Willingness to Pay for Destination Quality Improvement: Case Study of Baru Beach, Yogyakarta

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Abstract: This study aims to analyze the willingness to pay visitors for the quality improvement of Baru Beach. The respondents of this research are visitors in Baru Beach. This study uses the contingent valuation method (CVM). Accidental techniques were used to collect data from 150 tourists in Baru Beach. This paper found that the average value of willingness to pay (WTP) is IDR15,000 obtained using dichotomous choice. In addition, variables of age, income, education level, frequency of visits, and visitor perceptions were positive to WTP. Distance and marital status have no significant effect.

Keywords: Willingness to Pay; Contingent Valuation Method; Economic Valuation

JEL Classification: L83, Z32

Introduction

Indonesia is an archipelagic country, where the water area is wider than the land area. Indonesia is also rich with diverse flora and fauna and abundant natural wealth. They are coupled with the diversity of culture, so the attractiveness of Indonesian tourism is enormous. The long coastline has the potential for abundant natural resources. Biological potential samples are fisheries, mangroves, and coral reefs. At the same time, non-biological potentials include minerals, mining materials, and tourism. The sea is the starting point for rivers carrying various pollutants from land. The transfer of marine functions is a problem for the state and the international community. Marine pollution causes changes in marine biodiversity and reduces the beauty of the oceans.

According to Spillane (1991), tourism is a trip that aims to get pleasure, seek satisfaction, know something, improve health, enjoy sports or rest, perform tasks, make pilgrimages, and others. Tourism is one example of a superior sector that can help in boosting the country’s economic growth. Tourism can help encourage regional income (PAD) derived from taxes, accommodation, and redistribution. Foreign tourists who vacation to the tourist spot can also bring foreign exchange. Indonesia has many different cultures in each region. One way to introduce the culture is through the tourism sector. In addition to helping the government improve the economy, tourism also helps increase the income of the surrounding community.
The development of tourist attractions will be much development in the area, such as road builders and hotels. In addition, the tourism industry can also benefit the community by opening new jobs, such as helping to develop and preserve the tourist attraction. It also helps local governments to reduce the unemployment rate in the area. Plus, the knowledge of the benefits of tourism, the government began to realize the benefits that will be obtained in the long term from the existence of the tourism sector. If everything is done with the importance of various aspects, such as preserving the environment, it will be beneficial.

Indonesia has a lot of stunning tourism objects, plus much cultural diversity in it. The Special Region of Yogyakarta is one of the areas known as the city of culture. Besides that, Yogyakarta also has stunning tourist attractions and is still thick with its natural sustainability. The number of tourist visitors in the Special Region of Yogyakarta from 2015 to 2019 has consistently increased. It can be seen that 2019 reached 28,324,394 dominated by domestic tourists. In the five years, the increase in the number of tourist visitors in Yogyakarta Province is significant, which almost reaches 10,000,000 tourists.

Each tourist attraction always has its attractions and characteristics in each area. It is what makes the attraction of tourists to travel to the attraction. If a tourist attraction does not have attractions and characteristics, tourists will be reluctant to vacation to the attraction. Therefore, the attraction and characteristics of a tourist attraction will help increase tourists to the attraction. This increase in tourists will positively impact the economy of the tourist attraction area.

The Special Region of Yogyakarta has several districts, including Bantul Regency. Bantul Regency is one of the districts with many tourist attractions still considered beautiful—starting from the hills, plantations, beaches, and others. The number of tourist visitors who visit the Bantul Regency every year tends to be fluctuating. In 2017 the number of tourist visitors in Bantul Regency reached 9,141,150 visitors. However, the interval of two years, namely 2019, experienced a decrease in visitors above 1,000,000 visitors. This decrease in the number of visitors may result from managing less than optimal attractions and may also be due to many other factors.

Tourist attractions located in Bantul Regency have a beautiful natural beauty. These attractions have their uniqueness and characteristics to charm many tourists. Baru Beach is one of the beaches located in Bantul Regency, the Special Region of Yogyakarta. It has slightly different characteristics from other beaches located in Bantul Regency. Shrimp fir trees located along the beach make Baru Beach feel shady and cool, and they are also dozens of windmills that serve as the main power plant in the area. The number of Baru Beach visitors in 2019 is quite volatile. In certain months, the number of visitors has increased significantly. For example, it reached 8,260 visitors in June, and in December, it reached 4,370 visitors. The increasing number of visitors will affect the environmental conditions in the tourist attraction. So, it is necessary to improve the environment and the quality of Baru Beach attractions to maintain natural sustainability around the beach.
Researchers use non-market goods techniques to research the environment because tourist attractions do not have market value. In non-market goods, economic valuation is obtained by estimating the magnitude of monetary value against trade-offs experienced by a person for his willingness to pay for goods or services that have no market value. Stated preference techniques become the basis of assessment techniques, where willingness to pay values are obtained directly. Stated preference techniques rely on values expressed or given by individuals (Fauzi, 2006).

Willingness to Pay value is obtained from visitors to Baru Beach attractions to improve the quality of these attractions. To find out how much Willingness to Pay is worth, researchers use the Contingent Valuation Method (CVM). Contingent Valuation Method is a method that uses survey techniques to ask people directly about the value or price they will give to commodities that do not have a market, such as environmental goods (Prasetyo & Saptutyningsih, 2013). Contingent Valuation Method has advantages including; This method can be applied to all conditions and has two essential things: to estimate the benefits and be applied to environmental policies. The Contingent Valuation Method can also be used as an appraiser of various environmental goods around the community. This method can estimate the value of non-users, which allows one to measure the utility of the use of environmental goods even though the goods are not used directly and the results of research with this method are easy to analyze or elaborate on.

**Research Method**

This research was conducted in Bantul Regency, Special Region of Yogyakarta. The research object used was Baru Beach, with visitors to Baru Beach and the surrounding community as the research subject from August 23-August 31, 2021. The type of data used for this study was primary data by interviewing directly to the subjects using questionnaires that researchers prepared.

The sample is part of the number and characteristics possessed by that population (Sugiyono, 2007). The sampling technique used in this study was accidental sampling. Meanwhile, random sampling is a technique based on chance, i.e., anyone who happens to meet with a researcher can be used as a sample if a person is seen as suitable as a data source. To determine the number of samples in the study, the researchers used the following formula developed by Slovin:

\[ n = \frac{N}{1 + N(e)^2} \]

Information:
\( n \) = Number of samples; \( N \) = Number of visitors; \( e \) = Standard error of 0.1 (10%)

Using the Slovin formula above, the calculation samples number to be used in this study is as follows:
Based on the calculation results above, the samples obtained amounted to 99.69, rounded to 100 respondents. To increase data variation and avoid errors in filling in the data, the number of samples used by the researchers was as many as 150 respondents.

Then, the technique used to collect data in this study was interview techniques, in which the researchers did ask questions prepared for respondents, namely visitors to Baru Beach and the surrounding community. The results of this interview helped researchers get information from respondents.

In this study, willingness to pay is defined as a person's willingness to pay a predetermined value to improve facilities and environmental conservation. The value of willingness to pay was calculated from the average value of willingness to pay (EWTP) by the respondents, in which the overall value of willingness to pay would then be summed and divided by the number of respondents. Here, the willingness to pay variable was a dummy variable, where 1 indicated a willingness to pay EWTP, while 0 was not willing to pay EWTP.

On the other hand, binary logistic regression is a proper analytical method for finding out the relationship of response variables (y) to binding variables (x) that are dichotomous (yes or no) or polytomous (more than two answers) (Hosmer & Lemeshow, 1989). The response variable results are divided into two options with different values: 0 = no and 1 = yes. This analysis is the same as multiple regression analysis. The difference between binary logistic regression analysis and multiple regression analysis, i.e., its variable bound is dummy variables (0 and 1), and there are no classical assumptions in binary logistic regression analysis.

In this research, the method used was the contingent valuation method (CVM). The contingency contingent method is a survey method, where the researchers jumped directly to find out WTP and get respondents' information. The EWTP results can determine the willingness to pay responses employing dichotomous choice. The dichotomous choice is a way to search for data by asking respondents a choice question (yes or no) and estimating the respondent's willingness to pay for an evacuated item for a fixed amount of money (Boyle, 1990). To estimate the expected probabilistic model of value, responses from respondents were later used.

To analyze willingness to pay, it can be formulated as follows:

\[
WTP = f(Age, Inc, Edu, Jr, Freq, Sp, Persep)
\]
Then, the function is expressed in the form of:

\[ \text{WTP} = \beta_0 + \beta_1 \text{Age} + \beta_2 \text{Inc} + \beta_3 \text{Edu} + \beta_4 \text{Jr} + \beta_5 \text{Freq} + \beta_6 \text{Sp} + \beta_7 \text{Persep} + e \]

Information:

WTP = Willingness to pay; \( \beta_0 = \) Constant; \( \beta_1 \ldots \beta_7 = \) Regression coefficient; \( \text{Age} = \) Age (Year); \( \text{Inc} = \) Income (Rupiah); \( \text{Edu} = \) Education (Years); \( \text{Jr} = \) Distance (Km); \( \text{Freq} = \) Frequency of visitors; \( \text{Sp} = \) Marital status (Dummy); \( \text{Persep} = \) Visitor perception (Dummy); \( e = \) Error.

Then, the value of this WTP was summed and divided by the number of respondents. The WTP average is formulated as follows:

\[ \text{EWTP} = \frac{\sum_{i=1}^{n} \text{WTP}_i}{n} \]

Information:

EWTP = Estimated average willingness to pay; \( \text{WTP}_i = \) Willingness to pay value at \( i \); \( n = \) Number of respondents

The value of the willingness to pay dummy variable is one if "WTP=EWTP" and 0 if "WTP≠EWTP." The expected primary data results would be processed utilizing SPSS software and binary logistic regression analysis.

Based on empirical studies, the equation model in this study is as follows:

\[ \log \left( \frac{p}{1-p} \right) = \beta_0 + \beta_1 \text{Age} + \beta_2 \text{Inc} + \beta_3 \text{Edu} + \beta_4 \text{Jr} + \beta_5 \text{Freq} + \beta_6 \text{Sp} + \beta_7 \text{Persep} + e \]

Information:

\( p = \) Willingness to pay for development and quality improvement (If \( p = 1 \), the respondent is willing to pay; if \( 1-p = 0 \), the respondent is not willing to pay.); \( \beta_0 = \) Constant; \( \beta_1 \ldots \beta_7 = \) Regression coefficient; \( \text{Age} = \) Age; \( \text{Inc} = \) Income; \( \text{Edu} = \) Education; \( \text{Jr} = \) Distance; \( \text{Freq} = \) Frequency of visitors; \( \text{Sp} = \) Marital status; \( \text{Persep} = \) Visitor perception; \( e = \) Error.

**Classification Determination Test**

The 2 x 2 classification test calculates the estimated value of the correct and incorrect data. The column estimates two approximate values of dependent variables, while rows estimate the actual observation value of dependent variables. If the model is perfect, all cases will be diagonal, with a 100% predicted accuracy rate.
Model Literature Test

Nagelkerke R Square Test

Using Nagelkerke R Square, the authors could see the results of the logistic regression data. The benefits of this test are that it can tell the magnitude of the value of the free variable component and explain the bound variable. Independent variables can receive almost all the information used to predict dependent variables if the Nagelkerke R Square value is close to one.

Hosmer and Lemeshow Test

The value of this test is used to see the Wald test or regression feasibility test as measured by the chi-square value. This test is also used to test the data being examined, whether it matches the model, and there is no difference between the fit model and the data. The Hosmer and Lemeshow data results are seen from the test results. If the Hosmer and Lemeshow values are more than 0.05, $H_1$ is accepted, and $H_0$ is rejected, which means a match between the model and the data studied. Conversely, if the Hosmer and Lemeshow values are less than 0.05, $H_0$ is accepted, and $H_1$ is rejected, meaning no match between the model and the data studied.

Significance Test

Simultaneous Significance Test

Simultaneous significance tests are seen from the omnibus test, later used to determine whether independent variables influence dependent variables. The study used 5 percent (5%) alpha. $H_1$ is accepted if at least one variable affects a dependent variable, and $H_0$ is accepted if no independent variable affects the dependent variable. $H_0$ is rejected if the chi-square count > the chi-square table or the significance < alpha. To determine the simultaneous results of independent influence on dependent variables, the coefficient model's omnibus test was used.

Partial Significance Test

Partial significance tests are used to determine the effect of independent variables on dependent variables. If the significance value > 0.05, the independent variable affects the dependent variable. Conversely, if the significance value is < 0.05, the independent variable does not affect the dependent variable. The Exp column (B) shows the extent of the increase in one unit odds ratio size. Odds ratios are used to measure the magnitude of each event's risk and the effect exerted by independent variables against dependent variables. To calculate the odds ratio, the antilog of the estimated coefficient is found; after that, it is reduced by one and then multiplied by 100. The results of this calculation show changes in the movement of each independent variable.
Result and Discussion

Descriptive Analysis of Statistics

Based on the research conducted by researchers related to willingness to pay (WTP) for the improvement of the quality of Baru Beach attractions in Bantul Regency, Special Region of Yogyakarta, the descriptive analysis results can be seen in detail in Table 1.

Table 1 Descriptive Statistics for Each Variable

| Variable     | N   | Minimum | Maximum | Mean    | Std. Deviation |
|--------------|-----|---------|---------|---------|----------------|
| Age          | 150 | 20.00   | 50.00   | 27.5600 | 7.227          |
| Income       | 150 | 1000000.00 | 15000000.00 | 3120333.3333 | 2318484.93 |
| Education    | 150 | 12.00   | 19.00   | 13.9867 | 2.421          |
| Distance     | 150 | 5.00    | 200.00  | 30.1800 | 16.554         |
| Frequency of visitors | 150 | 1.00 | 4.00 | 1.7667 | 0.814 |
| Marital status | 150 | 0.00 | 1.00 | 0.3800 | 0.487 |
| Perception   | 150 | 0.00    | 1.00    | 0.9400  | 0.238          |
| WTP          | 150 | 0.00    | 1.00    | 0.7467  | 0.4363         |
| Valid N (listwise) | 150 |

Table 1 shows that most variables had a standard deviation value below the average value. Thus, it can be said that all variables were good, and the spread of the questionnaire was well indicated and standardized evenly.

Classification Determination Test

The classification determination test aims to determine the regression model's determination in predicting the opportunity of respondents' choice of willingness to pay for the improvement of the quality of Baru Beach attractions in Bantul Regency, Special Region of Yogyakarta.

Table 2 Classification Determination Test

| Observed | Predicted | WTP | Percentage |
|----------|-----------|-----|------------|
|          |           | Not Willing | Willing | Correct |
| Step 1   | WTP       | 22  | 16 | 57.9%
| Willing  |           | 9   | 103| 92.0% |
| Overall Percentage | | | | 83.3% |

The classification determination test results can be seen in Table 2, showing that predictions of willing to pay WTP were 119 respondents, but the actual observation results of willing to pay WTP were 113 respondents. For prediction results that were not willing to pay WTP of 31, the actual observation results that were not willing to pay WTP amounted to 37 respondents. In addition, a prediction accuracy percentage of 83.3% indicates that this logistic regression model was entirely accurate.
Model Conformity Test

Nagelkerke R Square Test

This test determines the percentage range of fit models, with values ranging from 0 to 1. If the value of Nagelkerke R Square is 0, there is no relationship between the bound variable to the free variable. Meanwhile, if the Nagelkerke R Square value is 1, there is a relationship between the bound and free variables.

Table 3 Nagelkerke R Square Test

| Step | -2 Log likelihood | Cox & Snell R Square | Nagelkerke R Square |
|------|-------------------|----------------------|--------------------|
| 1    | 113.749*          | 0.312                | 0.460              |

Table 3 displays the Nagelkerke R Square test results of 0.460, meaning that free variables could explain 46% of bound variables, and the remaining 54% could be explained by variables outside the study model.

Hosmer and Lemeshow Test

This test is conducted to find out the null hypothesis that the empirical data matches the model, thus showing the feasibility of the regression model. If the resulting value is more significant than 0.05, the model can predict its observation value, or the model is acceptable.

Table 4 Hosmer and Lemeshow Test

| Step | Chi-square | df | Sig.  |
|------|------------|----|-------|
| 1    | 5.253      | 8  | 0.730 |

Table 4 presents that the Hosmer and Lemeshow test result was 5.253, with a sign of 0.730 > 0.05. It can be interpreted that the model could predict the value of its observation, or the model was acceptable since it matched its observation data.

Significance Test

Simultaneous Significance Test

This test determines whether free or independent variables affect bound or dependent variables simultaneously or jointly. If the significance value > 0.05, all free variables simultaneously do not affect the bound variable. Conversely, if the significance value is < 0.05, the free variable simultaneously affects the bound variable or at least one free variable that affects the bound variable.

Table 5 Simultaneous Significance Test

| Step  | Chi-square | df | Sig.  |
|-------|------------|----|-------|
| Step  | 56.041     | 7  | 0.000 |
| Block | 56.041     | 7  | 0.000 |
| Model | 56.041     | 7  | 0.000 |
In Table 5, it can be seen that the simultaneous significance test result with Chi-square model value was 56.041, with sig values of 0.000 < 0.05. Then, it can be said that free variables simultaneously affected bound variables, or there was at least one free variable affecting bound variables. Thus, the hypothesized model was fit with the data.

**Partial Significance Test**

This test determines whether the variable is partially free or independent or affects the bound or dependent variable. If the significance value > 0.05, the independent variable does not affect the dependent variable. Conversely, if the significance value is < 0.05, the independent variable affects the dependent variable.

The value of willingness to pay in this study used dichotomous choice (yes = 1 or no = 0) resulting from bidding games to 15 respondents with an average willingness to pay (EWTP) result of IDR 15,000. The value of the dummy dependent variable WTP is 1 if WTP = IDR 15,000 and 0 if WTP ≠ IDR 15,000. Here are the partial significance test results:

| Variable       | B    | Wald   | Exp(B) |
|----------------|------|--------|--------|
| Age            | 0.195| 6.599  | 1.215**|
|                | (0.076)|       |        |
| Income         | 0.04054E-006| 7.464 | 1.000*  |
|                | (3.80869E-007)|       |        |
| Education      | 0.279| 4.790  | 1.321**|
|                | (0.127)|       |        |
| Distance       | -0.020| 1.862  | 0.981  |
|                | (0.014)|       |        |
| Frequency      | 0.880| 8.498  | 2.411*  |
|                | (0.302)|       |        |
| Marital status | -0.477| 0.645  | 0.612  |
|                | (0.594)|       |        |
| Perception     | 2.925| 8.302  | 18.639* |
|                | (1.015)|       |        |
| Constant       | -13.404| 19.982 | 0.000  |
|                | (2.999)|       |        |

Description: Variable dependent: WTP (dummy); () indicates the standard error coefficient; *Significant at the level of 1% (α = 0.01); **Significant at the level of 5% (α = 0.05); Significant at the level of 10% (α = 0.10).

Based on the Table 6, independent variables, namely age, income, education level, frequency of visits, and visitor perception, affect the dependent variables, namely willingness to pay improvements in the quality of Baru Beach attractions.

The level of significance in the age variable is 0.010 < 0.05, which indicates that the age variable has a significant effect on willingness to pay for the improvement of facilities and the preservation of Baru Beach attractions. The coefficient value in this variable has a positive influence with a ratio odds value of 1.215. Increasing awareness and increasing age make a person aware of permanently preserving the environment and the higher the
level of concern for the environment to maintain it. It is what makes the age variable positively affect the willingness to pay. This study is in line with research conducted by Akhtar et al. (2017), Sasouli et al. (2017), Vo and Huynh (2017), and Arista and Saptutyningsih (2020), which state that the age variable has a significant effect on willingness to pay to improve the quality of the Baru Beach tourist attraction.

The significance level income variable of 0.006 < 0.01 signifies that the revenue variable significantly affects willingness to pay facility improvements and preserve Baru Beach attractions. The coefficient value in this variable has a positive influence with a ratio odds value of 1,000. It is due to the high level of a person's income so that someone usually brings more funds to travel. Therefore, someone with a higher income level is willing to pay more for improving facilities and preserving the attractions he visits. The results of this study are the same as the results of research conducted by Nallathiga and Paravasthu (2010), Akhtar et al. (2017), Vo and Huynh (2017), Susilowati et al. (2019), Sanjaya and Saptutyningsih (2019), and Arista and Saptutyningsih (2020) which state that the income variable has a significant effect on willingness to pay to improve the quality of the Baru Beach tourist attraction.

The results of the partial significance test showed that the education level variable had a significant value of 0.029 < 0.05, which can be interpreted that the education level variable has a significant effect on the willingness to pay for facility improvement and preservation of Baru Beach attractions. The coefficient value in this variable has a positive influence with a ratio odds value of 1.321. The higher the level of education, the higher one’s knowledge of the benefits of improving facilities and preserving tourism objects so that they are maintained. The higher level of education also creates more advanced thinking on environmental sustainability by knowing the impacts obtained if someone destroys the environment. The results of this study are in line with research conducted by Nallathiga and Paravasthu (2010), Batzias et al. (2012), Akhtar et al. (2017), Sasouli et al. (2017), Zoupanidou et al. (2019), Sanjaya and Saptutyningsih, (2019) and Arista and Saptutyningsih, (2020) which state that the education level variable has a significant effect on willingness to pay to improve the quality of the Baru Beach tourist attraction.

The value of the significance of the marriage status variable from the partial significance test showed 0.422 > 0.05, which can be interpreted that the marriage status variable has no significant effect on the willingness to pay facility improvements and preservation of Baru Beach attractions. Because marital status is not a determinant of someone to carry out tourism activities, someone who is married or unmarried can still carry out tourism activities according to his wishes. This study is in line with research conducted by Priambodo and Suhartini (2016) and Akhtar et al. (2017) which states that the marital status variable has a negative relationship to the willingness to pay in improving the quality of the Baru Beach tourist attraction.

The value of the significance of the distance variable from the partial significance test showed 0.172 > 0.05, which that the distance variable had no significant effect on the willingness to pay for facility improvements and the preservation of Baru Beach attractions. Each individual is different in willingness to pay more, no matter the distance.
or near if they already have a goal. This study is in line with Priambodo and Suhartini (2016) and Saptutyningsih and Ningrum (2017), which state that the distance variable has a negative relationship to the willingness to pay to improve the quality of the Baru Beach tourist attraction.

The results of the partial significance test on the visit frequency variable showed a significant value of 0.004 < 0.01 which means that the variable frequency of visits had a significant effect on the willingness to pay for facility improvements and the preservation of Baru Beach attractions. The coefficient value in this variable has a positive influence with a ratio odds value of 2.411. So, it can be interpreted that the higher the frequency of respondents’ visits to tourist objects, the respondents are willing to pay more for the improvement of facilities and preservation of the Baru Beach tourist attraction because respondents or visitors can know firsthand the level of development the tourist attraction.

The results of this study are in line with research conducted by Saptutyningsih and Selviana (2017) and Sanjaya and Saptutyningsih (2019), which states that the variable frequency of visits has a significant effect on the willingness to pay of improving the quality of the Baru Beach tourist attraction.

The level of significance on the visitor perception variable is 0.004 < 0.01, so it can be interpreted that the visitor perception variable has a significant effect on the willingness to pay for the improvement of facilities and the preservation of Baru Beach attractions. The coefficient value in this variable has a positive influence with a ratio odds value of 18.639. Visitors are very concerned about improving facilities and preserving tourist objects. So, visitors see many changes in the tourist attraction when visiting again. The results of this study are the same as the results of research conducted by Mohammed et al. (2013), which states that the visitor perception variable has a significant effect on willingness to pay for improving the quality of the Baru Beach tourist attraction.

Conclusion

The average value of willingness to pay (EWTP) is IDR15,000. Based on primary data from 150 respondents who have been processed, there are 75% willing to pay willingness to pay for improvements in the quality of Baru Beach attractions. In contrast, the remaining 25% are not willing to pay for improvements in the quality of Baru Beach attractions. The Age variables have a positive and significant effect on willingness to pay for improvements in the quality of Baru Beach attractions. Increasing awareness and increasing age make a person aware of permanently preserving the environment and the higher the level of concern for the environment to maintain it. The income variables in this study had a positive relationship and had a significant effect on willingness to pay for improvements in the quality of Baru Beach attractions. Thus, the manager can take advantage of determining the price of admission to a tourist attraction, which will later be used to improve facilities and preserve the tourist attraction. The education level variables in this study had a positive relationship and had a significant effect on willingness to pay for improvements in the quality of Baru Beach attractions. A higher level of education will
create more advanced thinking on environmental sustainability by knowing the impacts obtained if a person damages the environment.

The variable frequency of visits in this study had a positive relationship and significantly affected willingness to pay improvements in the quality of Baru Beach attractions. The higher the frequency of respondent visits to tourist attractions will make respondents or visitors know firsthand the level of development of the attraction. The visitor perception variables in this study had a positive relationship and had a significant effect on willingness to pay for improvements in the quality of Baru Beach attractions. It is because visitors are very concerned about the improvement of facilities and the preservation of tourist attractions so that when returning to visit, visitors see many changes that occur in the attraction. In this case, the manager can pay attention to other things that are still lacking or not maintained so that visitors do not feel bored and always want to visit the Baru Beach tourist attraction. Furthermore, to visitors, to assist managers in improving facilities and preserving the Baru Beach tourist attraction. Because sustainability, cleanliness, and others are shared responsibilities.

The variable of marital status had no significant effect and had a negative relationship to the willingness to pay improvements in the quality of Baru Beach attractions. Marriage status is not a determinant of someone to do tourist activities so that someone married or unmarried can still do tourist activities following his wishes. The distance variable had no significant effect and had a negative relationship to the willingness to pay for improvements in the quality of Baru Beach attractions. It is because how far the distance a person traveled to reach the desired tourist destination will not affect anything.

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