

# Urban Catalyst: Regeneration of Downtown Area Through Community Development

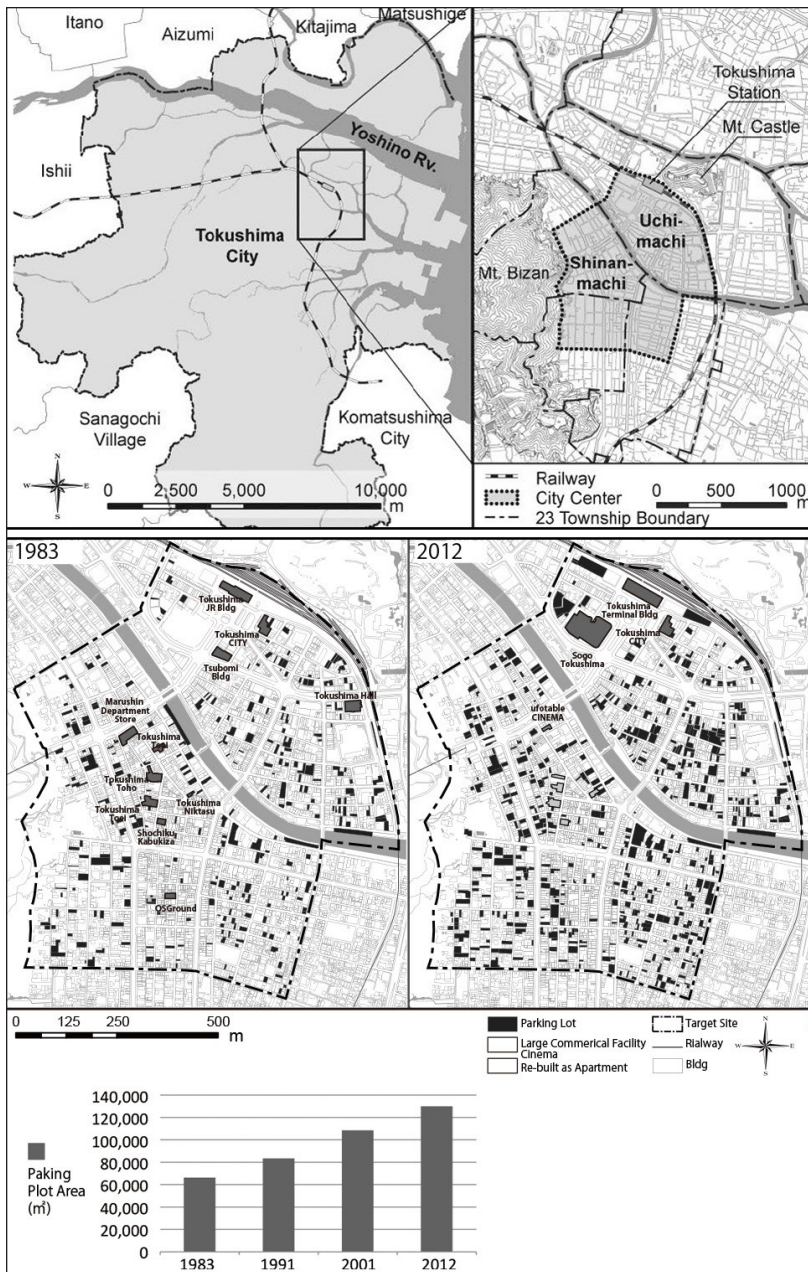
The decline of the central area in the local cities is brought into discussion for such a long time, but there are some cities with which original regeneration schemes brought their life back, or regained their vitality. In addition, Central City Revitalization Law was revised in 2006, and it pointed out of the needs of “Regeneration Plan under-utilization of Local Resources”, therefore, the movement of regeneration of the downtown initiated by the local governments or shopping mall’s association is quite active recently in nationwide.<sup>1, 2, 3, 4</sup>

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Recently, the method of urban regeneration, called “Urban catalyst,”<sup>5, 6, 7</sup> draws more attentions in Europe and America. In this paper, “urban catalyst” is defined as a catalyst promoting the chain development and regeneration in the city and places it with something like catalyst in the chemical reaction. Unlike the development methods such as “Scrap and Build” in the period of economic growth, it is a significant characteristic of urban catalyst which promotes changes and chain effect to the surroundings beyond the boundary of the development site. It should be an extremely effective method such as Japan, which is in a mature phase, not growing, rather declining and shrinking. The point unlike the conventional development method, urban catalyst make effect to the surrounding neighborhood like chain effect which is the strong characteristic whereas the conventional method limited in the change of the target site itself. There could be lots of examples to be observed as a result of “urban catalyst,” even if they are not recognized as is, which exactly influenced positively around its surroundings and most likely regenerate the area.

The central area around the Shinmachi River in Tokushima City is the place where the decline is the big issue. However, it is remarkable that city regeneration advances significantly by the citizen lately, authorities, collaboration of public and private sectors, it would be beneficial to understand the current situations and to find out the physical influence on to the built environments, clarify the individual activity and its relation to each other, and then applying these knowledge to establish the Japanese oriented urban catalyst theory. At a glance, it seems that there could be a certain rule, regularity, even type or pattern for these successful regeneration exist, even if it happened randomly without any order, or just by



1

accident. Not only restraining indiscriminate developments, but also enabling the selection of the strategic catalyst, and effective places for intervention, envisioning its regeneration, would be effective way of development without spending enormous amount of investigation. Urban catalyst could be an optimize solution for urban regeneration. The objective of the research is to analyze the cause and evidence of declines of the city center, Shinmachi district, and also to clarify the chain effects of catalyst to the urban context, built environments and community development chronologically.

### PRECEDENCE RESEARCH

There are some papers which focused on the Shinmachi River for the research in the past. Those are by Akihiko Higuchi, "Riverfront Development for Community Revitalization"<sup>8</sup> and by Yoshitomo Deguchi, "Study on Improvement of Shinmachi

Figure 1: The Shinmachi District located in Tokushima City Center (Top), Transformation of Parking Lots and Buildings in the City Center (1983 & 2012) (Middle), Transformation of Parking Lots Areas (1983 - 2012) (Bottom).

Riverside Park and its Influence to Surrounding Environment,”<sup>9</sup> and both of them are describing about the role of the urban river in the viewpoint urban design, but most of other research is limited in the engineering aspect such as quality of water resource and construction and maintenance of infrastructures along the river, thereby there are very few research dealt with the collaboration among community leaders, or community development for urban regeneration, or cause and effect related to the related field, moreover the emphasis on the chain effect of the methodology in urban regeneration.

## **SUMMARY OF THE RESEARCH**

### **METHOD OF THE RESEARCH**

In this research, to obtain a general and background information on the research area (Tokushima City Center), chapter 3 clarifies it based on various documents<sup>10,11</sup> including statistics data and documents about urban transformation. Chapter 4 focuses on the transformation around the Shinmachi River successively and effects of chain type catalyst around the Shinmachi Boardwalk construction, recent activities by the residents and community, several hearing survey had conducted to the local Government and event organizers to clarify the present conditions and issues. Chapter 5, summaries and analyses each chapter for the establishment of the Japanese type urban catalyst theory.

### **SUMMARY OF TOKUSHIMA CITY AND DOWNTOWN AREA**

Tokushima City is developed on a delta located at the mouth of Yoshinogawa River, and 138 rivers flow across the city, which is quite rich. The most of Tokushima City were located on the Tokushima plains, forming city blocks in a flat part, and the downtown developed between the symbolic Mt. Bizan and the former Tokushima Castle since 16th century, feudal period (Figure 1, Top).

The core of the central city is constituted with two districts; Shinmachi district and Uchimachi district. Particularly the Shinmachi district was flourished by its port activity, indigo products and sugar are the main trading products, and it became the most prosperities commercial district in Tokushima. However, large commercial districts are concentrated around the JR railway station, and now younger generations recognize the station area is the city center, not the Shinmachi district. This research’s study area, Shinmachi River Neighborhood is around the border between Shinmachi district and Uchimachi district.

### **TRANSFORMATION OF THE CITY CENTER**

#### **TRANSFORMATION OF BUILDINGS (LARGE COMMERCIAL FACILITIES, MOVIE THEATERS, PARKING LOTS)**

Through visualization of the collected map-data every in five years of Tokushima Center, locations and transformation of the buildings such as large commercial facilities, movie theaters, and parking lots is conducted. Based on Z-map of 2009, Zenrin map information is plotted on the GIS map with every 5 years and the plot area of the parking lots is calculated particularly to verify the urban transformation on GIS (Figure 1, Middle).

It is confirmed that parking lot plottage (proportion designated in parking lot) increased from 66,335 square meters (5.5%) to 129,936 square meters (10.8%), more than double within 1,206,000 square meters of the target area. This explains buildings are demolished, or converted into parking lots, hollowing out

phenomena in the downtown is remarkable (Figure 1, Bottom). Comparison with the tendency of increases of large commercial facilities in Uchimachi district, decreases of large commercial facilities in Shinmachi district is sharp, and rather serious. As for the shopping arcade (shopping mall) around half is driven into the closing a shop by the aging of the storekeeper, the issue of inheritor, and, unoccupied situation and ended up being the parking lot, this increase tendency is remarkable in the Shinmachi district. Furthermore, it accelerates a “Shattered Street” literally.

Furthermore, the movie theaters in the downtown got damages severely, due to the ground opening of suburbs type large shopping mall, Fuji-Grand Kitajima (2001) including the cinema complex. As a fact, the movie theaters in the city center closes chronologically; OS Ground (2002), Tokushima Toei (2003), Tokushima Toho (2005), Tokushima Hall (2006) and, with an advance of acceleration in decrease of the number of customers to the Shinmachi district. After 7 years of Zero movie theater in the downtown, a movie theater (ufotable CINEMA) showing mainly on animated cartoons opened in March, 2012 as a dynamo of regeneration.

The most of the abandoned sites of large commercial and cinema facilities, which drew large number of customers turned into large-scale high-rise apartments in the Shinmachi district, the aspect of the shopping mall underwent a complete change (Figure 1, Middle, and Figure 1, Bottom). The opportunity to visit the Shinmachi district became less and less, because the large commercial and cinema facilities which drew customers from the city or even from prefecture level closed down. In fact, people except a neighborhood resident and t commuters to the school and to work rarely visit the Shinmachi district. As a result, the walker route (pedestrian route) with excursion characteristics of Shinmachi Bashi → Higashi Shinmachi Shopping Arcade → Konya-machi & Ryogoku-cho → Ryogoku Bashi from the JR Tokushima Station diminished.

#### **CATALYST ANALYSIS**

Urban transformation originated from the development of Shinmachi Board Walk and a Parasol Shop for the inflow from the Uchimachi district for the purpose of the activation of the Shinmachi district. And analyzes was conducted focusing on community development for town planning almost acting like a chain effect, the connection and networks of human relations are well related to the regeneration of the area afterwards. The hearing survey was conducted to the key players of the related events along the Shinmachi River (Figure 2, Top). An investigation period is six days of 24th to 29th in November, 2012, and the surveyed organization and subjects for hearing survey are Shinmachi Board Walk, Hyotan-jima Cruising, Mach\*Asobi, Tokushima LED Art Festival, Tokushima Marché, and Aquactitta (NPO). The investigation item was, organization form, administration method, many divergences including activity contents, but, in Figure 2, Bottom, descriptions are subject to the events limited to the Shinmachi Board Walk, and listed how long and when the events are taken place, how many events, when was the inaugural year, etc. As a whole, the events are counted more than 145 times a year, approximately 40% of the ratio of the operation through the year along/on the Shinmachi Board Walk.

#### **SITUATION BEFORE THE SHINMACHI RIVER RESTORATION**

The hearing interview to the president of Shinmachi River Saving (NPO), also the publication by this NPO, the evidence was told that the river bank was totally

reinforced by the Concrete Parapet for disaster prevention, after the extremely strong typhoon hit the area in 1961, the area was suffered from the serious damage. The decline of the means of transportation by water, taste of the less human being, out of scale, etc. ended up the life of citizen apart from the river, and the river bank was shifted to the parking spaces for the auto mobiles. Then, the river front became the back side of citizen's daily life, another word, demoted from the main stage of the life to the backyard of city, people's place. When the water pollution of the river worsened by an inflow of factory effluent and the home drainage, and the river became the place where the bad smell occurs and no fish could

| Project & Event  |                        | Organization                               |                |
|--|------------------------|--|----------------|
| Hyotan-jima Crusing  |                        | NPO Saving Shinmachi River                 |                |
| Shinmachi Boardwalk  |                        | Nakagawa Architects                        |                |
| Parasol Shop   |                        | Saab, Inc. , Nakagawa Architects           |                |
| Machi★Asobi  |                        | Tokushima Pref. , Chamber of Commerce      |                |
| Tokushima LED Art Festival   |                        | Tokushima City, NPO Commons                |                |
| Tokushima Marche   |                        | Institute of Tokushima Economy, Saab, Inc. |                |
| Hearing Survey Items   |                        |  |                |
| Organization form, Finacial and Human Resources, Activity Period (Time), Activity Contents, Activity Place, Triggers for starting up the Organization, Influential Aspect, Collaboration, Mutual Relations with Others, Current Issues |                        |  |                |
| Event  | Month & Period         | Number of Events                           | Inaugural Year |
| Parasol Shop   | Weekends & Holiday     | 120 times                                  | 1998           |
| Tokushima Marche   | Last Sunday of Month   | 12 times                                   | 2011           |
| Hana・Haru・Festival   | End of April, 3days    | 3 times                                    | 1998           |
| Machi★Asobi  | May and October, 3days | 6 times                                    | 2009           |
| Awa Dance Festival   | August 12-15           | 4 times                                    | 1996           |
| <b>Total</b>   |                        | <b>145 times</b>                           |                |

2

dwel, obviously people will be away from the river even seriously, and caused less human activity, transformed to unattractive and lonely place. In fact, nobody likes the river at all.

#### SHIFT OF THE SHINMACHI RIVER RESTORATION

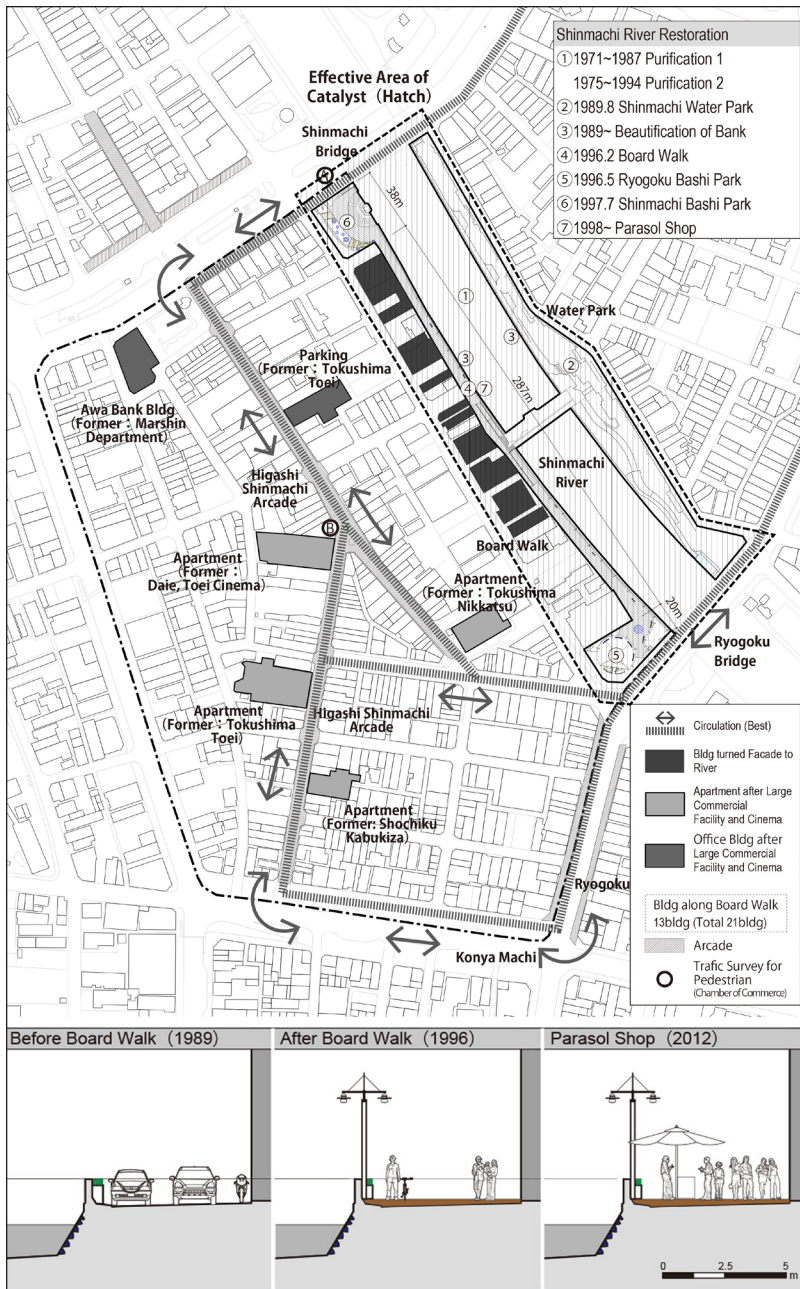
The citizen group including the NPO (Non-Profit Organization) called "Saving Shinmachi River," started up to clean a polluted river once again, triggered a local governmental support both in prefecture and municipal to initiate a project to revitalize it for citizen's life and amenity. Figure 3, Top shows the river bank's restoration situation in a chronological order (1971-2012), Figure 3, Bottom (Provided by Nakagawa Architects and Associates) showed the development and the sectional transition of the right-side river bank (1989-2012). In the Shinmachi River, it began with water purification project, followed by the development of Shinmachi River Water Front Park on the left-side bank, and beautification of the bank surface covered by the domestic bluish stones on the both sides, and in the end the completion of the Shinmachi River Boardwalk, these chained effect of river development taken place from 1989 to 1996 as an oasis for citizens.

#### SHINMACHI BOARD WALK

The Higashi-senba Shopping Arcade Promotion Association of the Shinmachi district promoted and executed "Higashi-senba Boardwalk Restoration Project" and successfully, the wooden decked promoted was constructed along the right-side bank of the Shinmachi River. According to the local architect, Nakagawa, "It was such a pity that most of the buildings along the river faced to the street, in another words, back side of buildings face the river front. Then, his design

Figure 2: Surveyed Organization and Subjects for Hearing Survey (Top), Number of Events at the Shinmachi Boardwalk (Bottom).





intention was creating a river front park with a total extension 287m consists with river bank board walk between Shinmachi-Bashi and Ryogoku-Bashi, Higashi-Zume Park of Shinmachi-Bashi, and Nishi-Zume Park of Ryogoku-Bashi all together as Urban Park.

Thanks to the Shinmachi River Purification Project, attention to the river, and the water front for the citizens had begun to revive to a citizen, and triggered the campaign of community development and town planning with the river initiated by the Higashi-senba Shopping Arcade Promotion Association. This evidence proved that purification the river water and the beautification of the river bank development brought citizens attentions and Patriotism for the further effect of utilization of river front, as well as bringing citizen's life back or co-exist with the river. Figure 4 shows the significant change before and after the completion of the board Walk. It generates accessibility to the river, and permeability to the river. Built environment along the river was dramatically changed.

Figure 3: River Bank's Restoration in a Chronological Order (1971-2012) (Top), Development and Sectional Transition of River Bank (Bottom).



4

#### PARASOL SHOP

Parasol shop is the temporal shopping mall to sell agriculture products and processed foods along the Board Walk. After the completion of Board Walk in 1996, parasol shops started its operation, the nature of Newness, trendy movement; it brings vitality along the water front temporarily. However, the turnout did not continue for a long time. The sales decreased, and, due to un-strategic opening of the shops by professionals and immature retailers, often did not match with customers' demands and needs, ended up shrinking and downsizing the market.

#### LEADERS OF CATALYST MOVEMENT





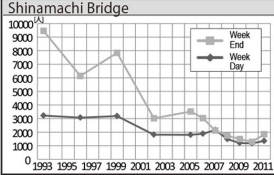
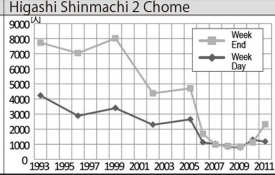


Major players for Catalyst were narrowed down to four events which could have made particularly big influence on the regeneration of the downtown, and did further hearing survey with more details during the same visits. The subjects of survey such as the construction of the human network, its effect to the regeneration and revitalization are summarized and four players are as follows; Hyotan-jima Cruising, Machi\*Asobi, Tokushima LED Art Festival, and Tokushima Marché (Figure 5, Top).

#### HYOTAN-JIMA CRUISING

When the Youth group of Tokushima Society of Architects & Building Engineers, manifested "Renaissance of Hyotan Island", the idea and the nick-name of Hyotan Island became familiar with the citizens of Tokushima in 1984. The sandbank surrounded by Shinmachi River, Suketo River, and Fukushima River branches of the Yoshino-gawa River, has been forming a downtown, a center of commerce for the citizen. Only one man began the campaign of cleaning the river, and bringing fish home. Soon after, in 1990, ten individuals gathered around him, and made a slogan of "The river was contaminated by the citizens, therefore, us, citizens are responsible to clean the river, and bring it to original cleanness". It ended up a launch of NPO for "Saving Shinmachi River".

According to the hearing investigation, it began to navigate a cruise ship, one lap of 6 km regularly at the same time to begin the cleaning of the river with the boat twice a month. In late years the number of the visitors gradually increases and reaches 5,000 monthly passengers and grows up as tourist attractions steadily. In addition, the events utilizing a river are organized all through the year, as well

Figure 4: Before (1990) and After (2012) of Board Walk Development.

|                          | a) Hyotan-jima Cruising   | b) Machi★Asobi   | c) Tokushima LED Art Festival   | d) Tokushima Marche  |  |
|--------------------------|---|--|---|--|--|
| Period & Operation Hours | Every Day pm13~16 (July and August: pm17~20)  | 2009Fall: 10.10-12 2010Winter: 1.16-31 2010Spring: 5.2-4 2010Fall: 10.9-11 2011Winter: 1.22-2.6                  | 2011Spring: 5.3-5.5 2011Fall: 9.23-10.10 2012Spring: 5.3-5.5 2012Fall: 9.22-10.8                                | 2010[2010.4.17-25] 9 Days 2013HOP[2012.4.20-22] 2013STEP[2012.10.26-28] 2013[2010.4.20-29]                       | 2011.12~Every Last Sunday of the month Total 24 times H24.9.30 canceled due to Typhoon |
| Contents                 | 6km of river cruising around Hyotan jima  | Anime event organized by ufotable, Town became Anime installation during the event                               | Art Exhibition and Installation using LED   | High quality of Tokushima's local foods for selling, and restaurants.  |  |
| Organizer                | NPO Saving Shinmachi River  | Anime Organizing Committee   | Organizing Committee  | Tokushima Marche Office  |  |
| Visitors                 | 2002: 12,486 2003: 14,176 2004: 13,580 2005: 20,284 2006: 18,407 2007: 26,879                         | 2008: 31,157 2009: 39,855 2010: 41,803 2011: 39,817 2012: 35,792(July)   | 2010: 200,000 2013 HOP: 13,000 2013 STEP: 40,000  | Average 12,000   |  |
| Effect                   | Collaboration with other events (Tokushima LED Art Festival, Machi★Asobi, Tokushima Marche)           | Activation of Anime-Manga industry (Cinema was re-opened in downtown. More anime related shops and cafes opened) | Permanent Art Work Utilized unoccupied Building Tera Koya, Launch of LED School                                 | Tourism is generated More events are organized simultaneously Matching business through the Marche               |  |
| Photo                    |                      |                                 |                                |                                |  |
|                          | Shinmachi Bridge<br> | Higashi Shinmachi 2 Chome<br>   | Building Faces River Front<br> | Permeability to the Street<br> |  |

5

as cleaning of the river. Moreover, the role of letting people recognize a boardwalk as an event place, almost “Landmark of the City” by planning various events simultaneously such as Tokushima LED Art Festival, Machi\*Asobi, an event in connection with Hana-Haru Festival. In December, 2012, the government authorized the eating and drinking merchandize at the pier, thereby the expansion of the future activities is further expected.

### MACHI\*ASOBI

Machi\*Asobi is the big event for the purpose of “Playing in Tokushima”, rather integrated entertainment produced by the ufotable Tokushima studio established in 2009. The ufotable is known as design studio producing Anime- Manga filming industry. The president of the company is from Tokushima; therefore he is quite keen to revitalize his hometown by his successful business. Entertainment company’s networks and popular/well-known voice actors and actresses gathered together with citizens in Tokushima; Tokushima’s symbol mountain, Mt. Bizan, Shinmachi Board Walk, Awa Dance Hall, Popo Shopping Arcade, around JR Tokushima Station, and they played the concerts, exhibitions, cinematography, wearing cartoon costumes; so called city walking. Their events successfully draw customers more than 50,000, and the number of the audience increases every time.

The interview to the sponsor, it is confirmed that the all the hotel guest rooms, approximately 5,000 rooms are fully booked during the events. It is such a rare case in Tokushima city, reminding the time of Awa Dancing Festival, which is supposed to be a most well-known event, is Tokushima, bringing 1.3 million tourists inside and outside of Tokushima. Machi\*Asobi proves that a lots of attentions are paid from outside of Tokushima. It has been contribution local industries, such as Anime-manga related industries activation, as well as bringing back a movie theater in the Shinmachi district, which generating a dairy flow of the citizens in the Higashi Shinmachi Shopping Arcade. Moreover, three Anime/Manga-related restaurants opened in the Shinmachi district as one of Catalyst effect.

### TOKUSHIMA LED ART FESTIVAL

As for the Tokushima LED Art Festival, it was started for the purpose of creating

Figure 5: Summary of Hearing Survey for Four Major Event in Downtown (Top), Pedestrian Traffic Flows in the Tokushima City’s Downtown (Bottom-Left), Buildings along Board Walk (Bottom-Right).



“the Island of Water Capital” by new charm called the fusion “lights of the LED,” an LED technology and the art that let water and green charm concentrate of the art culture that Tokushima had. It is intended to have purposes of civic participation, longer stay type of visiting of the customers, vitalization of the downtown, and activation of the regional economy. It drew the customers of 200,000 people in 2010, the first event, developed permanent exhibitions of the LED Art as well as temporary exhibitions around bridges and parks of the Shinmachi River; during an event period vacant land was also utilized as stores or exhibition spaces effectively. As of 2013, LED Tera Koya, learning center to promote human resources who knows ideas and technologies in LED art and industry was opened along the Shinmachi Board Walk. Tokushima LED Art Festival was also developed and organized by the same organization of Tokushima Marché by the Tokushima Economic Research Institute. Actually administration was operated by the out sourced executive committee.

#### **TOKUSHIMA MARCHÉ**

Tokushima Marché is held every month on the last Sunday as an “Open Market” which is developed from the Tokushima Agri-Business Initiatives by the Tokushima Economic Research Institute, and it draws customers more than an average of 12,000. Because the administration main constituent entrusts the talented person who ran the parasol shop for many years, the know-how of the administration method is utilized effectively. The retails operated during the Marché event, permanently opened stores and shops nearby locations such as restaurants and in the station plazas. This catalyst influence is rather positive, since it spread its effect not only in the immediate context. The profit on the events days are increasing without questions. Now the branding of Tokushima Marché is quite strong, high demand of the customers brings the business opportunity to the online market, also, trucks full of Tokushima Marché products drive to Osaka or Tokyo for the market events upon the request. The recognition increases, and a tour within the range of Shikoku is planned even only two years from the first time. In addition, on the Marché date, stores starting temporary business are seen in the neighborhood. The action that I cause synergy in the downtown area now emerges.

#### **ANALYSIS OF CATALYST EFFECT**

##### **CHANGE IN THE FLOW OF THE PERSON**

The result of quantity survey of pedestrian traffic flows in the Tokushima city’s downtown along the central shopping street are shown (Figure 5, Bottom-Left). The quantity of pedestrians increases in 1,999 in comparison with 1996 on the weekends and the holidays around Shinmachi River Area. It is understandable due to the effect by the completion of the Board Walk and the success of the parasol shop. Upon the completion of the Board Walk, the previous parking lots under prefectural management became the city park, and eating and drinking, the sale of the above related articles were enabled. Profit utilization spreads, but I gradually show a tendency to decrease, and it is considered that the effect was temporary, but the increase is again observed after 2009. It should deserve high attention.

##### **CHAIN EFFECT TO THE NEIGHBORING FACILITIES**

Transformation was observed in neighboring facilities like a chain effect by the construction of the Shinmachi Board Walk after the completion of Water Front Park. The buildings which turned the face to the river side increased as shown in Figure 4. Original expectations was realized, the ratio of more than 50% of

the building, in fact 13 buildings out of 21 buildings along river front turned the façade and face to the river. Although there are still issues remains such as less harmony of the buildings as a whole, each buildings' design quality and integration remained still very low, etc. The building was refurbished to arrange permeability to the Higashi-Shinmachi shopping arcade from the river (Figure 5, Bottom-Right). These are caused by two main reasons; Shinmachi Boardwalk was considering as a road which allows "building permit "by code to the adjacent site, and a parasol shop brought the citizens attention. As a catalyst effect, expected chain effect was observed around the built environment. Parasol shop acting as an incubator, or start-up shops to initiate permanent stores around the downtown as a chain effect, as a result, 26 new stores opened around immediate context, 14 stores opens in the neighboring shopping malls.

#### **CHAIN EFFECT TO THE NUMBER OF EVENTS ON THE BOARDWALK**

The number of the events around the boardwalk increases lately, and it is recognized nationwide, by its unique entertainment and the increases of the number of visitors. The events are taken place around the board walk exceeds more than 145 times a year shown in Figure 2, Bottom. However, most of the events are scheduled on the weekends or on holidays, when more visitors could be expected. This strategy succeeded. More than 300,000 visitors are counted only by the events which hearing surveys are conducted in 2011, the numbers should increase more with including daily occasions.

Through the hearing survey, the human network is established by the collaboration of working mutually each other to pursue the following events. Knowledge, know-how of administrating events is shared by the organizers. However, the regeneration of the visitors turnout is only limited on the weekend and the holiday, and still the area is deserted on weekdays. This could be upcoming issues.

#### **CONCLUSION**

In this research, the following aspects are identified and clarified to understand the cause and effect of catalyst; a) Before and After of physical phenomena of applied catalyst, such as the number of building upgrade, amount of pedestrian traffic flow, b) Through the hearing survey to the event organizers and government officials, to understand their intention and motivation of events, and to find out the relationship developed between each catalyst effect. As a result, the following things became clear.

1. Primarily, the interests of citizens began toward the river by purification work of the Shinmachi River, which is defined as the first stage of catalyst
2. Secondary, the campaign and promotion of creating Shinmachi Boardwalk and a parasol shop emerged, because a Shinmachi River Park was restored. These two are private enterprise-based development called the Shopping Street Promotion Society and are not by the public sector like government. This is defined as a chain effect of regeneration of Shinmachi River, and categorized as a second stage of catalyst
3. When Shinmachi Boardwalk and a parasol shop were completed and running its business, the increase of the building which face/frontage turned toward the river side are confirmed. This is the third stage of catalyst, and the influence on the physical phenomenon, to the built environment are confirmed even beyond the target area.

4. Due to the higher attention and recognition of Shinmachi Boardwalk as a heart of the City Place, more events are planned and organized based on the Shinmachi Boardwalk, which is the fourth stage of catalyst.
5. Human networks are established through the collaborated work to plan the event each other, as a result, individual consciousness, motivation became higher and higher, relating to citizens pride, which is the fifth stage of catalyst.

These series of city regeneration was not originated from the governmental vision, because, by understanding a conventional development method, it assumes the change is limited in the targeted area. Envisioning the chain effect to the surrounding context and neighbors are beyond the consciousness. Moreover, within the limited budget for regeneration, government tends to narrow down the scope of the development.

In contrast, the catalyst effect is not limited to the area of the development, and its chain effect will influence to the neighboring areas, which is a strong and unique character. As a good example of Shinmachi Boardwalk, it promotes the next development activity by a chain effect, and city regeneration is accelerated and realized by the synergy of all the involvement.

To conclude, it is desirable to find more successful and similar examples, and analyzing those samples to identify common aspect, generality, and tendency, to establish the theory of urban catalyst, as approaches to experience based urbanism for matured and shrinking society like Japan.

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