

# The Perception of Visitors towards the Level of Satisfaction on Park (Case Study: Singha Merjosari Park Malang)

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**Abstract.** Park is one of the public spaces which is used by people to get happiness and comfort. Singha Merjosari Park is one of the parks in Malang that is functioned as a recreational and educational park for the citizen. In weekends and national holidays Singha Merjosari park get visited by so many visitors. But if we see the reality, there are still some problems regarding visitor satisfaction. Also, there are attributes that has performance levels decrease that will become another new problem. The purpose of this study is to analyze the perception of visitors about the level of visitor satisfaction and what attributes that need to be improved and developed by managers in the future. The approach method in this research is descriptive quantitative. Primary data is based on measurement and observation. The number of samples used is 100 respondents referring to the number of samples determination by Slovin formula with the sample selection used is accidental sampling technique. The analysis technique used is Importance Performance Analysis (IPA) and Costumer Satisfaction Index (CSI). Based on the results of IPA analysis, the things that should get important attention and should be improved is the aesthetics of lighting, cleanliness of parking area and toilet, shade in park area, and availability of clean water. While the result of CSI value analysis is 65,30%. This means visitors are satisfied, but visitors are still not satisfied overall. Implications or changes that should be given is the aesthetics of lighting should be more creative and become the identity of the park (for example, lamp lanterns should be suitable with the concept of the park). Also, the change of toilet look so that visitors can enjoy the look and it can be iconic (toilet concept according to local culture of Malang) and the prevalence of lighting in the park area at night.

## 1. Introduction

The public spaces are important elements in the city that aims to perform several activities with specific interests to interact (Stephen Carr, 1992) [1]. Meanwhile public space according to the Project for Public Spaces in New York in 1984, is a form of space used by human to perform several activities such as roads, pedestrian, parks, plazas and etc.

Park is a fenced plot of land which is used for fun, excitement, and comfort (Laurie, 1986) [2]. Meanwhile, according to (Djamal, 2005) [3], the park is a plot of land that is open for public with a certain area, in which there are trees, shrubs, bushes and grasses that can be combined with the creation of other materials. (Hariyono, 2007) [4] states that the park is part of the public sphere that should be accessible to different kind of citizen. Taman Singha Merjosari is located on Jl. Mertojoyo Selatan, Merjosari Village, Lowokwaru Subdistrict, Malang City.



Malang is the second largest city in the East Java, Indonesia. It is located in the south of Surabaya with 90 km of distance. Malang area is 110.06 km<sup>2</sup> and divided into five districts. The population of Malang in late April 2016 reaches 887.443 people (Department of Population and Civil Registration - Malang). Population growth in Malang is about 1.58 percent each year. Malang is one of five cities that have the cleanest air in Asia. This result is released by research institute of non-government organization (NGO) and Cities Clean Air Partnership Program (CCAP). This award is a shared commitment between the government and all citizens of Malang to continue to preserve and beautify the face of Malang with the existence of parks.

Therefore, the assessment of the visitors perceptions is one way to see the level of satisfaction of the park. This assesment is done to improve the quality of the park. This study is conducted to answer the question "What is the level of satisfaction at Singha Merjosari Park?". The purpose of this study is to reveal how the visitor's perception of the satisfaction level at Singha Merjosari Park and also, visitors' desire to Singha Merjosari Park in the future.

## 2. Methods

The The research method is scientific ways to get the valid data, with the purpose to be found, developed and proven, a certain knowledge that in turn can be used to understand, solve and anticipate problems (Sugiyono, 2008) [5].

In this study, the method used is descriptive quantitative. The method of data collection in this study uses primary data which is a questionnaire to the Singha Merjosari Park Malang visitors.

The use of sampling techniques in this study is accidental sampling. The sampling technique is based on chance, that means anyone who by chance met with researchers can be used as a sample, if the person suits as a source (Sugiyono, 2008) [5]. In this study the number of samples used are 100 respondents. This refers to the determination of the number or size of the sample that uses the Slovin formula:  $n = \frac{N}{N(d)^2 + 1} = \frac{133}{133(0.05)^2 + 1} = 99,81$ , rounded to 100.

Garden satisfaction parameter reviewed from the factors that affect the level of satisfactory. The factors that affect the satisfactory, which are: aesthetics or beauty, cleanliness, security, circulation, aroma, climate regulation or climatological, and utility.

In analyzing this study, researcher used the Importance Performance Analysis (IPA) and Costomer Satisfaction Index (CSI) analytical techniques. According to (Tjiptono, 2011) [6] IPA technique first introduced by Martilla and James (1977) in their "Importance-Performance Analysis" article. In this technique, the respondents were asked to rate the level of importance and performance of the company, then the value of the average level of interest and performance is analyzed on the Importance-Performance Matrix, which the x-axis represents the perceptions or performance, while the y-axis represents the expectations or interests. There would be results obtained from the value of x, y (of each variable) in four quadrants on a Cartesian diagram. The interpretation of the quadrant is quadrant I (Keep Up the Good Work); Quadrant II (Possible Overkill); quadrant III (Low Priority) and quadrant IV (Concentrate Here).

Customer Satisfaction Index (CSI) is used to determine the level of overall satisfaction with an approach that considers the importance of the attributes of a product or service. According to (Suryawan, 2013) [7], customer satisfaction is determined by customer perception on performance of products or services that meets customer expectations. Customers will be satisfied if they fulfill their expectations thoroughly. According to (Irawan, 2003) [8], a measure of CSI is required because the results of the measurements can be used as a reference to determine the improvement of services goals for respondents overall satisfaction level and it can be seen on the criteria of customer satisfaction levels. CSI obtained from (T divided by 5Y) x 100%. The score 5 (on 5Y) is the maximum value that is used on scale of measurement. CSI formula as follows:

$$CSI = \frac{T}{5Y} \times 100\%$$

Information:

- CSI : Customer Satisfaction Index  
 T : The total number of variable S  
 Y : The total number of all the variable P  
 S : Multiplication of the I and P (each variable)  
 I : Average Satisfaction or Performance (each variable)  
 P : Average interest (each variable)

Overall satisfaction level of respondents can be seen in Table 1 below:

Table 1 Criteria of Customer Satisfaction

No.	CSI value	Customer Satisfaction Index
1.	0,81 – 1,00	Very Satisfied
2.	0,66 – 0,80	Satisfied
3.	0,51 – 0,65	Satisfied Enough
4.	0,35 – 0,50	Less Satisfied
5.	0,00 – 0,34	Not Satisfied

### 3. Results

#### 3.1 Importance Performance Analysis (IPA)

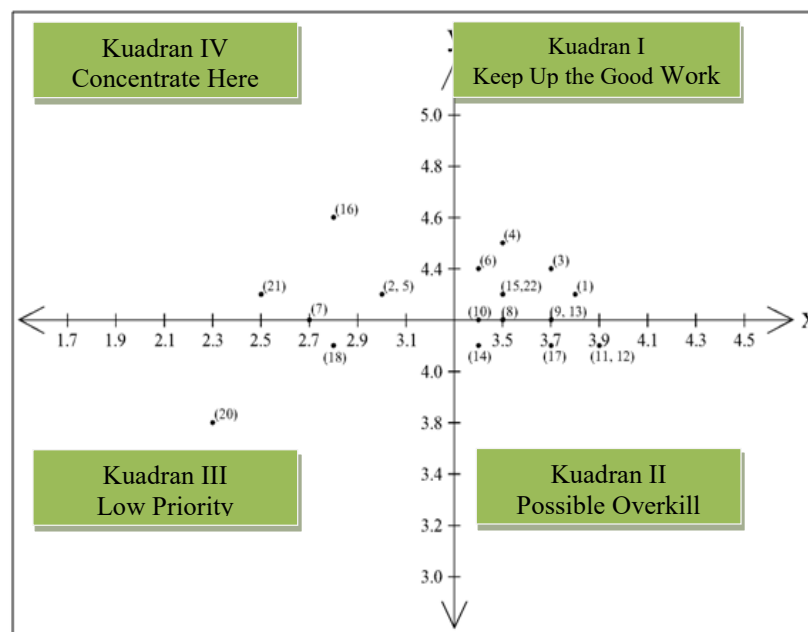
The level of conformity is the result of comparison between the level of visitor satisfaction (x) with the level of interest (y). Here is table of average satisfaction and interest in Singha Merjosari Park Malang as follows:

Table 2. The average of satisfaction and interest in Singha Merjosari Park Malang

No.	Factors	Satisfaction		Interests		Bobot (X)	Bobot (Y)
		Nilai	Rata-rata	Nilai	Rata-rata		
1.	Aesthetics						
	Plants	381	3.8	430	4.3	0.05	0.05
	Supporting facilities – Lights	299	3.0	426	4.3	0.04	0.05
	Supporting facilities – Gazebo	368	3.7	436	4.4	0.05	0.05
2.	Cleanliness						
	Park Area	350	3.5	448	4.5	0.05	0.05
	Parking Area	304	3.0	430	4.3	0.04	0.05
	Trash can	341	3.4	444	4.4	0.05	0.05
	Toilet	274	2.7	423	4.2	0.04	0.05
3.	Security						
	Playground	346	3.5	424	4.2	0.05	0.04
	Activities in park area	367	3.7	420	4.2	0.05	0.04
	Parking area	338	3.4	422	4.2	0.05	0.04
4.	Circulation						
	The ease of access to park area	388	3.9	412	4.1	0.05	0.04
	The ease of surrounding park	390	3.9	410	4.1	0.05	0.04
	The ease of parking vehicles	368	3.7	417	4.2	0.05	0.05
5.	The aroma						
	From waterways (ditch)	336	3.4	410	4.1	0.05	0.04
	Trash can	351	3.5	430	4.3	0.05	0.05
6.	Climate regulator (Climatology)						
	The level of shade in park area	277	2.8	455	4.6	0.04	0.05
	The level of wind circulation in park area	368	3.7	408	4.1	0.05	0.04

No.	Factors	Satisfaction		Interests		Bobot (X)	Bobot (Y)
		Nilai	Rata-rata	Nilai	Rata-rata		
	The facility to take shelter if it rains in park area	284	2.8	412	4.1	0.04	0.04
7.	Utility						
	Availability of wi-fi	175	1.8	342	3.4	0.03	0.04
	Availibility of power sources	232	2.3	375	3.8	0.03	0.04
	Availibility of clean water	249	2.5	430	4.3	0.04	0.05
	Availibility of communication network (signal)	350	3.5	430	4.3	0.05	0.05
Total		7136	71.5	9234	92.4	1	1
Average			3.3		4.2		

From Table 2 above shows us the average satisfaction and interest in Singha Merjosari Park in Malang. The calculation result will be displayed in the form of Cartesian diagram, which in the diagram, there are quadrants containing about Keep Up the Good (quadrant I), redundant (quadrant II), a low priority (quadrant III) and the main priority (quadrant IV). The Cartesian diagram Singha Merjosari Park Malang as follows:



**Figure 1.** Cartesian Diagram Singha Merjosari Park Malang

In interpreting quadrant on the Cartesian diagram as follows:

1) Keep Up the Good Work

In this quadrant variable is considered as an important factor and should be maintained for consumers to feel satisfied. The variables that must be maintained is:

- Aesthetic factors including: (1) plants or vegetation, and (3) support facility - seat or the gazebo;
- Hygiene factors including (4) area of the park and (6) the trash;
- Safety factors including (8) facility to play, (9) the activities in the park area, and (10) the parking area;
- Circulation factors factors, among other things, (13) the ease to park motor vehicle;
- Aroma or smell factors, among other things, (15) garbage can;

- Utilities factors, among other things, (22) the availability of communications networks - the signal strength.
- 2) Possible Overkill
- In this quadrant variable considered as a factor that is less important, but implementation on the ground is very satisfying. As for the variables are:
- Safety factors including (8) facility to play, (9) the activities in the park area, and (10) the parking area;
  - Circulation factors including (11) the ease of access to the location of the park, (12) the ease in the surrounding park, and (13) the ease of parking vehicle;
  - Aroma or smell factors, among other things, (14) drains;
  - Climate regulation factors including, among other things, (17) the level of air circulation in the garden area.
- 3) Low Priority
- In this quadrant variable considered as a factor that is not too important or not expected by the consumer. As for the variables are:
- Hygiene factors including (7) toilet;
  - Climate regulation factors including (18) shelter if it rains in the garden area;
  - Utilities factors, among other things, (19) the availability of wi-fi networks, and (20) the availability of electricity network.
- 4) Concentrate Here
- In this quadrant variable is considered as an important factor, but according to the consumer is not satisfying and should be improved. As for the variables are:
- Aesthetic factors including (2) support facility - lighting;
  - Hygiene factors including (5) and the parking area (7) toilet;
  - Climate regulation factors including (16) the level of shade or shade in the garden area;
  - Utilities factors, among other things, (21) the availability of clean water network.

Based on calculations through the use of IPA method, the attributes that need attention are the variables that are in quadrant IV. Based on the results of the analysis, it appears that the variables that need improvement and enhancement to support the people's satisfaction is as follows.

Table 3. Factor analysis of satisfaction and interest of visitor perceptions in Singha Merjosari Park Malang

No.	Variable	Satisfaction Factor	Analysis
1.	Aesthetics	Support facilities – lighting	The design of the lighting in the garden is very monotonous. There needs to be more creative and appropriate lighting design for the park theme.
2.	Cleanliness	Parking area	Cleanliness in the parking area is very dirty because of the large leaves of trees falling. Regular cleaning is required.
		Toilet	Cleanliness in the toilet is very bad because it is less maintenance so that many ceramics are damaged or broken. It is necessary to repair the damaged tile and clean the toilet regularly.
3.	Climate Regulator (Climatology)	The level of shade or shade of the garden	The level of shade or shade of the garden is not enough since there are many plants. The addition of a shade plant evenly is required
4.	Utility	The availability of clean water	The availability of clean water in the garden is also needed. The availability of clean water in effective hours is required.
		The lighting	The lighting at night was minimal and less inequality lies the lights throughout the park.

### 3.2 Customer Satisfaction Index (CSI)

Results of the index calculation of user satisfaction in Singha Merjosari Park Malang can be seen in Table 4.

Table 4. Index of Users Interests and Satisfaction

No.	Factors	Interests (I)	Satisfaction (P)	Score (S) (S) = (I) x (P)
		Skala 1 - 5	Skala 1 - 5	
1.	Aesthetics			
	Plants	4.3	3.8	16.34
	Supporting facilities – Lights	4.3	3.0	12.9
	Supporting facilities – Gazebo	4.4	3.7	16.28
2.	Cleanliness			
	Park Area	4.5	3.5	15.75
	Parking Area	4.3	3.0	12.90
	Trash can	4.4	3.4	14.96
	Toilet	4.2	2.7	11.34
3.	Security			
	Playground	4.2	3.5	14.70
	Activities in park area	4.2	3.7	15.54
	Parking area	4.2	3.4	14.28
4.	Circulation			
	The ease of access to park area	4.1	3.9	15.99
	The ease of surrounding park	4.1	3.9	15.99
	The ease of parking vehicles	4.2	3.7	15.54
5.	The aroma			
	From waterways (ditch)	4.1	3.4	13.94
	Trash can	4.3	3.5	15.05
6.	Climate regulator (Climatology)			
	The level of shade in park area	4.6	2.8	12.88
	The level of wind circulation in park area	4.1	3.7	15.17
	The facility to take shelter if it rains in park area	4.1	2.8	11.48
7.	Utility			
	Availability of wi-fi	3.4	1.8	6.12
	Availibility of power sources	3.8	2.3	8.74
	Availability of clean water	4.3	2.5	10.75
	Availibility of communication network (signal)	4.3	3.5	15.05
Total		Y = 92.4		T = 301.69

$$CSI = \frac{301.69}{5 \times 92.4} \times 100\% = 65,30\%$$

Based on the results of data processing and analysis can be concluded that the Singha Merjosari Park visitor satisfaction is achieved, but overall visitors are still “Satisfied Enough”. This is proven by the results of the CSI value which is 65.30%. So the improvement is needed in order to increase visitor satisfaction.

### 4. Conclusions

Based on calculations using the IPA, there are attributes that need to get the attention which are the attributes contained in quadrant IV. Factors contained in quadrant IV are considered important and in poor condition. Based on the results of the analysis, it appears that the attributes that need improvement and people satisfaction enhancement is as follows:

- aesthetic factor which is the variable of support facilities - lighting

- the cleanliness factor which is the variable of parking area and toilets
- climate regulator factor of which is the variable of level shade or shade in the garden area
- the utility factor is the variable of clean water availability and lighting

Based on the results of data processing and analysis of the use of Customer Satisfaction Index (CSI) that visitor satisfaction Singha Merjosari Park Malang is achieved, but visitors are still not satisfied overall. This is proven by the results of the CSI value which is 65.30%. Improvement in order to increase visitor satisfaction is needed.

Implications or changes that should be given are:

- **Lighting:**  
The aesthetics or design of lighting should be more creative and become the park iconic identity, for example, the use of lamp lanterns that is suitable with the concept of Singha Merjosari park and the evenness of the park lighting at night.
- **Toilet:**  
It is necessary to fix the floor in the toilet, also the maintenance should be regularly done. It is also important to change or redesign the look of the toilet so that visitors can enjoy the appearance and it can be an icon (the concept of toilet is according to the local culture of Malang), for example the lion statues (male and female) which shows the different type of toilet use (between men and women) so that the appearance can be more interesting.

## References

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