

## Study on Storytelling Contents Preference for Waterfront Area Construction

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### **Abstract**

*In this study, a present situation survey of users was done for the construction of waterfront area, and user preference was surveyed in applying new contents. For the survey, Shin stream and Susung pond, located at the center of Daegu city, and Palgeo stream, located on the outskirts of residential areas were selected. Through the result of the present situation survey, it was possible to identify the main user ages, facilities in use, and purposes, where the main user ages were at least 40s who primarily used for exercise and walking. The demands for new contents were found to have various requirements such as movies, educational space, diversification of exercise facilities, and festivals. Indicators such as location, age group, accessibility, and etc. could be set as indicators to be considered in developing waterfront areas to which storytelling is applied using the survey results*

**Keywords:** *Waterfront, Storytelling, Preferred Contents*

### **1. Introduction**

The application of storytelling in waterfront areas was actively progressed after the 2000s. Storytelling is literally a compound word of story and telling. Generally, most of the waterfront areas were used as engineered grafts of the concepts of flood control, conservation, and environment. However, as the use of waterfront areas increased, an introduction of a new technique was required in the method of developing waterfront areas. Requirements are rapidly increasing, demanding waterfront areas to provide spaces for more citizens and allow more various experiments. The start of storytelling was developed by composing contents of the traits and culture of the area, historical facts and legends, and spaces for trails and exercises at waterfront areas. But as times rapidly changed and as leisure increased due to the increase of cultural level and income of citizens, demands for developing various contents for waterfront areas have been increasing. Studies for applying various contents in waterfront areas that were carried out are ‘A study on resources applicable for waterfront areas’ [1], ‘Storytelling techniques about the application of fairy tales and games for waterfront areas’ [2], and ‘Applicability of waterfront area storytelling in applying edutainment’ [3]. There are previous studies which were about a study on storytelling contents for constructing waterfront area [5], and a preference survey in constructing waterfront area storytelling [6].

The surveys performed in this study are a present situation survey of current users and a demand survey to provide various contents such as TV shows, fairy tales, film festivals, and *etc.* for constructing waterfront areas

## 2. Survey on the Present Situation of Storytelling

### 2.1. Survey Results

In this study, around 460 users were surveyed targeting on the representative streams mainly used by Daegu citizens in Korea which were Shin stream and Susung pond, located in the city, and Palgeo stream, located on the outskirts. Shin stream and Susung pond are located in the center of Daegu city and are used for leisure, various festivals, and exercise facilities by the citizens. Palgeo stream is located on the outskirts of Daegu city and as the surrounding areas are residential areas, it is a waterfront area being actively used by the residents nearby.

The content and result of the survey is as follows.

#### Question 1

What age group are you in? ① 20s or below ② 30s ③ 40s ④ 50s ⑤ 60s or above	Ques. #	Total	Susung	Shin	Palgeo
	1	21%	30%	11%	20%
	2	14%	20%	11%	13%
	3	21%	19%	25%	23%
	4	20%	22%	18%	24%
	5	24%	9%	35%	26%

As a result after surveying the user age of the waterfronts, around 60% of the total users were in their 40s or above. In case of Susung pond, since there are complex spaces such as amusement facilities, festivals, and trails, and as various events and festivals are being held with many entertainment facilities nearby, it was determined to have many visits by the 20s, and in case of Shin stream and Palgeo stream, it was surveyed to have many visits by the 40s or above.

#### Question 2

What is your gender? ① Male ② Female	Ques. #	Total	Susung	Shin	Palgeo
	1	49%	46%	58%	46%
	2	51%	54%	42%	54%

The gender of waterfront visits was surveyed to be similar in male and female. In case of Shin stream, males visited more, and in case of Susung pond and Palgeo stream, it was surveyed to have slightly more female visitors.

#### Question 3

How many times a week do you visit streamside or nearby the river? (Example, Shin stream, Gemho river, Nakdong river, Susung pond, Palgeo stream etc.) ① Less than once ② Less than twice ③ Less than 3 times ④ Less than 4 times ⑤ 5 times or more	Ques. #	Total	Susung	Shin	Palgeo
	1	25%	33%	24%	8%
	2	29%	36%	23%	22%
	3	26%	21%	27%	35%
	4	12%	7%	13%	15%
	5	8%	3%	13%	20%

In the visiting times of waterfront, twice a week or more appeared to be 75%, and the distribution of people visiting 4 times or more was surveyed to be 20%. In case of Susung pond, many visits were around once or twice a week, and in case of Palgeo stream, the visits were surveyed to be mainly twice or more in a week.

Question 4

What is your purpose of visiting the streamside or nearby the river(Multiple answers allowed) ① For a walk or exercise ② Leisure ③ Rest ④ Education(Ecological tour)	Ques. #	Total	Susung	Shin	Palgeo
	1	64%	55%	77%	65%
	2	20%	25%	12%	19%
	3	15%	19%	10%	16%
	4	1%	1%	1%	0%

In the purpose of visiting waterfronts, cases for a walk or exercise were surveyed to be 64% of the total, and also, cases for leisure and rest were surveyed to be 35%. As cases for educational purpose were surveyed to be 1%, it was determined that there was little utilization of educational facilities such as nature learning fields, *etc.* installed at the waterfronts. Especially, in case of Shin stream, as 77% were cases visiting with purposes to exercise, it was surveyed that most people visited for the purpose of a walk or using the exercise facilities created at Shin stream.

Question 5

How far is your place from the streamside or the riverside you mainly visit? ① 1km or less (within 20min) ② 2km or less (within 30min) ③ 3km or more (within 40min) ④ 5km or more (1hour or more)	Ques. #	Total	Susung	Shin	Palgeo
	1	39%	32%	38%	52%
	2	34%	36%	32%	31%
	3	17%	21%	15%	13%
	4	10%	11%	15%	4%

As 75% of the total was surveyed to be less than 2km for the distance to the waterfronts, it was found out that most of the visitors were located within a walking distance. Especially, in case of Palgeo stream, as it was a stream mostly used by the residents nearby being located on the outskirts, it was surveyed to have higher utilization by the local residents than Susung pond or Shin stream.

Question 6

Who mainly leads you to the waterfront? ① Spouse ② Children ③ Friends ④ Parents or Seniors ⑤ Myself	Ques. #	Total	Susung	Shin	Palgeo
	1	34%	25%	39%	44%
	2	14%	19%	8%	13%
	3	44%	49%	42%	38%
	4	5%	7%	2%	4%
	5	3%	0%	9%	1%

In the types of companion to the waterfronts, spouses or friends were surveyed to be 78% which was higher than cases visiting alone. Susung pond was surveyed to be visited a lot with children as well.

Question 7

Facility mostly used at the waterfront ① Trails ② Fitness equipment ③ Square ④ Resting place such as bench	Ques. #	Total	Susung	Shin	Palgeo
	1	57%	49%	59%	69%
	2	19%	14%	20%	21%
	3	9%	14%	8%	2%
	4	16%	23%	13%	8%

The facility being used the most among the facilities created at the waterfronts was trails, and as visits for fitness equipment and rest accounted for 91% of the total, it was surveyed that currently people are visiting the waterfront to exercise. In case of Susung pond, the ratio of walking or doing exercise was small compared to Shin stream and Palgeo stream, while the ratio of visiting to use the resting place was surveyed to be relatively high.

Question 8

What is your preference of the following form for the composition of the waterfront? ① Educational space ② Amusement space ③ Festival space ④ Resting space ⑤ Thematic space ⑥ Park type space	Que #	Total	Susung	Shin	Palgeo
	1	9%	7%	8%	13%
	2	9%	9%	7%	13%
	3	13%	15%	12%	12%
	4	39%	42%	37%	36%
	5	13%	9%	17%	13%
	6	17%	18%	19%	13%

In case of facility or space that is necessary to be added or complemented to the waterfronts, resting space appeared to be the highest being 39%, and opinions about the necessity of thematic, festival, amusement, and educational space were also surveyed to be around 10%. In case of Susung pond, the preference ratio for resting space was relatively high with 42%, and in case of Shin stream, the preference ratio for the creation of thematic space appeared to be relatively high being 17%. In case of Palgeo stream, the preference ratio for educational space appeared relatively high with 13%.

Question 9

Which of the theme do you prefer to be created at the waterfront? ① Fairytales, novels, etc. ② Pororo, cartoons (Fantasies, Characters) ③ Runningman, movies etc. ④ Amusement facilities	Ques. #	Total	Susung	Shin	Palgeo
	1	23%	19%	29%	21%
	2	13%	9%	11%	22%
	3	28%	33%	25%	23%
	4	36%	39%	35%	34%

In creating thematic space, it was surveyed that creating space using contents such as amusement facilities, TV programs, fairy tales, and novels were preferred for the creation of a variety of space, and was determined that applications of various themes and contents were required mainly to the current exercise facilities and trails of waterfront area. In case of Susung pond, preference of creating space as a medium for visual media such as Runningman or movies appeared high being 33%, and in case of Palgeo stream, preference for cartoons or fantasy characters appeared relatively high with 22%.

Question 10

Facilities desired to be added to the waterfront? ① Amenities such as toilets, water taps ② Resting facilities such as bench ③ Exercise facilities ④ Convenience store ⑤ Experience facilities ⑥ Bike racks	Ques. #	Total	Susung	Shin	Palgeo
	1	29%	27%	24%	39%
	2	25%	29%	24%	20%
	3	19%	19%	28%	10%
	4	15%	15%	12%	17%
	5	8%	4%	7%	10%
	6	4%	6%	5%	4%

The additional facilities required to the waterfront currently being used were surveyed to be demanded in the following order of amenities and toilet, resting facilities, and exercise facilities. In case of Susung pond, preference for resting facilities appeared to be relatively high with 29%, in case of Shin stream, preference for exercise facilities appeared to be high with 28%, and in case of Palgeo stream, preference for amenities appeared high.

Question 11

Which of the following contents do you think would be good to be added to the waterfront? (Multiple answers allowed) ① Educational contents ② Playground for kids ③ Space and contents for festivals ④ TV contents ⑤ Fairy tales and movies	Ques. #	Total	Susung	Shin	Palgeo
	1	20%	12%	29%	18%
	2	20%	11%	27%	27%
	3	32%	38%	33%	20%
	4	18%	25%	5%	24%
	5	10%	11%	6%	11%

The contents desired to be added to the waterfronts were surveyed that spaces for festivals, playground, education, TV contents, and *etc.* were desired to be added, and considering the content of the survey on themes desired to be added, it was determined that various contents at waterfronts were demanded. In case of Susung pond, the preference appeared high for contents of festival space and visual media such as TV, and in case of Shin stream and Palgeo stream, preference for kids' playground appeared high.

**2.2. Indicators of Constructing Waterfront**

For the preference survey on the citizens' use of stream and streamside area, Susung pond and Shin stream, located in Daegu city, and Palgeo stream, located on the outskirts were targeted. As a result after surveying on the using facilities, purpose of use, contents,

and *etc.* in using the waterfront areas, it was possible to identify the items that can become indicators for constructing waterfronts.

The purpose of visiting the waterfront areas could be largely classified to exercise, walk, and rest, all of which could be used using the facilities currently constructed, and it was determined that it showed a tendency to be classified according to the location, accessibility and user ages.

First of all, in positional aspect, it showed a tendency to differ by locations, being in the city center or on the outskirts of residential areas, and was determined to show difference between having resting facilities such as playgrounds or cafes and having festivals and events.

Therefore, the following can be expressed as items that can be used as indicators for constructing waterfronts.

Indicator items	Content
1) Location	1) Town 2) Residential 3) Outskirts
2) Accessibility	1) Distance 2) Arrival time
3) Age group	1) Age group 2) Gender
4) Surrounding facilities	1) Cafes <i>etc.</i> 2) Playground 3) Exercise facility 4) Educational facility 5) Experience facility
5) Festivals and events	1) Festival 2) Event

### 3. Conclusion

In this study, preference was surveyed targeting on citizens using the waterfronts and indicators that shall be considered when constructing waterfront areas were presented. The summary of the result of the survey that was carried out at Susung pond, Shin stream, and Palgeo stream, located in Daegu city, about the user age and gender, distance and time to the waterfront areas, main using facilities, and facilities and contents desired to be added targeting on the citizens using the waterfronts is as follows.

It was surveyed that the main age group visiting the waterfront areas was 40s or above, and as shown in Susung pond, 20s visited more depending on the types of the surrounding facilities constructed.

The visiting numbers was identified to be mostly less than 3 times a week for an exercise or a walk, the travel distances were mostly within 2km, and in cases where locals mostly used like Palgeo stream, residents within 1km were surveyed to mainly visit with their friends or spouses. The facilities used most were the trails and exercise facilities which were determined to be the facilities that are currently installed the most. For spaces preferred to be added, the resting space appeared to be the highest, and it was surveyed that there were requirements and preference of various spaces. This is determined that the demand for spaces for family units and children was reflected. Based on the survey results, it was able to identify the items that can be selected as indicators for pre-surveys for constructing waterfront areas. The indicator items are location and accessibility of waterfronts, age group, surrounding facilities and conditions, and festivals and events which are determined to help decide purposes and facilities in constructing waterfront areas

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