext city via mobile real link revolution – keynote speech at the 20th anniversary symposium on urban revitalization and town equity held in the 20th annual meeting of the Japan Association for Real Estate Sciences. *Jpn J Real Estate Sci* 19:8–17. (in Japanese)
8. Saito S, Ishibashi K, Kumata Y (2001) An opportunity cost approach to valuation of the river in a city center retail environment: an application of consumer's shop-around Markov model to the Murasaki river at Kitakyushu City. *Stud Reg Sci* 31:323–337. (in Japanese)
9. Saito S, Iwami M, Nakashima T, Yamashiro K, Sato T (2007) Measuring the town equity by Willingness To Pay: a case study at Daimyo district in the city center of Fukuoka City. In: *Papers of the 23rd annual meeting of the Japan Association for Real Estate Sciences* 23:97–102. (in Japanese)
10. Saito S, Nakashima T, Kakoi M, Igarashi Y (2008) Hypertext city plan: real GIS and town equity. In: Kumata Y, Yamamoto K (eds) *Preservation of earth's environment resources by environment citizen*. Kokon Shyoin, Tokyo, pp 131–146. (in Japanese)
11. Saito S, Yamashiro K, Kakoi M, Nakashima T (2003) Measuring time value of shoppers at city center retail environment and its application to forecast modal choice. *Stud Reg Sci* 33 (3):269–286. (in Japanese)