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Modeling The Factors That Influence The Interest In Revisiting Surabaya Mangrove Botanical Garden Based On Structural Equation Modeling With A Partial Least Square Approach

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Abstract: *Tourism is an asset owned by several countries and has the potential to be utilized and developed. Indonesia is the largest archipelago in the world. Therefore, it can be a huge potential to develop the tourism industry, one of which is in the coastal area, namely the Surabaya Mangrove Botanical Garden. In connection with the many activities that can be done at the Surabaya Mangrove Botanical Garden, tourists who come must have their own perceptions and preferences regarding several factors such as supporting facilities, service quality, and other factors provided at the Mangrove Botanical Garden. Therefore, this research was conducted to analyze several factors at the Surabaya Mangrove Botanical Garden that can be used to increase tourist satisfaction and interest in revisiting based on the Structural Equation Modeling (SEM) method with the Partial Least Square (PLS) approach. The data collection technique used purposive sampling and the sample used was 297 Surabaya Mangrove Botanical Garden tourist respondents. The results of the overall value of the model obtained by the Goodness of Fit Index (GOF) method are 0.813, which means that the GoF ≥ 0,36, the model has a high ability to explain the data so that overall, it can be said that the model formed is valid. The results of the study indicate that the variables have a significant effect on tourist satisfaction in influencing the interest in revisiting are the variables of facilities, services, tourism image, and costs at the Surabaya Mangrove Botanical Garden.*

Keywords— Tourism, Mangrove Botanical Garden, Satisfaction, Interest in Revisiting, Structural Equation Modeling, Partial Least Square

1. INTRODUCTION

Tourism is an asset owned by several countries and has the potential to be utilized and developed. Indonesia is the largest archipelago in the world [1]. Therefore, this can be a huge potential to develop the tourism industry, one of which is in the coastal area, namely the Surabaya Mangrove Botanical Garden. In connection with the many activities that can be done at the Surabaya Mangrove Botanical Garden, tourists who come must have their own perceptions and preferences regarding several factors such as supporting facilities, service quality, and other factors provided at the Mangrove Botanical Garden. Therefore, it is necessary to conduct research to analyze several factors at the Surabaya Mangrove Botanical Garden which can be used to increase tourist satisfaction and interest in revisiting because revisit intention is characterized as the opportunity for tourists to repeat activities or return to a destination [2]. It is hoped that the improvement in the quality provided by tourism managers will be in line with the higher satisfaction of tourists visiting the tour, so that with high tourist satisfaction and interest in revisiting can be a measure of the success of a tourist destination [3].

Research on botanical garden satisfaction in Indonesia has been conducted by Batubara & Fitri [4] using a simple regression method and on the interest of botanical garden tourists in Indonesia by Pratama [5] using descriptive quantitative.In these research methods, there are weaknesses that include only providing information about the relationship between certain variables, and requiring the fulfillment of assumptions such as data normality, homogeneity of variance, and independence of observations [6].Therefore, the Structural Equation Modeling (SEM) method with the Partial Least Square (PLS) approach is proposed as an alternative to measure the relationship between variables that are not directly observed.The Structural Equation Modeling method with the Partial Least Square (SEM-PLS) approach is a multivariate analysis technique applied to test and estimate the relationship between one or more dependent variables with multiple factors [7].

Referring to the information and results from previous studies, the researcher is interested in investigating tourists' return visit interest to the Mangrove Botanical Garden.Therefore, the method to be applied in this study is Structural Equation Modeling (SEM) with the Partial Least Square (PLS) approach, as an innovation from previous studies.

2. LITERATURE REVIEW

2.1 Data

This research took place in Surabaya Mangrove Botanical Garden. This research data comes from primary data sources obtained through a survey of visitors to the Surabaya Mangrove Botanical Garden with data collection methods using purposive sampling techniques, which are based on certain considerations, namely respondents over 17 years old

and are tourists who have or are visiting the Surabaya Mangrove Botanical Garden. As for research materials, that ideal minimum sample size should be ten times the number of indicators [8]. Therefore, the minimum sample size in accordance with SEM-PLS guidelines in this study is 10 x 21 or 210 samples.

2.2 Research Variables and Indicators

The latent variables and indicators in this study are as follows:

Table 1: Endogenous Variables

Variable	Indicator
Tourist Satisfaction	Satisfaction with existing rides
	Satisfaction with existing services
	Satisfaction with existing security
	Satisfaction with accessibility to destinations
Interest in Revisiting	Planning to visit again within 3 months
	Recommend the destination to others
	Making the destination as the main destination for traveling

Table 2: Exogenous Variables

Variable	Indicator
Facilities	Public facilities are complete
	Public facilities are in accordance with the needs
	Public facilities are in good condition and clean
	Public facilities have an attractive design
Services	Officers look neat and serve politely
	Officers serve swiftly
	Officers provide information in a friendly and clear manner
Tourism Image	Destinations have a varied collection of mangrove plant species
	Destinations have interesting rides
	Destinations have their own characteristics
Cost	The cost of rides is affordable
	The costs incurred are in accordance with the facilities received
	Affordable food and beverage prices
	Accessibility costs to the location are affordable

2.3 Steps of Analysis

The data analysis steps for this research are as follows:

1. Conduct a validity test to assess the validity of each question in a questionnaire. According to Nurhayati [9] the validity test, it can also be done using statistical software with the criteria that the question item is valid if the value of p - $value < \alpha$.

2. Conduct a reliability test to assess the consistency of the question so that it can be relied on with a formula like the following:

$$r = \left(\frac{k}{k-1}\right)\left(1 - \frac{\sum_{i=1}^{k} \sigma_i^2}{\sigma_t^2}\right) \quad (1)$$

It is said that the reliability is very high if the Cronbach's alpha value is between 0.8 to 1.

3. Make a path diagram (path analysis).

4. Convert the path diagram into a measurement model equation system (outer model):

$$\mathbf{x} = \boldsymbol{\lambda}_x \boldsymbol{\xi} + \boldsymbol{\delta} \quad (2)$$

$$\mathbf{y} = \boldsymbol{\lambda}_y \boldsymbol{\eta} + \boldsymbol{\varepsilon} \quad (3)$$

as well as the structural model (inner model):

$$\boldsymbol{\eta} = \mathbf{B}\boldsymbol{\eta} + \boldsymbol{\Gamma}\boldsymbol{\xi} + \boldsymbol{\zeta} \quad (4)$$

5. Calculate path coefficients, loadings, and weights using one of three schemes, namely the path scheme, centroid, or factor scheme.

6. Evaluate the measurement model and structural model.

a. Convergent validity by looking at the loading factor value with a requirement greater than 0,7 and the Average Variance Extracted (AVE) value with a requirement greater than 0,5.

$$\text{AVE} = \frac{\Sigma\, \lambda_{jk}^2}{\Sigma\, \lambda_{jk}^2 + \Sigma_{jk}\, \text{var}(\varepsilon_{jk})} \quad (5)$$

b. Discriminant validity by looking at the cross-loading value with the condition that it is greater than 0.7.

c. Reliability by looking at the composite reliability value with a requirement greater than 0,7 and Cronbach's alpha with a requirement greater than 0,6.

d. Evaluation of the structural model can be measured by looking at the R-Square and Q-Square values with the formula:

$$Q^2 = 1 - (1 - R_1^2)(1 - R_2^2) \ldots \left(1 - R_p^2\right) \quad (6)$$

to assess the extent of the influence of exogenous latent variables on endogenous latents.

e. Testing the overall model using the Goodness of Fit Index with the following formula:

$$\text{GoF} = \sqrt{\overline{\text{AVE}} \times \overline{R^2}} \quad (7)$$

7. Testing statistical hypotheses for measurement and structural models carried out by the bootstrapping method.

8. Making interpretation of measurement and structural models.

3. RESULT AND DISCUSSION

2.1 Validity Test

The hypothesis used in the validity test in this study is as follows:

$H_0 : \rho = 0$ (invalid question item)

$H_0 : \rho \neq 0$ (valid question item)

With critical region H_0 rejected if the value $p - value < \alpha$ (0,05). The results of the research questionnaire validity test can be seen in Table 3 as follows:

Table 3: Validity Test Results

Variable	Indicator	P-Value	Description
Facilities (ξ_1)	x_{11}	0,000	Valid
	x_{12}	0,000	Valid
	x_{13}	0,000	Valid
	x_{14}	0,000	Valid
Services (ξ_2)	x_{21}	0,000	Valid
	x_{22}	0,000	Valid
	x_{23}	0,000	Valid
Tourism image (ξ_3)	x_{31}	0,000	Valid
	x_{32}	0,000	Valid
	x_{33}	0,000	Valid
Cost (ξ_4)	x_{41}	0,000	Valid
	x_{42}	0,000	Valid
	x_{43}	0,000	Valid
	x_{44}	0,000	Valid
Tourist Satisfaction (η_1)	y_{11}	0,000	Valid
	y_{12}	0,000	Valid
	y_{13}	0,000	Valid
	y_{14}	0,000	Valid
Interest in Revisiting (η_2)	y_{21}	0,000	Valid
	y_{22}	0,000	Valid
	y_{23}	0,000	Valid

Based on Table 3, it is found that all question items (indicators) have $p - value < \alpha$ (0,05) so it can be concluded that all indicators or question items in the questionnaire are valid.

2.2 Reliability Test

Reliability test is used to determine the consistency and reliability of a questionnaire. If the Cronbach's alpha value ≥ 0.6, the research instrument is said to have high reliability. The reliability test results are presented in Table 4 as follows:

Table 4: Reliability Test Results

Variable	Cronbach's	Description
Facilities (ξ_1)	0,916	Very High Reliability
Services (ξ_2)	0,926	Very High Reliability
Tourism image (ξ_3)	0,890	Very High Reliability
Cost (ξ_4)	0,934	Very High Reliability
Tourist Satisfaction (η_1)	0,920	Very High Reliability
Interest in Revisiting (η_2)	0,909	Very High Reliability

Based on Table 4, it can be seen that the results of the analysis with Cronbach's alpha value for the variables are reliable and have very high reliability because the Cronbach's alpha value is between 0,89 and 1,00.

2.3 Path Diagram Construction

In this study, the model structure includes six latent variables, consisting of two endogenous latent variables and four exogenous latent variables.

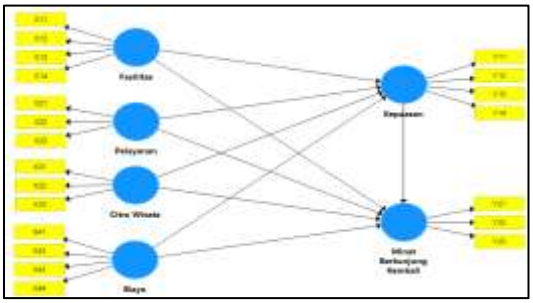

Fig. 1. *Research Path Diagram*

2.4 Conversion of Path Diagram into Measurement and Structural Model Equation

1. Measurement Model (Outer Model)

The measurement model of exogenous latent variables is obtained from the path diagram in Figure 1, refers to Equation (2), and based on the outer loading value (λ) in the analysis results, the exogenous latent variable measurement model matrix can be written as:

$$\begin{bmatrix} x_{11} \\ x_{12} \\ x_{13} \\ x_{14} \\ x_{21} \\ x_{22} \\ x_{23} \\ x_{31} \\ x_{32} \\ x_{33} \\ x_{41} \\ x_{42} \\ x_{43} \\ x_{44} \end{bmatrix} = \begin{bmatrix} 0{,}914 & 0 & 0 & 0 \\ 0{,}895 & 0 & 0 & 0 \\ 0{,}870 & 0 & 0 & 0 \\ 0{,}899 & 0 & 0 & 0 \\ 0 & 0{,}937 & 0 & 0 \\ 0 & 0{,}927 & 0 & 0 \\ 0 & 0{,}937 & 0 & 0 \\ 0 & 0 & 0{,}875 & 0 \\ 0 & 0 & 0{,}926 & 0 \\ 0 & 0 & 0{,}917 & 0 \\ 0 & 0 & 0 & 0{,}881 \\ 0 & 0 & 0 & 0{,}931 \\ 0 & 0 & 0 & 0{,}915 \\ 0 & 0 & 0 & 0{,}934 \end{bmatrix} \begin{bmatrix} \xi_1 \\ \xi_2 \\ \xi_3 \\ \xi_4 \end{bmatrix}$$

While, the endogenous latent variable measurement model is obtained from the path diagram in Figure 1, refers to Equation (3), and based on the outer loading value (λ) in the analysis results, the following matrix is formed:

$$\begin{bmatrix} y_{11} \\ y_{12} \\ y_{13} \\ y_{14} \\ y_{21} \\ y_{22} \\ y_{23} \end{bmatrix} = \begin{bmatrix} 0{,}907 & 0 \\ 0{,}893 & 0 \\ 0{,}894 & 0 \\ 0{,}904 & 0 \\ 0 & 0{,}908 \\ 0 & 0{,}921 \\ 0 & 0{,}935 \end{bmatrix} \begin{bmatrix} \eta_1 \\ \eta_2 \end{bmatrix}$$

2. Measurement Model (Outer Model)

The structural model is obtained from the path diagram in Figure 1, refers to Equation (4), and based on the path cooficient value (β and γ) in the analysis results, the following matrix is formed:

$$\begin{bmatrix}\eta_1\\ \eta_2\end{bmatrix} = \begin{bmatrix}0 & 0\\ 0{,}393 & 0\end{bmatrix}\begin{bmatrix}\eta_1\\ \eta_2\end{bmatrix} + \begin{bmatrix}0{,}194 & 0{,}182 & 0{,}274 & 0{,}345\\ 0{,}183 & 0{,}017 & 0{,}020 & 0{,}293\end{bmatrix}\begin{bmatrix}\xi_1\\ \xi_2\\ \xi_3\\ \xi_4\end{bmatrix}$$

2.5 Evaluation of the Measurement Model (Outer Model)

1. Loading Factor

Table 5: Factor Loading Value

Variable	Indicator	Factor Loading	Description
Facilities (ξ_1)	x_{11}	0,914	Valid
	x_{12}	0,895	Valid
	x_{13}	0,870	Valid
	x_{14}	0,899	Valid
Services (ξ_2)	x_{21}	0,937	Valid
	x_{22}	0,927	Valid
	x_{23}	0,937	Valid
Tourism image (ξ_3)	x_{31}	0,875	Valid
	x_{32}	0,926	Valid
	x_{33}	0,917	Valid
Cost (ξ_4)	x_{41}	0,881	Valid
	x_{42}	0,931	Valid
	x_{43}	0,915	Valid
	x_{44}	0,934	Valid
Tourist Satisfaction (η_1)	y_{11}	0,907	Valid
	y_{12}	0,893	Valid
	y_{13}	0,894	Valid
	y_{14}	0,904	Valid
Interest in Revisiting (η_2)	y_{21}	0,908	Valid
	y_{22}	0,921	Valid
	y_{23}	0,935	Valid

Based on the data in Table 5, the results indicate that each research variable already has a factor loading value above 0,7, so it can be concluded that all indicators are valid and significant in forming their respective latent variables.

2. Average Variance Extracted (AVE)

Table 6: Average Variance Extracted Value

Variable	AVE	Description
Facilities (ξ_1)	0,916	Valid
Services (ξ_2)	0,926	Valid
Tourism image (ξ_3)	0,890	Valid
Cost (ξ_4)	0,934	Valid
Tourist Satisfaction (η_1)	0,920	Valid
Interest in Revisiting (η_2)	0,909	Valid

Based on the analysis results shown in Table 6, it is found that all research variables used have decent convergent validity because the AVE value is above 0,5.

3. Discriminant Validity

Table 7: Cross-Loading Value

Variable		ξ_1	ξ_2	ξ_3	ξ_4	η_1	η_2
ξ_1	x_{11}	**0,914**	0,687	0,695	0,720	0,728	0,695
	x_{12}	**0,895**	0,676	0,688	0,672	0,737	0,622
	x_{13}	**0,870**	0,640	0,636	0,634	0,655	0,640
	x_{14}	**0,899**	0,674	0,656	0,632	0,708	0,689
ξ_2	x_{21}	0,679	**0,937**	0,806	0,799	0,787	0,686
	x_{22}	0,675	**0,927**	0,793	0,747	0,779	0,642
	x_{23}	0,736	**0,937**	0,834	0,852	0,843	0,795
ξ_3	x_{31}	0,681	0,756	**0,875**	0,791	0,759	0,676
	x_{32}	0,693	0,815	**0,926**	0,815	0,833	0,720
	x_{33}	0,661	0,793	**0,917**	0,831	0,817	0,733
ξ_4	x_{41}	0,631	0,735	0,753	**0,881**	0,773	0,739
	x_{42}	0,697	0,798	0,846	**0,931**	0,817	0,746
	x_{43}	0,665	0,808	0,852	**0,915**	0,823	0,736
	x_{44}	0,726	0,803	0,831	**0,934**	0,848	0,754
η_1	y_{11}	0,744	0,792	0,792	0,825	**0,907**	0,732
	y_{12}	0,683	0,796	0,823	0,821	**0,893**	0,702
	y_{13}	0,728	0,729	0,791	0,767	**0,894**	0,773
	y_{14}	0,692	0,784	0,784	0,794	**0,904**	0,785
η_2	y_{21}	0,687	0,730	0,753	0,765	0,776	**0,908**
	y_{22}	0,661	0,683	0,710	0,732	0,771	**0,921**
	y_{23}	0,696	0,692	0,700	0,746	0,750	**0,935**

Based on the analysis results in Table 7, the cross-loading value of each indicator on its variable shows a greater value when compared to the cross-loading value of other variables contained in the model.

4. Reliability

Table 8: Composite Reliability and Cronbach's Alpha Value

Variable	Composite Reliability	Cronbach's	Description
Facilities (ξ_1)	0,941	0,917	Reliable
Services (ξ_2)	0,953	0,926	Reliable
Tourism image (ξ_3)	0,932	0,891	Reliable
Cost (ξ_4)	0,954	0,935	Reliable
Tourist Satisfaction (η_1)	0,944	0,921	Reliable
Interest in Revisiting (η_2)	0,944	0,911	Reliable

Based on the table above, all latent variables have a composite reliability value above 0,7 and Cronbach's alpha above 0,6. It can be concluded that each indicator can be said to be reliable and has accuracy, consistency and accuracy in measuring latent variables.

2.6 Evaluation of the Measurement Model (Outer Model)

1. R-Square (R^2)

Table 9: R-Square Value

Variable	R-Square	Description
Tourist Satisfaction (η_1)	0,860	Strong Model
Interest in Revisiting (η_2)	0,729	Strong Model

Based on the results in Table 9, it can be seen that the endogenous latent variable of tourist satisfaction can be explained well by the exogenous latent variables of facilities, services, tourism image, and costs by 86%. While the remaining 14% is explained by other factors outside the study. This also shows that the model is included in the strong category. Meanwhile, the endogenous latent variable of interest in revisiting can be explained by the exogenous latent variables of facilities, services, tourism image, and costs by 72.9%, while the remaining 27.1% is explained by other factors outside the study. and the model can also be categorized into a strong model.

2. Prediction Relevance (Q^2)

The value of Q-Square (Q^2) is obtained based on Equation (6). The following is the calculation of the Q-Square (Q^2) in this study.

$$Q^2 = 1 - (1 - R_1^2)(1 - R_2^2)$$
$$Q^2 = 1 - (1 - 0{,}860^2)(1 - 0{,}729^2)$$
$$Q^2 = 1 - 0{,}122$$
$$Q^2 = 0{,}878$$

The value of Q^2 value obtained is 0,878 showing the value Q^2 close to the value of 1, it can be interpreted that the structural model with data or has good model prediction ability. It can be concluded that the variables of facilities, services, tourism image, and cost are good or appropriate as latent variables and are able to explain satisfaction and interest in revisiting Surabaya Mangrove Botanical Garden tourists as endogenous variables in the relevant model by 87.8%.

2.7 Overall Model Test (Goodness of Fit Index)

The combined model or overall measurement and structural model evaluation is thelast stage of evaluation using the goodness of fit (GoF) value. The criteria for the GoF value are, GoF is considered small if $0 \leq GoF < 0{,}25$, GoF is considered medium if $0{,}25 \leq GoF < 0{,}36$, and GoF is considered large if $GoF \geq 0{,}36$. The following is the calculation of goodness of fit (GoF) in this study.

$$GoF = \sqrt{\overline{AVE} \times \overline{R^2}}$$
$$GoF = \sqrt{\left(\frac{4{,}989}{6}\right) \times \left(\frac{1{,}729}{2}\right)}$$
$$GoF = 0{,}813$$

Based on the results of these calculations, the Goodness of Fit value is 0,813. The Goodness of Fit value is greater than 0,36, so the value is included in the large criteria. So, it can be concluded that the model has a high ability to explain the data so that the overall model formed is suitable.

2.8 Hypothesis Testing

The combined model or overall measurement and structural model Hypothesis testing conducted in this study has the aim of knowing the effect of indicator variables on latent variables (outer model) and exogenous latent variables on endogenous latent variables (inner model). Testing is done with the bootstrap resampling method. The bootstrapping procedure is carried out using a bootstrap count of 5,000 and a significance level of 0,05 (5% significance level). The following is a path diagram of the final model of the test results in this study which contains the values λ, β, and γ.

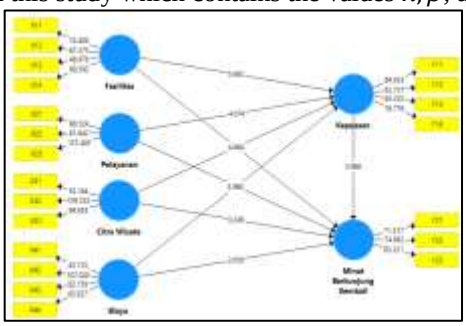

Fig. 2. Research Path Diagram

Statistical hypothesis testing is carried out using a significance level α = 5% so thatthe value is obtained t_{table} of 1.96 with the condition that if $t_{statistics} < t_{table}(1{,}96)$ means that the parameters used have no effect or are insignificant.

1. Statistical Hypothesis Test for Outer Model
   Using the following hypothesis:

   $H_0 : \lambda_{jk} = 0$ (indicators are not significant in measuring latent variables)
   $H_1 : \lambda_{jk} \neq 0$ (indicators are significant in measuring latent variables)

Table 10: Hypothesis Test Results for Outer Model

Indikator	T Statistics	P-Value
x_{11}	74,406	0,000
x_{12}	67,375	0,000
x_{13}	48,976	0,000
x_{14}	69,593	0,000
x_{21}	86,524	0,000
x_{22}	81,842	0,000
x_{23}	137,405	0,000
x_{31}	53,164	0,000
x_{32}	104,332	0,000
x_{33}	94,655	0,000
x_{41}	45,135	0,000
x_{42}	107,020	0,000
x_{43}	82,159	0,000
x_{44}	85,637	0,000
y_{11}	84,023	0,000
y_{12}	62,737	0,000
y_{13}	63,323	0,000

y_{14}	76,776	0,000
y_{21}	71,517	0,000
y_{22}	74,662	0,000
y_{23}	83,321	0,000

Based on Figure 2 and Table 10 all values of $t_{statistics} > t_{table}(1{,}96)$ so the decision is rejected H_0 and the conclusion is that all indicators are significant in measuring latent variables.

2. Statistical Hypothesis Test for Inner Model

The hypothesis test results for the inner model are shown in Table 11 as follows:

Table 11: Hypothesis Test Results for Outer Model

Parameters	T Statistics	P-Value
Facilities (ξ_1) → Satisfaction (η_1)	5,682	0,000
Service (ξ_2) → Satisfaction (η_1)	4,074	0,000
Tourism Image (ξ_3) → Satisfaction (η_1)	4,884	0,000
Cost -(ξ_4) → Satisfaction (η_1)	5,990	0,000
Facilities (ξ_1) → Interest in Revisiting (η_2)	3,427	0,001
Service (ξ_1) → Interest in Revisiting (η_2)	0,236	0,814
Tourism Image (ξ_1) → Interest in Revisiting (η_2)	0,246	0,806
Cost (ξ_1) → Interest in Revisiting (η_2)	2,650	0,008
Satisfaction (ξ_1) → Interest in Revisiting (η_2)	3,968	0,000

Based on Figure 2 and Table 11, the interpretation of the hypothesis test resultsis as follows:

$H_0 : \gamma_{mk} = 0$ (exogenous latent variables are not significant in measuring endogenous latent variables)
$H_1 : \gamma_{mk} \neq 0$ (exogenous latent variables are significant in measuring endogenous latent variables)

Based on Table 11 the value $t_{statistics}$ from $\gamma_{11}, \gamma_{12}, \gamma_{13}, \gamma_{14}, \gamma_{21}$, and γ_{24} more than $t_{tabel}(1{,}96)$ so the decision is reject H_0 and the conclusion is that exogenous latent variables are significant in measuring endogenous latent variables. As for the value $t_{statistics}$ from γ_{22} and γ_{23} less than $t_{tabel}(1{,}96)$ so the decision is accepted H_0 and the conclusion is that exogenous latent variables are not significant in measuring endogenous latent variables.

2.9 Mediation Test

Mediation test is conducted to detect the position of the mediating variable in a model. Mediation testing is obtained from the specific indirect effect value. The processing results for the mediation test can be seen in Table 12 as follows:

Table 12: Spesific Indirect Effect Value

Variable	Original Sample	Sample Mean	T Statistics	P-Value
$\xi_1 \rightarrow \eta_1 \rightarrow \eta_2$	0,076	0,077	3,217	0,001
$\xi_2 \rightarrow \eta_1 \rightarrow \eta_2$	0,071	0,072	2,786	0,005
$\xi_3 \rightarrow \eta_1 \rightarrow \eta_2$	0,108	0,110	2,976	0,003
$\xi_4 \rightarrow \eta_1 \rightarrow \eta_2$	0,136	0,136	3,345	0,001

Based on the analysis shown in Table 12, all values are obtained $t_{statistics}$ are greater than the value of $t_{tabel}(1{,}96)$ which means that all mediation parameters are significant. Thus, the model facilities (ξ_1), service (ξ_2), tourism image (ξ_3), and cost (ξ_4) in Surabaya Mangrove Botanical Garden is significant to the interest in visiting with tourist satisfaction as a mediating variable can be accepted.

2.10 Interpretation of the Measurement Model Equation (Outer Model)

1. Measurement Model Equation of Facilities Variable (ξ_1)

$\hat{x}_{11} = 0{,}914\ \hat{\xi}_1$

$\hat{x}_{12} = 0{,}895\ \hat{\xi}_1$

$\hat{x}_{13} = 0{,}870\ \hat{\xi}_1$

$\hat{x}_{14} = 0{,}899\ \hat{\xi}_1$

To interpret these models, one equation is taken, namely $\hat{x}_{11} = 0{,}914\ \hat{\xi}_1$. From the equation obtained, it can be concluded that the indicator x_{11} can be explained by ξ_1 by 0.914. The value of $\lambda_{11}^{x} = 0{,}914$ positive indicating that the higher the value of the respondent's answer related to the completeness of existing public facilities, the more the variable facilities at the Mangrove Botanical Garden will also increase. This also applies to other equations.

2. Measurement Model Equation of Service Variable (ξ_2)

$\hat{x}_{21} = 0{,}937\ \hat{\xi}_2$

$\hat{x}_{22} = 0{,}927\ \hat{\xi}_2$

$\hat{x}_{23} = 0{,}937\ \hat{\xi}_2$

To interpret these models, one equation is taken, namely $\hat{x}_{21} = 0{,}937\ \hat{\xi}_2$. From the equation obtained, it can be concluded that the indicator x_{21} can be explained by ξ_2 by 0.937. The value of $\lambda_{21}^{x} = 0{,}937$ positive indicating that the higher the value of the respondent's answer regarding neatness in appearance and polite service from the officer, the more the service variable at the Mangrove Botanical Garden will also increase. This also applies to other equations.

3. Measurement Model Equation of Tourism Image Variable (ξ_3)

$\hat{x}_{31} = 0{,}875\ \hat{\xi}_3$

$\hat{x}_{32} = 0{,}926\ \hat{\xi}_3$

$\hat{x}_{33} = 0{,}917\ \hat{\xi}_3$

To interpret these models, one equation is taken, namely $\hat{x}_{31} = 0{,}875\ \hat{\xi}_3$. From the equation obtained, it can be concluded that the indicator x_{31} can be explained by ξ_3 by 0.875. The value of $\lambda_{31}^{x} = 0{,}875$ positive indicating that the higher the value of the respondent's answer regarding the collection of various types of mangrove plants will also

increase at the Mangrove Botanical Garden. This also applies to other equations.

4. Measurement Model Equation of Cost Variable (ξ_4)

$\hat{x}_{41} = 0{,}881\ \hat{\xi}_4$

$\hat{x}_{42} = 0{,}931\ \hat{\xi}_4$

$\hat{x}_{43} = 0{,}915\ \hat{\xi}_4$

$\hat{x}_{44} = 0{,}934\ \hat{\xi}_4$

To interpret these models, one equation is taken, namely $\hat{x}_{41} = 0{,}881\ \hat{\xi}_1$. From the equation obtained, it can be concluded that the indicator x_{41} can be explained by ξ_4 by 0.881. The value of $\lambda_{41}^{x} = 0{,}881$ positive indicating that the higher the value of the respondent's answer regarding the affordability of the cost of the rides, the more the cost variable will also increase at the Mangrove Botanical Garden. This also applies to other equations.

5. Measurement Model Equation of Tourist Satisfaction Variable (η_1)

$\hat{y}_{11} = 0{,}907\ \hat{\eta}_1$

$y_{12} = 0{,}893\ \hat{\eta}_1$

$y_{13} = 0{,}894\ \hat{\eta}_1$

$y_{14} = 0{,}904\ \eta_1$

To interpret these models, one equation is taken, namely $\hat{y}_{11} = 0{,}907\ \hat{\eta}_1$. From the equation obtained, it can be concluded that the indicator y_{11} can be explained by η_1 by 0.907. The value of $\lambda_{11}^{y} = 0{,}907$ positive indicating that the higher the value of the respondent's answer regarding satisfaction with the existing rides, the more the tourist satisfaction variable will also increase at the Mangrove Botanical Garden. This also applies to other equations.

6. Measurement Model Equation of Interest in Revisiting Variable (η_2)

$\hat{y}_{21} = 0{,}908\ \hat{\eta}_2$

$\hat{y}_{22} = 0{,}921\ \hat{\eta}_2$

$\hat{y}_{23} = 0{,}935\ \hat{\eta}_2$

To interpret these models, one equation is taken, namely $\hat{y}_{11} = 0{,}907\ \hat{\eta}_1$. From the equation obtained, it can be concluded that the indicator y_{11} can be explained by η_1 by 0.907. The value of $\lambda_{11}^{y} = 0{,}907$ positive indicating that the higher the value of the respondent's answer regarding satisfaction with the existing rides, the more the tourist satisfaction variable will also increase at the Mangrove Botanical Garden. This also applies to other equations.

2.11 Interpretation of the Structural Model Equation (Inner Model)

1. Structural Model Equation of Tourist Satisfaction Variable (η_1)

$$\hat{\eta}_1 = 0{,}194\ \hat{\xi}_1 + 0{,}182\ \hat{\xi}_2 + 0{,}274\ \hat{\xi}_3 + 0{,}345\ \hat{\xi}_4$$

From the equation it is explained that if the facilities variable (ξ_1) increases by one unit and other variables are considered constant, then tourist satisfaction variable (η_1) will increase by 0.194. Then if the service variable (ξ_2) increases by one unit and other variables are considered constant, tourist satisfaction variable (η_1) will increase by 0.182. Furthermore, if the tourism image variable (ξ_3) increases by one unit and other variables are considered constant, then tourist satisfaction variable (η_1) will increase by 0.274. In addition, if the cost (ξ_4) increases by one unit and other variables are considered constant, then tourist satisfaction variable (η_1) will increase by 0.345. In addition, the positive value on the variable coefficient of facilities, services, tourism image, and costs indicates a directly proportional relationship to tourist satisfaction. The higher the quality of facilities,services, tourism image and costs at the Surabaya Mangrove Botanical Garden that are perceived by tourists, the more tourist satisfaction will increase at the Surabaya Mangrove Botanical Garden.

2. Structural Model Equation of Interest in Revisiting Variable (η_2)

$$\hat{\eta}_2 = 0{,}393\ \hat{\eta}_1 + 0{,}183\ \hat{\xi}_1 + 0{,}017\ \hat{\xi}_2 + 0{,}020\ \hat{\xi}_3 + 0{,}293\ \hat{\xi}_4$$

From this equation it is explained that if the tourist satisfaction variable (η_1) increases by one unit and other variables are considered constant, then the variable of interest in revisiting (η_2) will increase by 0.393. Then if the facilities variable at the Surabaya Mangrove Botanical Garden (ξ_1) increases by one unit and other variables are considered constant, then the variable of interest in revisiting (η_2) will increase by 0.183. Then if the service variable (ξ_2) increases by one unit and other variables are considered constant, then the variable of interest in revisiting (η_2) will increase by 0.017. However, based on the test results in Table 11, the service variable does not have a significant effect on revisit interest. This is because there are other factors that influence tourists' interest in revisiting, for example when the tourist attractions are crowded with visitors, the staff may be overwhelmed and not provide the best service to all tourists. However, this may not be enough to deter tourists' interest in revisiting. Furthermore, if the tourism image variable (ξ_3) increases by one unit and other variables are considered constant, then the variable of interest in revisiting (η_2) will increase by 0.020. However, based on the test results in Table 11, the tourism image variable does not have a significant effect on return visit interest. This is probably because the positive direct experience of tourists when visiting is much stronger even though the tourism image is not good. Then next, if the cost (ξ_4) increases by one unit and other variables are considered constant, then the variable of interest in revisiting (η_2) will increase by 0.293. In addition, the positive value on the variable coefficient of

facilities, services, tourism image, cost, and satisfaction indicate a directly proportional relationship to the interest in visiting tourists again. The higher the quality of facilities, services, cost tourism image, and satisfaction at the Surabaya Mangrove Botanical Garden felt by tourists, the more interest in revisiting Surabaya Mangrove Botanical Garden tourists will increase.

4. CONCLUSION

Based on the analysis and discussion that has been carried out, the following conclusions are obtained:

1. The results of data analysis using the Structural Equation Modeling method with the Partial Least Square approach obtained the following structural model estimation results:

$$\hat{\eta}_1 = 0{,}194\,\hat{\xi}_1 + 0{,}182\,\hat{\xi}_2 + 0{,}274\,\hat{\xi}_3 + 0{,}345\,\hat{\xi}_4$$

$$\hat{\eta}_2 = 0{,}393\,\hat{\eta}_1 + 0{,}183\,\hat{\xi}_1 + 0{,}017\,\hat{\xi}_2 + 0{,}020\,\hat{\xi}_3 + 0{,}293\,\hat{\xi}_4$$

With the overall test model (Goodness of Fit Index) obtained a value of 0.813 which means that if the value of $GoF \geq 0.36$ then the model has a high ability to explain the data and overall, it can be said that the model formed is valid.

2. Based on calculations using 297 Surabaya Mangrove Botanical Garden tourist respondents, a structural model is obtained which shows that the variables that affect tourist satisfaction are the variables of facilities, services, tourism image, and costs. Furthermore, the variables that influence the interest in revisiting are the variables of facilities, costs, and tourist satisfaction.

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