Visitor Perceptions of Service Quality in Promoting Environmental Sustainability at Umbul Bening Water Park, East Java

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ABSTRACT

Purpose: This research aims to determine tourists' perceptions regarding service quality based on environmental sustainability and to create a service quality model to support ecological sustainability at the Umbul Bening tourist attraction.
Research methods: The research uses a sequential exploratory mix-method, with an accidental sampling technique of 322 respondents; quantitative data is processed using SERVQUAL (service quality) and IPA (critical performance analysis), while qualitative data processing is analyzed using FGD (focus group discussion).
Results and discussion: The research results show that tourists' perceptions of service quality based on environmental sustainability are not good, with a gap in service quality, especially related to environmental quality.
Implication: The service model referring to servicescape is an alternative for creating environmental quality in providing services using the SOR (stimulus, organism, response) paradigm approach, which is expected to be able to influence employee consistency in carrying out their work to support environmental sustainability.

Keywords: perception, service, service scape, environmental sustainability

INTRODUCTION

Banyuwangi Regency is known as the Sun Rise of Java because the sun rises earlier than other districts on the island of Java (Fikri, 2017). The shape of region is divided into highland and lowland areas, as well as a coastline that stretches from north to south; with these conditions there are five categories of tourist attractions in Banyuwangi, namely Nature (such as the Ijen Mountains, Beaches and Baluran), Plantations (plantations in Kalibaru District and Slippery), Assisted Tourism (bathing and other artificial tourism), Religious Tourism (such as temples in the Alas Purwo area and tombs of religious figures), Cultural Tourism (such as Rising Village) which is the choice of tourists to visit (Dewi, 2021). Based on data from the Banyuwangi Central Statistics Agency, in the last two years, the number of tourist visits to Banyuwangi has increased; there were 551,478 tourists in 2022 (Banyuwangi Regency, 2023) and 586,274 tourists in 2023 (Banyuwangi Regency, 2024).

The Umbul Bening tourist attraction is one of the assisted tourism/bath tourism attractions in Banyuwangi, located in Salamrejo Hamlet, Sumbergondo Village, Glenmore District. The management pays attention to environmental sustainability when providing services. Based on initial observations, there were findings that employees in providing services to visitors were less than optimal, such as employees not encouraging visitors to dispose of rubbish in the right place, employees being less responsive in fulfilling visitors' requests, making visitors throw rubbish carelessly which had an impact on environmental cleanliness,

Based on data, the number of tourist visits has decreased; the decline in tourist visits is caused by several factors, namely the condition of the tourist attraction, the policies set, and the quality of human resources to receive tourist visits (Nugrogo, 2016). Tourists do not get comfort and pleasure while visiting the object. tourism (Witarsana et al., 2017). To identify the cause of the decline in tourist visits to Diumbul Clear by knowing tourists' perceptions of the quality of services implemented because, in the same year, the number of tourists visiting Banyuwangi increased.

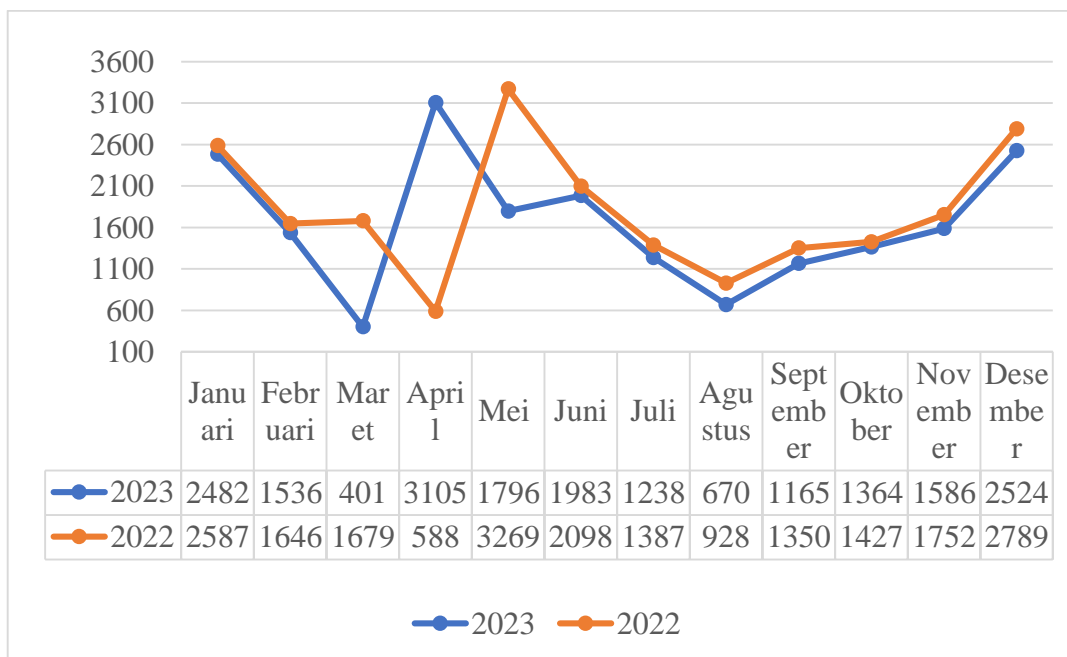|	Januari	Februari	Maret	April	Mei	Juni	Juli	Agustus	September	Oktober	November	Desember
2023	2482	1536	401	3105	1796	1983	1238	670	1165	1364	1586	2524
2022	2587	1646	1679	588	3269	2098	1387	928	1350	1427	1752	2789

Figure 1. Number of tourist visits from Umbul Bening Banyuwangi
[Source: Umbul Bening, 2024]

Several researchers have carried out Research on the use of the environment as a means of tourism activities, including (Nejati et al., 2014). The results of their research show that this use hurts the environment, especially in terms of landscape, air quality, and water quality. Meanwhile, research (Kapur, 2018) shows that this use positively impacts the environment, especially in improving environmental management and planning, increasing environmental awareness, and protecting and preserving the environment. There is a research gap in previous research, so tourism activities should be carried out with full consideration, which does not only refer to economic growth but also the impact on socio-cultural life and the environment (Mulia, 2021). This research was

carried out to encourage minimizing potential negative impacts through a service quality model to support environmental sustainability, which is based on tourists' perceptions of the quality of service being implemented; this is the novelty of this research.

This research is applied research, using mixed methods; the theory used is sustainable tourism, which considers current and future economic, social, and environmental impacts (Government of Indonesia Regulations, 2021). To support environmental sustainability, the servicescape concept, which is everything physically present around consumers during a service transaction meeting, consisting of atmosphere, design, and social dimensions (Hightower & Shariat, 2009), is used as a guideline in creating service models. This research aims to determine tourists' perceptions of the quality of services implemented and create a service quality model to support environmental sustainability.

RESEARCH METHODS

This research was conducted at the Umbul Bening tourist attraction in Salamrejo Hamlet, Sumbergondo Village, Glemore-Banyuwangi District. Using qualitative and quantitative data types with primary data sources and secondary data. Sampling was used to represent the sample population (Sugiyono, 2013); using the accidental sampling technique, every individual/tourist who happened to cross paths with the researcher was used as a sample (Purnomo, 2015), and the total sample for this study was 322 respondents,

The instrument for this research is a questionnaire divided into a list of questions arranged in statement sentences with available answer options (Gulo, 2002). Moreover, focus group discussion as data collection through interviews with a group of people numbering between 4 (four) and 10 (ten) (Basnet, 2018); the research design is a sequential exploratory mix-method with stages of data collection and quantitative data analysis in the first stage, and collecting and analyzing qualitative data in the second stage, in order to strengthen the quantitative research results (Muzaki & Ibrahim, 2020). The data analysis technique uses the servqual test to calculate the difference score for each survey item by subtracting customer perceptions from their expectations (Schneider & White, 2004). Meanwhile, critical performance analysis is used to assess the importance of various relevant attributes and the level of company performance on each attribute. The average value of attributes' importance level and Company performance will be analyzed in the Importance-Performance Matrix/Cartesian Diagram (Tjiptono & Chandra, 2011). Using SPSS tools, the servicescape dimensions consisting of the atmosphere, design, and social dimensions become a reference in creating service quality models using the SOR (stimulus-organism-response) approach.

RESULTS AND DISCUSSION

The servqual test is used to calculate the gap score between the expected level of service and the level of service received; if the service performance value (perception) is less than expectations, the visitor feels dissatisfied; if the service performance value (perception) is the same as expected then the visitor feels satisfied with existing services, and if the service performance value (perception) exceeds what is expected then visitors assess the available services as

extraordinary (Tjiptono & Chandra, 2011). Table 2 shows the Servqual scores for each service attribute.

Table 1. Servqual test results

No.	Service Quality Attributes	Average		Gap
		Perception	Expectation	
1	Parking area available	4.46	4.20	0.26
2	Environmental cleanliness of tourist attractions	3.55	4.30	-0.75
3	Cleanliness of swimming pool water	4.03	4.24	-0.21
4	Employee neatness in appearance	3.62	4.12	-0.50
5	Services and rides are by what is offered	4.02	4.25	-0.23
6	The manager's reliability in providing tourist attractions that utilize the environment	4.48	4.34	0.14
7	Reliability of employees in directing to maintain the cleanliness of the tourist environment	3.47	4.25	-0.78
8	Reliability of directional information during the visit	3.83	4.07	-0.24
9	Employee responsiveness to environmental cleanliness	3.55	4.23	-0.68
10	Employee responsiveness to providing assistance	3.90	4.05	-0.16
11	Employee responsiveness in handling visitor requests	3.77	4.05	-0.28
12	Employees provide complete and transparent information	3.83	4.07	-0.24
13	Politeness and friendliness of employees toward visitors	3.77	4.07	-0.30
14	Employee knowledge of tourist attractions and environments	3.66	4.20	-0.54
15	Tourist environmental safety	4.50	4.36	0.15
16	Availability of waste disposal sites	3.58	4.14	-0.56
17	Availability of first aid facilities for accidents (P3K)	4.40	4.23	0.17
18	Employees' attention to visitors	3.73	4.05	-0.33
19	Employees' patience in serving visitors	3.70	4.05	-0.35

| No. | Service Quality Attributes | Average | | Gap |
		Perception	Expectation	
20	Employees understand visitors' needs	3.68	4.05	-0.37

[Source: Primary data processed by researchers, 2024]

Service attributes that perform below visitor expectations require service improvement. Based on the results of the Important Performance Analysis (IPA) test, which is presented in the form of a Cartesian diagram, four service attributes are the main priorities for improvement. Figure 1 is a Cartesian diagram showing each service attribute's location.
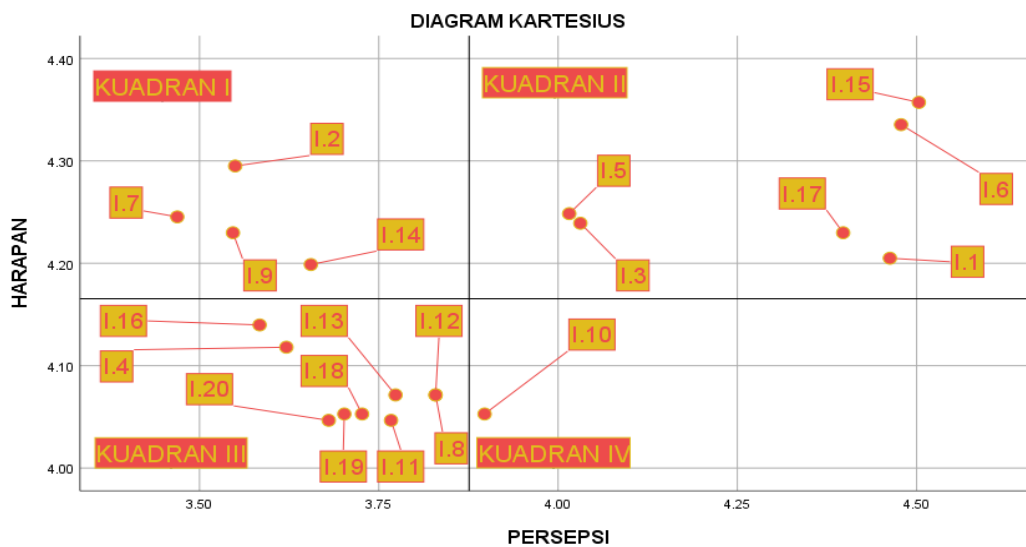

Figure 2. Cartesian diagram
[Source: Primary data processed by researchers, 2024]

The four attributes that are the main priority are (1) Employee knowledge of tourist attractions and environments, (2) Reliability of employees in directing them to maintain a clean environment, (3) Employee responsiveness to environmental cleanliness, and (4) Environmental cleanliness of tourist attractions.

In response to these findings, a focus group discussion was held with employee representatives from the marketing and ticketing team, security parking team, culinary rides team, and cleaning team, and came up with the following solutions: (1) Inform every product development (rides, facilities, etc.) via the Whatsapp group, so that every employee knows about the Umbul Bening rides and environment, (2) There is a need for posters urging visitors to protect the environment by throwing away rubbish in the right place, (3) Add a trash can, and (4) Cleaning officers must frequently check the areas they are responsible for.

Based on the data in Table 2, Servqual Test Results from 20 service attributes, 16 services do not meet visitors' expectations/expectations, indicating that visitors' perceptions of service quality at Umbul Bening are not very good, especially regarding environmental quality. Therefore, improving environmental

quality through service models is necessary to support environmental sustainability. The models are as follows.
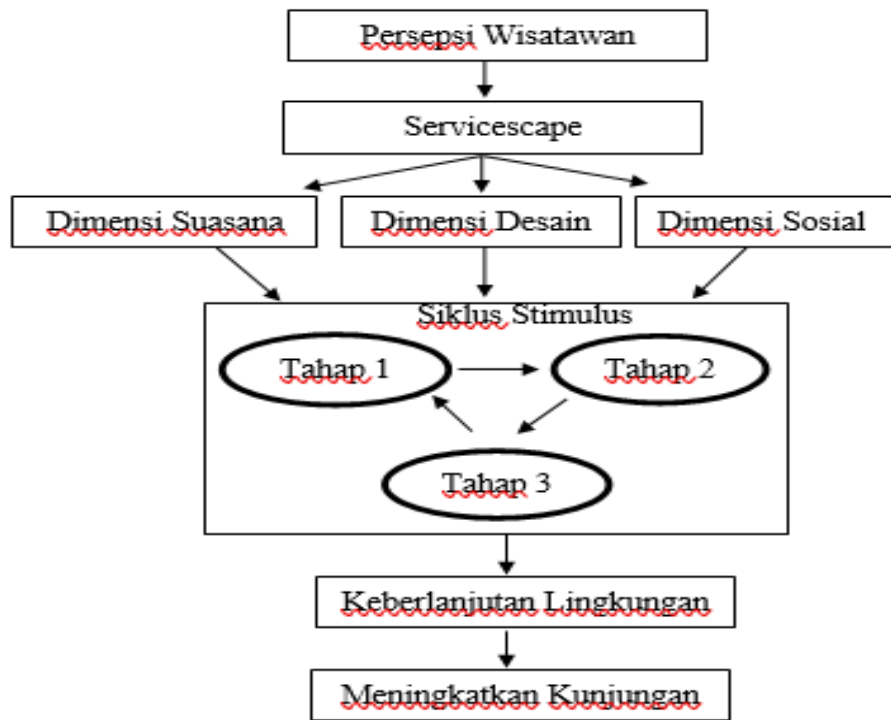

Figure 3. Service Quality Model
[Source: Primary data processed by researchers]

The service model above was created by referring to the servicescape/physical environment consisting of atmosphere dimensions, design dimensions and social dimensions, which is based on the Stimulus-Organism-Response (SOR) paradigm developed by Mehrabian & Russell (1974) that internal feelings or behavior and organism (a person) is caused by the external environment (stimuli) improvements to the physical environment of a service company are very important because services can be produced and consumed simultaneously in an environment that acts as a service package and can represent the only physical evidence (Mari & Poggesi, 2013). Apart from that, it can increase visitor attraction (Pîrghie & Matei, 2020), as well as make visitors satisfied, create customer loyalty and positive word-of-mouth recommendations, and have the potential to attract new customers (Tjiptono & Chandra, 2011), as well as will increase sustainable tourist visits to Umbul Bening,

CONCLUSION
Tourists' perceptions of the quality of service at the Umbul Bening tourist attraction are not good because of the 20 service attributes assessed by tourists; only four service attributes meet or exceed the expected service level, while the other 16 attributes are below the expected service level.
Model making refers to the servicescape (physical environment), which consists of atmosphere dimensions, design dimensions, and social dimensions in providing service quality to support environmental sustainability, with application

through the Stimulus-Organism-Response (SOR) paradigm, because of the feelings or behavior of tourists (organisms). It is caused by the external environment (stimuli), which can influence tourists' feelings and decisions (response).

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