



# Analysis of Tourist Satisfaction Towards Implementation of CHSE Protocol for Homestay in Cilember Tourism Village

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**Abstract.** The COVID-19 pandemic has led to a significant drop in tourist arrivals worldwide, including in Cilember Tourism Village, one of the Tourism Villages in West Java Province. Tourism governance with a CHSE (Cleanliness, Health, Safety, and Environment Sustainability) approach is expected to provide solutions for tourism actors to implement the government health and safety standards. This study aims to evaluate the implementation of the *Homestay* CHSE-based health protocol in increasing tourist satisfaction by collecting data through observation, interviews, literature study, and observation. The research method used is mixed methods using quantitative and qualitative with the Customer Satisfaction Index and Important Performance Analysis approach. Respondents in this study are tourists who come to Cilember Tourism Village. This study assesses tourist satisfaction based on each dimension: Cleanliness, Health, Safety, and Environmental Sustainability. Based on the results, the level of conformity between the level of interest and performance in homestay services is in the average figure of 81.49% = 81%. The Customer Satisfaction Index (CSI) rating is 64.09%, showing that tourists feel quite satisfied with the performance of services provided by homestay managers in Cilember Tourism Village. Suggestions need to be a concern for homestay managers to improve the quality of services related to the CHSE protocol to increase tourist satisfaction.

**Keywords:** Tourism Village · Health Protocol · CHSE · Sustainability

## 1 Introduction

Tourism has become essential to national development in Indonesia, even becoming one of the government's priority development programs. Since 2016, Indonesia's tourism sector has been ranked as the government's second most significant foreign exchange contributor [1]. The decade of 2020 began with the unsettling and unfortunate occurrence of new diseases in more than 30 new infections experienced by the world in the last 30 years [2]. The Covid-19 pandemic, which began to spread in Indonesia in March 2020, severely hit economic growth, impacting health and social life. The tourism sector is no exception because, in addition to strict travel bans and restrictions, people are

encouraged to increase social distancing and avoid crowds to help break the chain of the coronavirus-19 [3]. Over time, this pandemic has also changed people's habits and behavior patterns to have more concerned with health.

For some people, tourist villages are considered an alternative tourist destination that is attractive during the Covid-19 pandemic [4]. The charm of these natural tourist attractions is mountainous landscape scenery, rice fields, and plantations with fresh air and pollution-free. Generally, the density level of tourist village visitors is easier to manage because of the vastness of the village area. Tourist villages are currently a trend and attractive because tourists can learn local wisdom in a clean, natural, and healthy environment [5].

However, further efforts are needed so that business actors, tourists, and the public can safely carry out their tourist activities. For this reason, through the Ministry of Tourism, Creative Economy, the Indonesian government created health protocol guidelines based on Cleanliness, Health, Safety, and Environmental Sustainability (CHSE) to be applied in tourism destinations, both in tourist attractions and various tourism supporting facilities such as restaurants, hotels, homestays, shopping centers, creative economy businesses, and tourism transportation to increase visitors' confidence in the guarantee of cleanliness, healthy, safe, and environmentally friendly products, and services, prevent the spread of Covid-19, and maintain the reputation and credibility of tourist attractions [6].

The development of tourist villages can be one of the efforts to realize equitable development at the village level in various regions of Indonesia. It is expected to improve the community's economy and encourage environmental preservation and local wisdom [7]. This factor is one of the reasons why the United Nations of World Tourism Organization (UNWTO) also enables Indonesia to maximize tourism based on tourist villages [8]. Some of these things became the basis of important government considerations. In collaboration with the Ministry of Tourism of Creative Economy, the Ministry of Rural and the Ministry of Economic Cooperatives seeks to develop rural-based tourism by targeting the realization of 2000 tourist villages in 2020 [9].

One affected village is Cilember Tourism Village, which has closed its tourist activities. Tourism Villages develop categories with various potentials with unique attraction development during the current pandemic in Cisarua District, Bogor Regency. It was formed in early 2015 and initiated by a tourism group that saw the potential of tourism in Cilember Village. The geographical condition is between two major rivers: the Ciliwung River and the Ciesek River (Table 1).

**Table 1.** Number of tourist visits to Cilember Tourism Village in 2020

<b>Tourism Village</b>	<b>Local</b>	<b>Foreigner</b>	<b>Total</b>
<b>Cilember</b>	11402	4821	16223
<b>Tugu Selatan</b>	9289	3013	12302
<b>Batu Layang</b>	8901	2893	11794
<b>Malasari</b>	6491	1901	8392
<b>Taman Sari</b>	4903	1834	6737

Cilember has numerous potential factor among the tourism village in Bogor not only of the number of tourists visited but also have extraordinary attraction and uniqueness with various cultural attractions such as Pencak silat, planting rice activity or *nandur* and *saba lembur*, namely walking around a rice field village and ended with playing water on the Ciesek river. Cilember Tourism Village also prepares tourists with complete facilities such as *homestays*, public toilets, places of worship, and food to meet tourist needs [10].

The economic life of Cilember Tourism Village is very dependent on the tourism industry, especially homestay. A homestay is a building, a house inhabited by the owner and partly used for rent by providing opportunities for tourists to interact with life day-to-day owner, which is owned by the local community for local economic empowerment. The existence of a homestay offers opportunities for tourists to enjoy the culture through closer interaction with the host culture home and food [11].

Because the interest of tourists to travel and stay at the homestay in Cilember Village are quite high, the homestay must implement the CHSE program. Several parties must implement the CHSE protocol, including owners, managers, communities, and homestay guests. This study contributes to analyzing the level of tourist satisfaction in implementing the tourism village CHSE protocol in the management of homestays.

Cilember Tourism Village has implemented health protocols such as having a hand-washing facility with running water and liquid soap, Hand Sanitizer and body temperature checking at the entrance of The Tourist Village or *the* gathering point (assembly point) before doing activities in the Tourist Village. Cilember Tourism Village has regulations for wearing masks and maintaining distance with restrictions on the maximum number of visitors while in the tourist village. For the environment of Cilember Tourism Village, cleaning and disinfectant spraying activities are done regularly and periodically by permanent cleaners, as well as the availability of sewerage (*drainage*) and closed garbage bins at designated places. Cilember Tourism Village has a Visitor Security and Safety Service (*Security and Safety*).

## 2 Objectives

Although there have been many uses of IPA as an instrument for quality measurement perception in tourism [12, 13], there are still gaps that require further research. Most studies implementing an IPA scheme only focus on certain tourism services such as accommodation, transportation, tours, and attractions. However, discussions about tourism villages and homestay management based on CHSE implementation are still rare.

The objectives of this research are to analyze the level of conformity based on tourist perception of cleanliness, health, safety, and environmental sustainability implementation at homestay Cilember tourist village, analyze the level of tourist satisfaction in the implementation of Cleanliness, Health, Safety, and Environment Sustainability at homestay Cilember Tourism Village, analyzing quadrants in the Importance Performance Analysis matrix in homestay management in Cilember Tourism Village.

### **3 Theoretical Review**

#### **3.1 Tourism Village**

Rural tourism, or village tourism, has been widely known as a form of tourism product developed in rural areas in various places in the world, as a form of tourism activity that brings tourists the experience of seeing and appreciating the uniqueness of life and traditions [14]. Tourism Village is a form of integration between attractions, accommodation, and supporting facilities that are presented in a structure of community life that is integrated with applicable procedures and traditions [15].

#### **3.2 Conformity Level Tourist Perception**

The level of conformity is the result of the comparison of the expected score with the reality of the implementation score. This assessment interprets visitor satisfaction with these conditions and services. Also, as an indicator of future improvements, always pay attention to visitors' wishes. The level of conformity will determine the main order of the factors that affect the satisfaction of tourism management services to visitors. [16].

#### **3.3 Guest Satisfaction**

Customer satisfaction provides two main benefits for the company: customer loyalty and advertising commonly referred to as positive word of mouth [17]. Satisfaction is a person's feeling of pleasure or disappointment that arises from comparing the product's performance to their expectations [18].

#### **3.4 Important Performance Analysis**

Importance-Performance Analysis (IPA) is a method used to measure customer satisfaction by measuring the level of importance and level of implementation. The level of importance is how important the company's service attributes are to customers, while the level of implementation is the company's performance. Results from IPA are included in the Cartesian diagram to know the priority of the company's service attributes. So, it will know the attributes of company services that need to be improved and maintain its performance [19].

#### **3.5 Cleanliness, Health, Safety, and Environment Sustainable (CHSE) by the Ministry of Tourism and Creative Economy**

The CHSE Protocol is the policy of the Ministry of Tourism and Creative Economy as a guide for entrepreneurs, managers, local tour guides, and employees of tourist attractions in the adaptation of new habits in the form of guidelines for tourism businesses, tourism destinations, and other tourism products to apply guarantees to tourists on the implementation of Cleanliness, Health, Safety, and Environmental Sustainability.

The implementation of Cleanliness, Health, Safety, and Environmental Sustainability (CHSE) is now referred to as the Guidelines for implementing Cleanliness, Health,

Safety, and Environmental Sustainability in Tourist Attractions. This operational guide is from the Decree of the Minister of Health Number HK.01.07 / Menkes / 382/2020 concerning Health Protocols for People in Public Places and Facilities in the Framework of Prevention and Control of Corona Virus Disease 2019 (Covid-19) [6].

## 4 Methods

### 4.1 Types of Research

In this study, the researchers use mixed methods. Mixed methods is a research method between quantitative and qualitative methods to be used together in research activity to obtain more comprehensive, valid, reliable, and objective data [20].

### 4.2 Population and Sample

The population combines all elements in the form of events or people with similar characteristics. It becomes the researcher's primary concern because it is viewed as an object of research [21]. In this study, the population is tourists who visit Homestay Cilember Tourism Village, Bogor Regency.

The sampling technique applied in this study is Purposive Sampling. Purposive Sampling is a technique of determining samples based on specific criteria or characteristics, namely consumers who have particular standards that follow the researcher's purpose and are used as a sample to solve the problem of researchers [22].

Due to the data limitations in this study, the erratic visits of tourists' homestay, the researchers use the method number of sample of the tourist population using the unknown population formula [23].

$$n = \left( \frac{Z_a \cdot Z_o}{e} \right)^2$$

$$n = \left( \frac{1.96 \cdot 0.25}{0.05} \right)^2$$

$$n = 96.04$$

Information:

$n$  = Number of samples

$Z_a/Z_o$  = Value  $z$  is a confidence level of 95% which is 1.96

$e$  = 5% error rate

$\sigma$  = standard deviation of the population (sample presumption with a representative of  $0.05 \times 0.05 = 0.25$ )

Then it can be concluded that the sample taken as many as 96 respondents.

**4.3 Analytical Methods**

**4.3.1 Validity Test**

A questionnaire is declared valid or invalid if the questions can reveal something that will be measured by the questionnaire (Ghozali, 2013). Suppose the correlation value of the questionnaire is below 0.3 or vice versa. The item is declared valid if the coefficient between objects with the total item equals or above 0.3. Instrument validity tests can use correlation formulas. The correlation formula based on Pearson Product Moment is as follows:

$$r_{xy} = \frac{N(\sum XY) - (\sum X)(\sum Y)}{\sqrt{N(\sum X^2) - (\sum X)^2(N(y2) - ((\sum Y)^2))}}$$

r = Validation coefficient of the item searched

XY = Correlation coefficient

ΣX = Number of scores in the X distribution

ΣY = Number of scores in the Y distribution

ΣXY = The sum of variable X and variable Y observation times.

N = Number of Respondents

**4.3.2 Reliability Test**

Reliability is a measuring tool of a questionnaire that indicates variables. If a questionnaire answer is consistent or stable from time to time, the questionnaire will be reliable [24]. If the Alpha value > 0.60, the research is reliable. The Cronbach Alpha coefficient formula is as follows:

$$r = \frac{k}{k - 1} x \left\{ 1 - \frac{\sum Si}{St} \right\}$$

r = Instrument reliability coefficient (cronbach alfa)

ΣSi = The number of score variances of each item

St = Total variance

k = Number of question items

If the alpha value < 0.60, then the variable is not reliable, and if the alpha value >0.60, the value of the reliable variable.

**4.3.3 Customer Satisfaction Index**

The Customer Satisfaction Index (CSI) is a method used to determine visitor satisfaction. The test of the CSI method is carried out by looking at the level of importance of the attributes provided by the researcher. CSI determines the level of customer or consumer satisfaction of an index by taking into account the level of importance of the attributes to be measured [25]. The stages of analysis are as follows:

- a. Determining the Mean Importance Score (MIS) and Mean Satisfaction Score (MSS), a value derived from the average performance of each attribute and the level of importance.

$$MIS = \frac{\sum yi}{n} \quad MSS = \frac{\sum xi}{n}$$

Information:

- n = number of respondents
- yi = interest value of the ith attribute
- xi = performance value of the ith attribute

- b. Using the Weighted Factor (WF) function of the Mean Importance Score or the average value of the interest level (MISi) of each attribute expressed in the form of a percent against the total Mean Importance Score (MISi) for all attributes tested. WF values can be obtained using the following equations:

$$MFi = \frac{MISi}{Total\ MISi}$$

Information:

MISi = Mean Importance score ke-i

- c. The Weighted Score (WS), the function of the Mean Satisfaction Score, is then multiplied by a Weighted Factor (WF). The average satisfaction score (MSS) is obtained from the average performance level.

$$WSi = MSSi \times Wfi$$

Information:

MSSi = Mean Satisfaction Score ke-i

WFi = Weighted Factor ke-i

- iv. Using the Calculation of Weighted Average Total (WAT), the function of the total Weighted Score (WS) attribute 1 (a1) to the attribute n (an).

$$WHAT = WSa1 + WSa2 + \dots + WSan$$

- v. Calculating the Customer Satisfaction Index (CSI), a function of the Weighted Average (WA) value divided by the results of the Highest Scale (HS).

$$CSI = \frac{WA}{HS} \times 100\%$$

Information:

WA = Weighted Average

HS = Highest Scale (maximum scale) (Table 2).

### 4.3.4 Importance Performance Analysis

The Importance Performance Analysis (IPA) method is a calculation method that originated from the concept of Service Quality (SERVQUAL). Companies use this method to increase and realize consumer expectations of the company’s tangible or intangible products [26]. In this case, researchers will analyze tourists’ level of interest and performance in Cilember Tourism Village Homestay. The destination manager can produce more quality tourist services following tourist expectations in the future.

**Table 2.** CSI Criteria and Values

CSI Criteria	CSI Value
81%–100%	Very Satisfied
66%–80%	Satisfied
51%–65%	Quite Satisfied
35%–50%	Less Satisfied
0%–34%	Not Satisfied

After knowing the level of importance and performance of each attribute of the tourism component for the entire respondent, the next step is to map the results of the questionnaire calculation into a cartesian diagram. The first step is calculating the total level of importance and performance, thus resulting in a conformity score.

$$Tki = \frac{Xi}{Yi} \times 100\%$$

- Tki: Level of Conformity
- Xi: Performance Scoring Score
- Yi: Interest Assessment Score

Then, the second step is to simplify the numbers into the cartesian diagram, which can be done by dividing each of the total interests and levels of performance by the number of respondents with the following formula:

$$\bar{Xi} = \frac{\sum Xi}{n} \quad \bar{Yi} = \frac{\sum Yi}{n}$$

**Information:**

- $\bar{Xi}$  = Average score of each attribute I at performance level
- $\bar{Yi}$  = Average score of each attribute I at the importance level
- $\sum Xi$  = Total score on each attribute I at the implementation level of all respondents
- $\sum Yi$  = Total score on each attribute I at the implementation level of all respondents
- n = Total Respondent

The next step after getting the number is included in the cartesian diagram. The cartesian diagram is an importance-performance matrix in which the chart is divided into four quadrants bounded by two lines that intersect perpendicularly at a point (X, Y), each calculated by the formula:

$$\bar{X}_t = \frac{\sum_i^k 1\bar{X}_t}{n} \quad \bar{Y}_t = \frac{\sum_i^k 1\bar{Y}_t}{n}$$

- $\bar{X}$  = Average performance value of all statements
- $\bar{Y}$  = Average performance value of all statements
- n = number of attributes (questions)

The Importance Performance Analysis (IPA) matrix consists of four quadrants describing different circumstances [27]. The cartesian diagram in Importance Performance Analysis is shown in the Fig. 1 as follows:



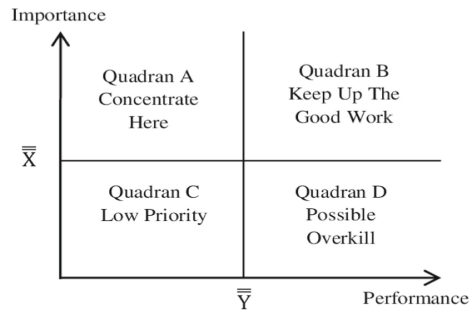


Fig. 1. Cartesian Diagram Importance Performance Analysis (IPA)

## 5 Findings and Discussion

### 5.1 Validity Test

The r-value of the table with the provision  $N = 96$  and a significant rate of 5%, then the number obtained is  $= 0.168$ . The following data processing results from observations that have been made from 96 respondents with a total of 32 questions. The provisions are valid if  $r > r$  critical or  $r > r^{\text{table}}$  with 96 respondents [28].

- If  $r \geq 0.168$ , then the items are declared valid.
- If  $r \leq 0.168$ , then the items are declared invalid.

The Table 3 shows that all statements are declared valid because the r-value calculates greater than the r table  $> 0.168$ .

### 5.2 Reliability Test

The criteria of a research instrument are said to be reliable using this technique if  $\alpha > 0.6$  [28] with coefficient formula Alpha Cronbach as follows (Table 4).

The reliability test at the interest level of the Cronbach Alpha value of 0.749 hinted at is 0.6, and it can be concluded that the Cronbach alpha value of  $0.740 > 0.6$  is declared reliable (Table 5).

The reliability test on the performance level component of the Cronbach Alpha value of 0.696 with the hinted can be concluded  $0.696 > 0.6$  is declared reliable.

### 5.3 Customer Satisfaction Index

The Customer Satisfaction Index is an index for determining the overall level of customer satisfaction using an approach that considers the importance level of the measured attributes [29] (Table 6).

In this study, researchers used the Customer Satisfaction Index to measure tourist satisfaction. The study involved 96 respondents who visited homestays in Cilember Tourist Village. Based on the Customer Satisfaction Index results, the overall total based

**Table 3.** Validity Test

Question	Correlation Value		R <sup>table</sup>
	Interests	Performance	
<b>Q.1</b>	0.246	0.212	0.168
<b>Q.2</b>	0.465	0.180	0.168
<b>Q.3</b>	0.212	0.214	0.168
<b>Q.4</b>	0.400	0.256	0.168
<b>Q.5</b>	0.433	0.185	0.168
<b>Q.6</b>	0.256	0.195	0.168
<b>Q.7</b>	0.275	0.553	0.168
<b>Q.8</b>	0.182	0.420	0.168
<b>Q.9</b>	0.315	0.182	0.168
<b>Q.10</b>	0.286	0.630	0.168
<b>Q.11</b>	0.458	0.680	0.168
<b>Q.12</b>	0.659	0.181	0.168
<b>Q.13</b>	0.286	0.368	0.168
<b>Q.14</b>	0.458	0.177	0.168
<b>Q.15</b>	0.659	0.540	0.168
<b>Q.16</b>	0.377	0.630	0.168
<b>Q.17</b>	0.337	0.440	0.168
<b>Q.18</b>	0.265	0.459	0.168
<b>Q.19</b>	0.432	0.284	0.168
<b>Q.20</b>	0.413	0.371	0.168
<b>Q.21</b>	0.318	0.443	0.168
<b>Q.22</b>	0.403	0.403	0.168
<b>Q.23</b>	0.307	0.311	0.168
<b>Q.24</b>	0.223	0.208	0.168
<b>Q.25</b>	0.280	0.507	0.168
<b>Q.26</b>	0.398	0.393	0.168
<b>Q.27</b>	0.230	0.440	0.168
<b>Q.28</b>	0.277	0.459	0.168
<b>Q.29</b>	0.172	0.284	0.168
<b>Q.30</b>	0.373	0.371	0.168
<b>Q.31</b>	0.308	0.443	0.168
<b>Q.32</b>	0.555	0.403	0.168

**Table 4.** Importance Level Reliability Test

<b>Reliability Statistics</b>	
Cronbach's Alpha	N of Items
.757	32

**Table 5.** Performance Level Reliability Test

<b>Reliability Statistics</b>	
Cronbach's Alpha	N of Items
.696	32

**Table 6.** Customer Satisfaction Index Analysis

Variable	Code	Attribute	Total Interests	Total Performance	CL (%)	MIS	MSS	WF	WS
<b>Reception Room</b>	Q1	CHSE Information and Guidelines	365	313	85.75	3.80	3.26	0.030	0.098
	Q2	Sitting position and safe distance	361	315	87.26	3.76	3.28	0.030	0.098
	Q3	Handwashing soap or hand sanitizer	356	328	92.13	3.71	3.42	0.029	0.101
	Q4	Body temperature check	372	307	82.53	3.88	3.20	0.031	0.098
	Q5	Cleaning of guest goods with disinfectant	362	305	84.25	3.77	3.18	0.030	0.095
	Q6	Reception room cleaned with disinfectant	378	306	80.95	3.94	3.19	0.031	0.100
	Q7	Location of gathering points and evacuation routes	356	310	87.08	3.71	3.23	0.029	0.095

*(continued)*

**Table 6.** (continued)

Variable	Code	Attribute	Total Interests	Total Performance	CL (%)	MIS	MSS	WF	WS
	Q8	Provision of bins in closed condition	375	303	80.80	3.91	3.16	0.031	0.098
<b>Bedroom</b>	Q9	Sheets, blankets and pillowcases are washed	382	305	79.84	3.98	3.18	0.032	0.100
	Q10	Room items cleaned with disinfectant	401	315	78.55	4.18	3.28	0.033	0.109
	Q11	Bedroom in clean condition	395	312	78.99	4.11	3.25	0.033	0.106
	Q12	Handwashing soap or hand sanitizer	389	292	75.06	4.05	3.04	0.032	0.098
	Q13	Environmental conservation campaigns	384	305	79.43	4.00	3.18	0.032	0.101
	Q14	Procedures for the use of equipment and electronic goods	383	303	79.11	3.99	3.16	0.032	0.100
	Q15	Provision of bins in closed condition	394	305	77.41	4.10	3.18	0.033	0.104
<b>Bathroom</b>	Q16	Separate bathroom with owner	381	315	82.68	3.97	3.28	0.032	0.103
	Q17	Clean and hygienic conditions	385	337	87.53	4.01	3.51	0.032	0.112
	Q18	The bathroom is cleaned with cleaning tools	383	313	81.72	3.99	3.26	0.032	0.103
	Q19	Soap supply	387	282	72.87	4.03	2.94	0.032	0.094
	Q20	The water tap works well	385	281	72.99	4.01	2.93	0.032	0.093
	Q21	The sewerage of the bathroom is tightly closed	380	310	81.58	3.96	3.23	0.031	0.101

(continued)

**Table 6.** (continued)

Variable	Code	Attribute	Total Interests	Total Performance	CL (%)	MIS	MSS	WF	WS
<b>Kitchen</b>	Q22	Complete cleaning with disinfectant	386	314	81.35	4.02	3.27	0.032	0.104
	Q23	Provision of hand washing facilities or hand sanitizer	382	304	79.58	3.98	3.17	0.032	0.100
	Q24	Food hygiene and sanitation	373	322	86.33	3.89	3.35	0.031	0.103
	Q25	Sitting position and safe distance	393	301	76.59	4.09	3.14	0.032	0.102
	Q26	Procedures for use and potential hazards	373	305	81.77	3.89	3.18	0.031	0.098
	Q27	The trash can is closed	395	337	85.32	4.11	3.51	0.033	0.115
<b>Other spaces around homestay</b>	Q28	Cleaning other rooms with disinfectant	378	313	82.80	3.94	3.26	0.031	0.102
	Q29	Sitting position with a safe distance	368	282	76.63	3.83	2.94	0.030	0.089
	Q30	Drainage channels around the homestay are closed and flowing	370	281	75.95	3.85	2.93	0.031	0.090
	Q31	Trash cans in closed condition	360	310	86.11	3.75	3.23	0.030	0.096
	Q32	Homestay area planted with vegetation	362	314	86.74	3.77	3.27	0.030	0.098
<b>Total</b>					81.49%	126	103		
	WHAT								3.205
	CSI (%)								64.09

on the level of tourist satisfaction is in the category of Quite Satisfied with a value of 64.09%, which is in the range of 51–65%. It means that the level of tourist satisfaction with homestay services still needs to be improved to increase tourist visits in the future.

**Table 7.** Conformity Level

No	TK	Decision	No	TK	Decision
Q1	85.75	Hold	Q17	87.53	Hold
Q2	87.26	Hold	Q18	81.72	Hold
Q3	92.13	Hold	Q19	72.87	Action
Q4	82.53	Hold	Q20	72.99	Action
Q5	84.25	Hold	Q21	81.58	Hold
Q6	80.95	Action	Q22	81.35	Hold
Q7	87.08	Hold	Q23	79.58	Action
Q8	80.80	Action	Q24	86.33	Hold
Q9	79.84	Action	Q25	76.59	Action
Q10	78.55	Action	Q26	81.77	Hold
Q11	78.99	Action	Q27	85.32	Hold
Q12	75.06	Action	Q28	82.80	Hold
Q13	79.43	Action	Q29	76.63	Action
Q14	79.11	Action	Q30	75.95	Action
Q15	77.41	Action	Q31	86.11	Hold
Q16	82.68	Hold	Q32	86.74	Hold

The level of conformity between the level of interest and the level of performance in homestay services is in the average figure of  $81.49\% = 81\%$ . This limit becomes a benchmark in determining the average value of the suitability level of question attributes. The basis of the decision is as follows:

- a. If  $CL < 81\%$ , it needs to be improved (Action).
- b. If  $CL > 81\%$ , the effort must be maintained (Hold) (Table 7).

**5.4 Important Performances Analysis**

Processing with the Importance Performance Analysis (IPA) method is carried out to determine the position of each research attribute based on respondents’ perceptions of the level of importance and performance level of each research attribute [30]. The data used in the processing of Importance Performance Analysis (IPA) is the level of importance and performance level data for each research attribute obtained from disseminating research questionnaires to 96 respondents. Here are the steps of the Importance Performance Analysis (IPA) (Table 8).

Gap Analysis is a measurement method to determine the gap between the performance of a variable and consumer expectations of that variable. Gap Analysis itself is a part of the **IPA method**. Gap Analysis can be concluded that Positive Gap (+) will

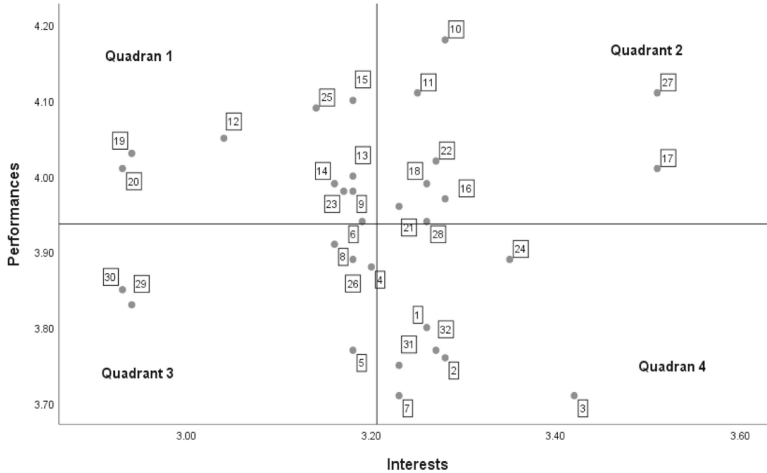
**Table 8.** Gap Analysis

Code	Attribute	Interests	Performance	Gap Value
Q1	CHSE Information and Guidelines	3.80	3.26	0.54
Q2	Sitting position and safe distance	3.76	3.28	0.48
Q3	Handwashing soap or hand sanitizer	3.71	3.42	0.29
Q4	Body temperature check	3.88	3.20	0.68
Q5	Cleaning of guest goods with disinfectant	3.77	3.18	0.59
Q6	Reception room cleaned with disinfectant	3.94	3.19	0.75
Q7	Location of gathering points and evacuation routes	3.71	3.23	0.48
Q8	Provision of bins in closed condition	3.91	3.16	0.75
Q9	Sheets, blankets, and pillowcases are washed	3.98	3.18	0.80
Q10	Room items cleaned with disinfectant	4.18	3.28	0.90
Q11	Bedroom in clean condition	4.11	3.25	0.86
Q12	Handwashing soap or hand sanitizer	4.05	3.04	1.01
Q13	Environmental conservation campaigns	4.00	3.18	0.82
Q14	Procedures for the use of the equipment and electronic goods	3.99	3.16	0.83
Q15	Provision of bins in closed condition	4.10	3.18	0.93
Q16	Separate bathroom with owner	3.97	3.28	0.69
Q17	Clean and hygienic conditions	4.01	3.51	0.50
Q18	The bathroom is cleaned with cleaning tools	3.99	3.26	0.73
Q19	Soap supply	4.03	2.94	1.09
Q20	The water tap works well	4.01	2.93	1.08
Q21	The sewerage of the bathroom is tightly closed	3.96	3.23	0.73
Q22	Complete cleaning with disinfectant	4.02	3.27	0.75
Q23	Provision of handwashing facilities or hand sanitizer	3.98	3.17	0.81
Q24	Food hygiene and sanitation	3.89	3.35	0.53
Q25	Sitting position and safe distance	4.09	3.14	0.96
Q26	Procedures for use and potential hazards	3.89	3.18	0.71
Q27	The trash can closed	4.11	3.51	0.60
Q28	Cleaning other rooms with disinfectant	3.94	3.26	0.68
Q29	Sitting position at a safe distance	3.83	2.94	0.90

*(continued)*

**Table 8.** (continued)

Code	Attribute	Interests	Performance	Gap Value
Q30	Drainage channels around the homestay are closed and flowing	3.85	2.93	0.93
Q31	Trash cans in closed condition	3.75	3.23	0.52
Q32	Homestay area planted with vegetation	3.77	3.27	0.50



**Fig. 2.** Cartesian Diagram

be obtained if the performance score exceeds the interest score. In comparison, if the interest score exceeds the performance score, a negative gap (-) will be obtained. Based on the results of homestay conditions, there are good attributes. Yet, there are still several attributes that are not satisfying according to the needs of tourists because the Gap value is more than 1, namely the attribute numbers Q12, Q19, and Q20.

The average assessment of the company’s performance and the assessment of the tourist interests are then plotted into a cartesian diagram divided into four quadrants with a dividing line based on the Likert scale value from 1 to 5. Then, after searching the middle value, the middle value for X is 3.20, and the middle value for Y is 3.93. This cartesian diagram describes the position of each variable in its quadrant. The cartesian diagram can be seen in Fig. 2.

**Quadrant 1**

Quadrant I is a top priority where the attributes plotting into this quadrant must get more attention or be corrected. It shows that tourists feel dissatisfaction with the attributes or dimensions of the services that have been provided, so the need for improvements to these attributes should be prioritized. These attributes include (Table 9).



**Table 9.** Quadrant I Attribute

Code	Attribute	Dimension
Q9	Sheets, blankets, and pillowcases are washed	Bedroom
Q12	Hand sanitizer	Bedroom
Q13	Environmental conservation campaigns	Bedroom
Q14	Procedures for the use of the equipment and electronic goods	Bedroom
Q15	Provision of bins in closed condition	Bedroom
Q19	Soap supply	Bathroom
Q20	Water tap	Bathroom
Q23	Provision of handwashing facilities or hand sanitizer	Kitchen
Q25	Sitting position and safe distance	Kitchen

**Table 10.** Quadrant II Attribute

Code	Attribute	Dimension
Q10	Room items cleaned with disinfectant	Bedroom
Q11	Bedroom in clean condition	Bedroom
Q16	Separate bathroom with owner	Bathroom
Q17	Clean and hygienic conditions	Bathroom
Q18	The bathroom is cleaned with cleaning tools	Bathroom
Q21	The sewerage of the bathroom is tightly closed	Bathroom
Q22	Complete cleaning with disinfectant	Kitchen
Q27	The trash can close	Kitchen
Q28	Cleaning other rooms with disinfectant	Other spaces around the homestay

Because these attributes are considered to greatly affect tourist satisfaction, however, from the level of performance, the homestay manager has not been implemented as expected by consumers, so tourists are disappointed / less satisfied. It is highly recommended that the manager makes improvements to the attributes in this quadrant so that tourists are satisfied.

#### Quadrant 2

Quadrant II is maintaining achievements where this quadrant has the highest score in terms of importance level and performance level. The attributes in quadrant II can be said to be safe, and the performance must be maintained. Attributes plotting into this quadrant include (Table 10).

**Table 11.** Quadrant III Attribute

Code	Attribute	Dimension
Q4	Body temperature check	Reception Room
Q5	Cleaning of guest goods with disinfectant	Reception Room
Q6	The reception room cleaned with disinfectant	Reception Room
Q8	Provision of bins in closed condition	Reception Room
Q26	Procedures for use and potential hazards	Kitchen
Q29	Sitting position at a safe distance	Other spaces around the homestay
Q30	Drainage channels around the homestay are closed and flowing	Other spaces around the homestay

**Table 12.** Quadrant IV Attribute

Code	Attribute	Dimension
Q1	CHSE Information and Guidelines	Reception Room
Q2	Sitting position and safe distance	Reception Room
Q3	Handwashing soap or hand sanitizer	Reception Room
Q7	Location of gathering points and evacuation routes	Reception Room
Q24	Food hygiene and sanitation	Kitchen
Q31	Trash cans in closed condition	Other spaces around the homestay
Q32	Homestay area planted with vegetation	Other spaces around the homestay

**Quadrant 3**

Quadrant III is in the category of low priorities, where this attribute is considered less important for tourists, and its performance is not very preferential. For homestay managers, the applicant of this attribute should be reconsidered because the attributes entered in this quadrant are considered less important, and less satisfying Attributes that are plotted into this quadrant include (Table 11).

**Quadrant 4**

Quadrant IV is an exaggeration. It indicates that the attributes in this quadrant are considered to have a low level of importance, but the level of performance given is high. Considered less important but the service provided is very satisfactory. Attributes possessed in this quadrant include (Table 12).

## 6 Conclusion

Based on the results of the analysis and discussion in the previous section, it can be concluded as follows:

1. The level of conformity between the level of interest and the level of performance in homestay services based on results is in the average figure of  $81.49\% = 81\%$ . This value becomes a benchmark in determining the average value of the level of conformity of question attributes to determine whether there are actions needed to improve or maintain the quality of homestay services.
2. Based on the analysis using the Customer Satisfaction Index (CSI) method, tourists feel quite satisfied with the performance of services provided by homestay managers in Cilember Tourism Village, with a value of  $64.09\%$ . It needs to be a concern for homestay managers to improve the quality of services related to the CHSE protocol so that tourist satisfaction will increase.
3. Based on the Importance Performance Analysis (IPA) method, nine attributes are contained in quadrant 1 (top priority). It shows that these attributes are considered important by tourists, but their performance is still lacking in their implementation. Then, another nine attributes are in quadrant 2. It shows that these attributes are considered important by tourists, and their performance is good, thus, must be maintained and continuously improved. Furthermore, seven attributes are in quadrant 3 (low priority). It means that the attributes in this quadrant are considered less important and less satisfactory for respondents. There are seven attributes in quadrant 4 (excessive). It means that these attributes contained in quadrant 4 have less effect on the tourists.
4. The limitation of this study is there is no guarantee that tourists who respond to all attributes have experienced each of them. Future research needs to add an “not applicable” column for the Likert scale to minimize bias. For further research, it is necessary to conduct surveys in other locations within the tourist village area to reduce the potential for response bias. It is needed to increase the sample size to increase the normal distribution of the data
5. IPA is the strategic tool for tourism management or researchers to evaluate the quality of tourism services by providing the guideline to prioritize the focus area for improvement. Even though obtaining good responses from 96 participants, it would be better for further research to make it more generalized to the entire population.

**Acknowledgments.** This research uses personal funds from each researcher and is carried out from February to May 2022.

**Authors' Contributions.** Imam contributed to the conception, design, and data collection; Rizki contributed to data analysis and manuscript preparation. Yudhiet participated in concept, design, and result in interpretation, and Regina participated in manuscript proofreading and editing.

**Competing Interest Statement.** This article is free from any conflict of interest regarding the data collection, analysis, and publication.

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